

Invasive Cancer Incidence by State, Sex, and Site — United States, 2009

Simple D. Singh, MD, MPH¹; Jane Henley, MSPH¹; Jessica B. King, MPH¹; Reda J. Wilson, MPH, RHIT, CTR¹; Joseph D. Rogers, BS¹; and A. Blythe Ryerson, MPH, PhD¹

¹Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia

Introduction:

- Cancer is the leading cause of illness and death in United States.
- USCS is the official federal statistics on cancer incidence and mortality.
- This report summarizes the most recent cancer incidence rates by sex, age, race, ethnicity, primary site, and state of residence using data from the *United States Cancer Statistics: 2009 Incidence and Mortality* report (USCS).

Methods:

- The USCS combines data from all states and the District of Columbia on cancer incidence (newly diagnosed cases) from the Centers for Disease Control and Prevention's (CDC) **National Program of Cancer Registries** (NPCR) and the National Cancer Institute's (NCI) **Surveillance, Epidemiology and End Results Program** (SEER) and cancer deaths from CDC's National Center for Health Statistics (NCHS) to produce official federal statistics on cancer incidence and mortality.
- Data on new cases of invasive cancer diagnosed during 2009 submitted to CDC or NCI by November 2011.
- This report covers 98% of the U.S. population.
- Statistics are reported for:
 - 68 primary cancer sites and subsites for men
 - 72 primary cancer sites and subsites for women
 - The childhood cancer section includes incidence among children aged 19 years or younger.
- Postcensal population denominators for incidence rates were race-specific, ethnicity-specific, and sex-specific county population estimates from the 2000 U.S. Census, as modified by the SEER and aggregated to state and national level.

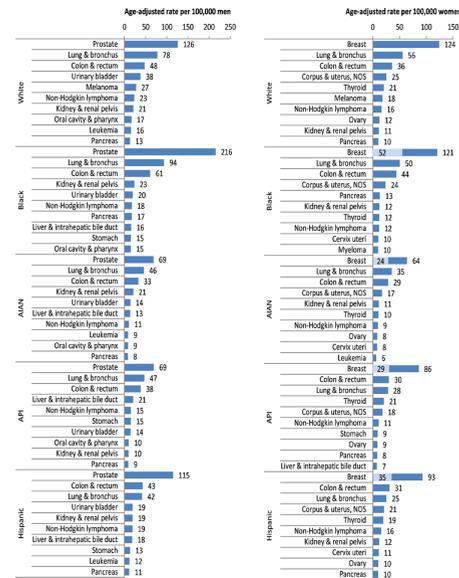
Table 1. Number and incidence* of invasive cancers,† by sex, primary sites, racial and ethnic group,§ and age group — National Program of Cancer Registries (NPCR) and Surveillance, Epidemiology, and End Results (SEER) program,¶ United States, 2009

Characteristic	Overall			Men			Women		
	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
All cancers	459.0	1,476,504		523.5	757,545		414.3	718,959	
Prostate	NA	206,640	(14)	137.7	206,640	(27)	NA	NA	
Female breast	NA	211,731	(14)	NA	NA		123.1	211,731	(29)
Lung and bronchus	64.3	205,974	(14)	78.2	110,190	(15)	54.1	95,784	(13)
Colon and rectum	42.5	136,717	(9)	49.2	70,223	(9)	37.1	66,494	(9)
Racial and ethnic group									
White	456.5	1,244,503	(84)	513.0	636,138	(84)	418.2	608,365	(85)
Black	472.9	156,869	(11)	593.7	81,670	(11)	393.4	75,199	(10)
American Indian/Alaska Native	272.9	6,997	(<1)	294.8	3,427	(<1)	258.3	3,570	(<1)
Asian/Pacific Islander	291.8	39,213	(3)	309.6	17,820	(2)	283.5	21,393	(3)
Hispanic	353.0	102,278	(7)	395.2	50,074	(7)	327.9	52,204	(7)
Age group (yrs)									
≤19	16.9	14,023	(1)	17.7	7,481	(1)	16.2	6,542	(1)
20–49	155.5	192,055	(13)	114.8	71,622	(9)	196.3	120,433	(17)
50–64	843.2	477,087	(32)	924.4	254,091	(34)	768.2	222,996	(31)
65–74	1902.5	385,233	(26)	2368.2	220,684	(29)	1506.3	164,549	(23)
≥75	2223.3	408,106	(28)	2872.4	203,667	(27)	1810.9	204,439	(28)

Abbreviation: NA = not available.
 * Age-adjusted to the 2000 U.S. standard population.
 † Excludes basal and squamous cell carcinomas of the skin, except when these occur on the skin of the genital organs, and in situ cancers, except urinary bladder.
 ‡ Race categories are not mutually exclusive from Hispanic ethnicity. Rates are not presented for cases with unknown or other race.
 § Compiled from cancer registries that meet the data-quality criteria for all invasive cancer sites combined (covering approximately 98% of the U.S. population).
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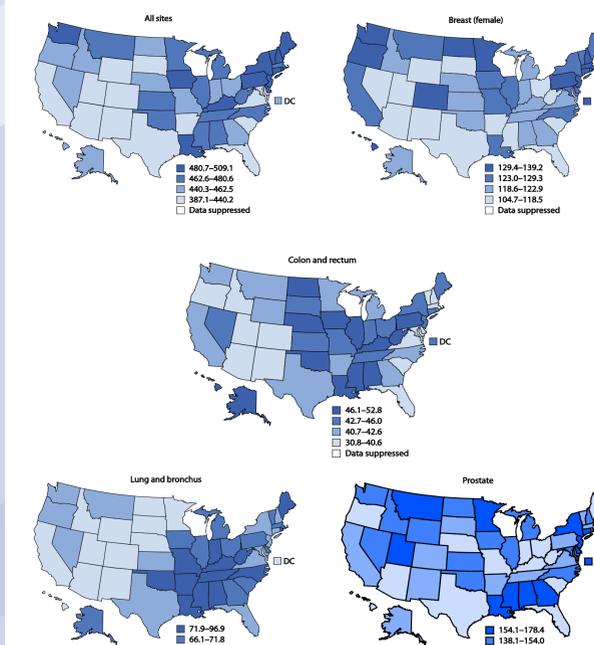
Results:

Figure 1. Invasive cancer incidence rates* for 10 primary sites† with the highest rates within racial and ethnic groups,§ by sex — National Program of Cancer Registries (NPCR) and Surveillance, Epidemiology, and End Results (SEER) program,¶ United States, 2009



Abbreviation: NOS = not otherwise specified.
 * Rates are age-adjusted to the 2000 U.S. standard population.
 † Incidence of late-stage breast cancer is shown as a subset in bar for overall breast cancer incidence.
 ‡ Race categories are not mutually exclusive from Hispanic ethnicity.
 § Compiled from cancer registries that meet the data-quality criteria for all invasive cancer sites combined, covering approximately 98% of the U.S. population. Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and in situ cancers except urinary bladder.
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Figure 2. Invasive cancer incidence per 100,000 population, by primary cancer site — National Program of Cancer Registries (NPCR) and Surveillance, Epidemiology, and End Results (SEER) program, United States, 2009*



* Age-adjusted to the 2000 U.S. standard population.

Major findings of 2009 report:

- In 2009, 1,476,504 cancer cases were diagnosed
 - 757,545 in males
 - 718,959 in females
- The age-adjusted incidence rate was 459 per 100,000
 - 524 in males
 - 414 in females
- Overall cancer incidence rates were highest among black males and white females
- Among children 19 years or younger, 14,023 cancer cases were diagnosed in 2009
- Incidence rates increased with age
- Rates were highest for cancers of prostate, female breast, lung and bronchus, and colon and rectum cancer
- Prostate, female breast, lung and bronchus, and colon and rectum accounted for 52% of cancers diagnosed in 2009
- The top ten sites differed by sex and race and ethnic group
- Males
 - Prostate cancer is the most common cancer
 - Lung cancer is second among all groups except Hispanic men, where it is third
 - Colorectal cancer is third among all groups except Hispanic men, where it is second
- Females
 - Breast cancer is the most common cancer
 - Lung cancer is second among all groups except Asian/Pacific Islander and Hispanic women, where it is third
 - Colorectal cancer is second among Asian/Pacific Islander and Hispanic women and third among all other groups
 - Incidence of late-stage breast cancer was highest among black women

State-specific findings:

- By state in 2009, all-sites cancer incidence rates ranged from 387.1 per 100,000 persons to 509.1
- Site-specific cancer incidence rates ranged by state
 - 95.2 to 178.4 for prostate cancer
 - 104.7 to 139.2 for female breast cancer
 - 28.1 to 96.9 for lung cancer
 - 30.8 to 52.8 for colorectal cancer

Conclusions:

- Pooled cancer incidence data at the national, regional, and state levels help federal and state public health officials monitor trends and respond to reports of suspected increases in occurrence, develop research hypotheses, allocate health resources, and plan and evaluate the impact of cancer control programs.

Contact Information:

Simple Singh, MD, MPH, Epidemiologist
 Centers for Disease Control and Prevention
 1600 Clifton Rd.
 Atlanta GA, 30333
SDSingh@cdc.gov

