

Liver cancer survival in the United States by race and stage (2001-2009): findings from the CONCORD -2 study.

Journal:	Cancer
Manuscript ID	CNCR-17-0457.R1
Wiley - Manuscript type:	Supplement Article
Date Submitted by the Author:	16-May-2017
Complete List of Authors:	Momin, Behnoosh; Centers for Disease Control and Prevention, Division of Cancer Prevention and Control Pinheiro, Paulo; University of Nevada Las Vegas, Carreira, Helena; London School of Hygiene and Tropical Medicine Li, Chunyu; CDC, Weir, H.K.; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion
Keywords:	liver cancer, population-based survival, NPCR, SEER, cancer control



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Liver cancer survival in the United States by race and stage (2001-2009): findings from the CONCORD -2 study.

Running Title: Liver cancer survival in the US by race and stage

Authors: Behnoosh R. Momin, DrPH, MS, MPH¹; Paulo S. Pinheiro, MD, PhD²; Helena Carreira, MSc³, Chunyu Li, MD, PhD, MS¹, Hannah K Weir, PhD¹

Affiliations:

¹Division of Cancer Prevention and Control, Centers for Disease Control and Prevention, Atlanta, GA

² Epidemiology and Biostatistics, University of Nevada Las Vegas, Las Vegas, NV

³ Cancer Research UK Cancer Survival Group, Department of Non-Communicable Disease Epidemiology, London School of Hygiene & Tropical Medicine, London, UK

Corresponding Author:

Dr. Behnoosh R. Momin 4770 Buford Highway, MS F-76 Atlanta, GA 30341 Telephone: (770) 488-3112 Email: <u>BMomin@cdc.gov</u> Fax: (770) 488-4335

Number of pages: 20 Text words: 3,864 Number of figures/tables: 5

Precis: Some progress has occurred in survival for liver cancer, but 5-year survival remains low, even for those diagnosed at localized stage. Given the low survival observed in all states, efforts directed at controlling well-established risk factors, such as hepatitis B may have the greatest impact on reducing the burden of liver cancer in the United States.

DISCLAIMER: The findings and conclusions in this report are those of the authors and do not necessarily reflect the official position of the Centers for Disease Control and Prevention.

Abstract

Background. Worldwide, liver cancer is a leading cause of death for both men and women. The number of Americans who are diagnosed with liver cancer and die from it has been rising slowly each year. We examined population-based survival, by state, race, and stage at diagnosis, using data from the CONCORD-2 study. Methods. We analyzed data from 37 state-wide registries, covering approximately 80% of the US population, for patients diagnosed during 2001-2009. Survival up to five years was adjusted for background mortality (net survival) using state- and race-specific life tables, and age-standardized using the International Cancer Survival Standard (ICSS) weights. **Results**. Liver cancer was diagnosed overall more often at the localized stage, with blacks being more often diagnosed at distant and regional stages than whites. Overall 5-year net survival was 12.2% in 2001-2003 and 14.8% in 2004-2009. Whites had higher survival than blacks in both calendar periods (11.7% vs. 9.1% and 14.3% vs. 11.4%, respectively). During 2004-2009, 5-year survival was 25.7% for localized stage, 9.5% for regional stage, and 3.5% for distant stage. **Conclusion**. Some progress has occurred in survival for liver cancer, but 5-year survival remains low, even for those diagnosed at localized stage. Efforts directed at controlling well-established risk factors such as hepatitis B may have the greatest impact on reducing the burden of liver cancer in the US.

Keywords: cancer registries, survival, liver, hepatitis

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Introduction

Worldwide, liver cancer is the fifth most common cancer among men, the ninth most common cancer among women, and the second most common cause of cancer death for men and women combined (1). Recent reports from North America, Europe, and Japan showed that the incidence of hepatocellular carcinoma (HCC), the most common histological type, is increasing (2-5). The number of Americans who are diagnosed with and die from liver cancer each year has been rising slowly for several decades (6). In 2013, 21,143 men and 8,330 women were diagnosed with liver cancer, and 16,300 men and 7,732 women died from liver cancer (7). According to the 2015 Annual Report to the Nation, United States (US) death rates for most cancer sites declined or were stable from 2003 to 2012 among men and women of each racial and ethnic, except for liver cancer, which increased for most racial and ethnic groups (8). Among men and women, US liver cancer incidence rates were highest among American Indian/Alaskan Natives, followed by Asian Pacific Islanders, and Hispanics. Liver cancer incidence rates among US men were more than twice those among US women (8).

Chronic hepatitis B (HBV), Chronic hepatitis C (HCV), and cirrhosis all contribute to the risks associated with hepatocellular carcinoma. HBV and HCV infections account for an estimated 78% of global HCC cases (9). In addition, excessive alcohol consumption, obesity, rare metabolic disorders, type 2 diabetes mellitus, and non-alcoholic fatty liver disease (NAFLD) are other known risk factors of liver cancer (10). Most cases of HCC are preventable. Methods to reduce the risk of liver cancer include evidence-based strategies or interventions related to the risks associated with hepatitis. Vaccination against hepatitis B infection for all infants at birth

and adults who may be at an increased risk, as well as testing for hepatitis C and linking patients to follow-up care after testing, leads to declines in HCC incidence (8).

In contrast to many other cancers, the prognosis of patients with HCC is not highly correlated with tumor stage. Cirrhosis underlies the neoplasm in most cases and has major impact on the prognosis of patients with HCC (11). The CONCORD-2 study reported survival for patients with cancer diagnosed from 1995 through 2009 in 67 countries, and enabled the comparison of survival of patients in the United States (US) with other countries (12). Liver cancer survival was low in all countries. The 5-year age-standardized net survival from liver cancer was below 20% everywhere in Europe, in the range 15–19% in North America, and as low as 7–9% in Mongolia and Thailand. Between 1995-99 and 2005-2009, five-year age-standardized net survival from liver cancer increased in the United States from 9% to 15%. This could possibly be due to improved viral hepatitis services and medical management.

The purpose of the current study is to expand the CONCORD-2 study by reporting liver cancer survival in the United States using the largest data set available (80% US coverage), by race and stage at diagnosis, using available population-based registry data from 37 states. This information is critical to prioritizing, planning and implementation of cancer control interventions.

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Material and Methods

Data Source and Variables

Thirty-seven (37) state cancer registries affiliated with the National Program of Cancer Registries (NPCR) or the Surveillance, Epidemiology and End Results (SEER) Programs that participated in the CONCORD-2 study, (12) covering approximately 80% of the US population, agreed to the inclusion of their data in these analyses. We analyzed individual tumor records for 126,261 adults (aged 15-99 years) who were diagnosed with cancer of the liver and intrahepatic bile ducts (ICD-O-3 codes C22.0-C22.1) (13) during 2001-2009 and followed up through December 31, 2009. We included the first primary, invasive cancer of the liver, regardless of whether an individual had a previous cancer. If an individual was diagnosed with two or more cancers of the liver during 2001 through 2009, only the first was considered in the survival analysis.

We grouped patients by year of diagnosis into two calendar periods (2001-2003 and 2004-2009) to reflect changes in the methods used by US registries to collect SEER Summary Stage (SS) 2000 at diagnosis (14). During 2001-2003, most registries coded stage SS2000 directly from the medical records. During 2004-2009, all registries derived SS2000 using the Collaborative Staging System (15).

Survival analyses

We analysed survival by state, race (all, black, white), SS2000 (local, regional, distant, unknown) and calendar period of diagnosis. We estimated net survival up to 5 years after diagnosis, with 95% confidence intervals (CI), using the Pohar Perme estimator (16) of net survival. Net survival can be interpreted as the probability of survival up to a given time since

diagnosis, after controlling for other causes of death (background mortality). To control for the wide differences in background mortality between participating registries, we constructed life tables (17) of all-cause mortality in the general population of each state from the number of deaths and the population, by a single year of age, sex, calendar year, and where possible, by race (black, white), using a flexible Poisson model (18).

We estimated net survival using the cohort approach for patients diagnosed in 2001-2003, since all patients had been followed up for at least five years by December 31, 2009. We used the complete approach to estimate net survival for patients diagnosed from 2004-2009, because five years of follow-up data were not available for all patients. Net survival was estimated for five age groups (15-44, 45-54, 55-64, 65-74, 75-99 years). We obtained age-standardized survival estimates using the International Cancer Survival Standard (ICSS) weights (19). If two or more of the five age-specific estimates could not be obtained, we present only the pooled, unstandardized survival estimates for all ages combined. Unstandardized estimates are italicized in the tables. Trends, geographic variations and differences in age-standardized survival by race are presented graphically in bar-charts and funnel plots (20). Funnel plots of net survival for 2001-2003 and 2004-2009 provide insight into the variability of cancer survival in the US by race and state and show how much a particular survival estimate deviates from the pooled estimate of US registries (horizontal line) given the precision of each estimate. More details on data and methods are provided in the accompanying article (21).

Results

Liver cancer case distribution by race, state of residence, and stage at diagnosis by calendar period of diagnosis is reported in Table 1. In 2004-2009, liver cancer was mostly diagnosed at

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localized stage (overall 41%), followed by regional (24%) and distant (18%). Stage at diagnosis varied slightly by race, with blacks being most often diagnosed at distant and regional stages (20% and 26%, respectively, compared to 17% and 24% in whites). However, state-specific analyses showed that patients with unknown stage at diagnosis ranged from 8% to 30%, which makes accurate comparisons across race at the national level difficult (Supplemental Table 1). Between the two calendar periods, there is indication of a shift towards earlier diagnosis of liver cancer, with an additional 8 percentage points in localized stage and 2 percentage points in regional stage, and a less than 1 percentage point increase in patients diagnosed with distant stage. Additionally, there was a substantial decline in the proportion of cases recorded with unknown stage at diagnosis, from 26% to 17%.

Although the overall 5-year age-standardized net survival was low, 12% in 2001-2003 and 15% in 2004-2009, an improvement between the two calendar periods was observed (Figure 1). Of the 35 states for which an age-standardized estimates were available, net survival increased between 2001-2003 and 2004-2009 in 30 states, while only 5 states showed a decrease. There was considerable variation by state in 2004-2009 in the 5-year survival, ranging from 8.1% in Wyoming to 20.9% in Florida (Supplemental Table 2).

One-, 3-, and 5-year age-standardized net survival in 2004-2009 was 38%, 21%, 15%, respectively (Table 2). For each of the three time points, blacks showed lower age-standardized net survival than whites for all states combined. The difference was most pronounced in the first year after diagnosis, suggesting that blacks have a lower survival in the short term in addition to lower survival at five years since diagnosis. Only four states showed considerable in-state racial

disparities, all with a survival disadvantage for blacks compared to whites. There was, however, a 5-year survival improvement for both races from 2001-2003 to 2004-2009, 2.6 percentage point increase for whites, and 2.3 percentage points for blacks. Five-year age-standardized net survival was 14.3% for whites and 11.4% for blacks. Overall 5-year survival for all races combined was 14.8%, higher than both blacks and whites.

Five-year age-standardized net survival by stage (Table 3) for 2004-2009 was uniformly low at 26%, 10% and 4% for localized, regional and distant stage, respectively. For localized stage, increases in survival were observed between 2001-2003 and 2004-2009 with a 2.8 percentage points for all races, 2.4 percentage points for whites and 5.0 percentage points for blacks. For regional and distant stages, smaller increases were observed, except that for blacks diagnosed with regional stage, for whom there was a decline in survival of 1 percentage point. While 5-year net survival was low in all states, there was considerable variation by stage and state (Supplemental Table 3).

Figure 2 shows funnel plots of net survival for 2001-2003 and 2004-2009, to obtain further insight into the variability of liver survival in the US, by race and state. Although survival for liver cancer was generally low in all states in both calendar periods, survival for black patients was lower than survival for white patients, and in most states it was lower than the pooled U.S. value.

Discussion

This study reports the most comprehensive comparison of trends in the United States in 5-year survival for liver cancer, using recent population-based data. The 5-year age-standardized net

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survival for liver cancer reported in this analysis was low (15%) for the most recent period, but slightly higher than in 2001-2003 (12%). This slight increase may be partially explained by the increased proportion of patients diagnosed at localized stage who showed improved survival in the most recent years. Five-year survival in the US is slightly lower but still closely aligned with the 5-year survival estimates of Canada (17.7% [16.8-18.7%], 2005-2009) and slightly higher than survival in the United Kingdom (9.3% [8.7-9.9%], 2005-2009) (12). This study noted some variations in survival by state, race, and sex. Whites had higher survival than blacks in both calendar periods. Additionally, white women showed a survival rate that was 2.5 percentage points higher than white men, and black women showed a survival rate that was 5.5 percentage points higher than black men. While our findings report a survival advantage for women, this is in contrast to those reported for Europe in the late 1990s (22). Micheli and colleagues reported an advantage for women for 11 of the 26 cancer sites; this advantage was not reported for liver cancer. This difference may reflect a difference in US and European populations. Regardless of state, variations in liver cancer survival by race and gender are unknown, liver cancer is uniformly fatal across all populations. Early diagnosis for liver cancer is challenging, since many of the symptoms associated with this disease do not present until later stages. In addition, due to the location of the liver beneath the rib cage, liver tumors are difficult to detect.

This study suggests there is some improvement in liver cancer survival. Advances in treatment strategies likely contributed to this improvement. Surgical resection, liver transplantation, and ablation are associated with best long-term survival. Surgical resection is usually performed in patients with localized HCC and sufficient preserved liver function. Liver transplantation is the best option for patients with decompensated cirrhosis and a solitary lesion (<5 cm) or early

multifocal disease (\leq 3 lesions, \leq 3 cm in diameter) (23). When liver resection or transplantation is feasible, ablation may be used, particularly for patients with early-stage HCC that is centrally located in the liver. Disparities in access to and receipt of appropriate surgical care may play an essential role for the racial differences we observed in liver cancer survival. Studies have shown that African Americans and Asians with localized HCC were significantly less likely to receive a transplant compared to their white counterpart (24). In addition, African American patients were found to be younger and have a more advanced stage of disease than white patients, and were also more likely to die while waiting for a transplant (25). However, survival disparities by race may not be explained by differences in care only. Artinyan and colleagues reported that racial differences in survival remained significant among patients who received liver transplantation (26).

Clinical Implications

To improve liver cancer survival, adherence to evidence-based treatment protocols among all populations, as well as other factors including biologic factors, response to therapy, patient comorbidities, post-treatment follow-up and care, and tumor recurrence all need to be considered. Increased recruitment of non-white populations to liver cancer clinical trials may help alleviate racial differences in survival and improve the understanding of race-based differences in cancer biology (27). HBV or HCV can cause persistent active hepatitis and hepatic fibrosis, which lead to the development of HCC and also has major impact on the prognosis of patients with HCC by affecting the rate of recurrence after surgery (28-30). Interferon therapy has shown to be beneficial for patients with hepatitis virus-associated HCC and can improve their outcome after curative resection (31).

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Cancer Control Implications

Given that most liver cancers are preventable (CDC), cancer control efforts and resources that support preventing infection and promoting viral hepatitis services should be prioritized (32-33). Approximately 22% of HCC among those aged 65 years or older in the United States is attributed to HCV, (10) and an estimated 1.6 million persons will be eligible for HCV treatment by 2020 (34). Antiviral therapies for hepatitis B and hepatitis C can help prevent liver cancer, and also result in decreased neuroinflammation in the liver and over time cause reversal of fibrosis, which also leads to decreased HCC risk (35). In 2012, the CDC recommended one-time HCV testing for persons born during 1945–1965 (aged 47–67 years in 2012) (36). The following year, the US Preventive Services Task Force issued similar recommendations (37). According to the National Academies of Science, Engineering, and Medicine (38), limited public and provider awareness, as well as limited public resource allocation are the primary underlying causes of high rates of chronic hepatitis B and C in the United States (38). In the U.S., Asians have the highest incidence of HBV (39). However, for other populations (non-Asians), the incidence of HBV is not as much a concern as the incidence of HCV, which assumes a bigger role in the etiology of liver cancer (40). For the latter group, the patterns among immigrants are consistent and gender specific, with a higher incidence and mortality for males when coming to the U.S., but females having stabilized or slightly decreased rates. This has been shown for different populations (Hispanics and non-Hispanic Blacks) (41-43). CDC's National Comprehensive Cancer Control Program (NCCCP) is currently working on the development and implementation of an action plan that would facilitate greater implementation and uptake of strategies and interventions to address liver cancer within selected pilot programs that have a high liver cancer

burden. The action plan will contain interventions specific to increasing support for vaccinebased strategies to eliminate HBV transmission, and development of prevention and health services that include screening for HBV and HCV infections linked to appropriate medical management and care (in alignment with recommendations), community education about HBV and HCV, and the improvement of viral hepatitis surveillance. Improved surveillance for HBV and patients with HCV-related cirrhosis has the potential to result in the detection of more cancers at a localized stage when surgery may be possible and more beneficial (44).

Strength and Limitations

This analysis has several strengths, including that it includes a very large number of US states, making it the most geographically-comprehensive survival study to our knowledge. Also, the sophisticated and complex methodology takes into account the competing risks of death that are higher for elderly than for younger cancer patients. Finally, more than 70% of all cases included in this analysis were morphologically verified, contributing to the high quality of the data used. A limitation of our analysis is that some stage and race categories had missing data or small numbers. The small black population in some states precluded the construction of life tables for the black population in these states; therefore the state-specific life tables for all races combined were used instead. Additionally, data on populations with a higher burden of liver cancer, including Asian/Pacific Islanders and Hispanics, were not collected or analyzed in this study.

Conclusions

Cancer incidence in the United States is expected to increase greatly due to demographic changes such as an aging population and a larger proportion of individuals from racial/ethnic groups; it is

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estimated that liver cancer will rank the second highest of increase (59%) between 2010 through 2030 among all cancer sites (45). This analysis suggests some progress in five-year survival for liver cancer in the U.S.; however, there is still much more work that needs to be done in order to reduce the burden of this cancer. Improvements in surveillance, prevention and detection of HBV and HCV infection may have the greatest potential of leading to earlier detection resulting in increased survival.

Figures and Tables

Figure 1. Liver cancer: 5-year age-standardized net survival (%) for adults (15-99 years) diagnosed during 2001-2003 and 2004-2009, and absolute change (%): states grouped by U.S. Census Region.

Note: Data from 37 statewide cancer registries (covering 80.6% of the population) are ranked within U.S. Census Region by the survival estimate for 2004-2009. Dark colors denote states affiliated with the National Program of Cancer Registries (NPCR); pale colors denote states affiliated with the Surveillance, Epidemiology and End Results (SEER) Program; * denotes states affiliated with both federal surveillance programs. Change (%) not plotted if a survival estimate was not available for one calendar period or one or more estimates was not age-standardized.

Figure 2. Liver cancer: 5-year age-standardized net survival (%) for adults (15-99 years), by state, race and calendar period of diagnosis.

Note: the pooled (US) survival estimate for each calendar period is shown by the horizontal (solid) line with corresponding 95.0% and 99.8% control limits (dotted lines).

Supplemental Table 1. Liver cancer: number of cases for adults (15-99 years) diagnosed during 2001-2003 and 2004-2009 and distribution (%) by SEER Summary Stage 2000 at diagnosis, race and calendar period of diagnosis.

Note: NPCR indicates National Program of Cancer Registries; SEER indicates Surveillance, Epidemiology, and End Results program. Information on stage was not available for two states (Maryland and Wisconsin), or for Rhode Island for cases diagnosed during 2004- 2009. This is the same information that appears in Table 1.

Supplemental Table 2. Liver cancer: 1-, 3- and 5-years age-standardized net survival (%) for adults (15-99 years) diagnosed during 2001-2003 and 2004-2009, by race and calendar period of diagnosis.

Note: NPCR indicates National Program of Cancer Registries; SEER indicates Surveillance, Epidemiology, and End Results program. Unstandardized estimates are italicized.

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Supplemental Table 3. Liver cancer: 5-year age-standardized net survival (%) for adults (15-99 years) diagnosed during 2001-2003 and 2004-2009, by SEER Summary Stage 2000 at diagnosis, race and calendar period.

Note: NPCR indicates National Program of Cancer Registries; SEER indicates Surveillance,

Epidemiology, and End Results program. Information on stage was not available for two states

(Maryland and Wisconsin), or for Rhode Island for cases diagnosed during 2004-2009.

Unstandardized estimates are italicized.

Table 1. Liver cancer: number of cases for males and females (15-99 years) diagnosed 2001-2009 and distribution (%) by SEER Summary Stage 2000 (SS2000) at diagnosis, by race and calendar period of diagnosis.

		20	01-2003			2004-2009	
SS2000		All races	White	Black	All races	White	Black
No. of		33,690	25,500	4,225		69,374	13,002
patients					92,571		
Localized	(%)	33.4	33.2	30.4	41.0	40.9	38.8
Regional	(%)	22.4	21.6	23.6	24.4	23.8	25.9
Distant	(%)	18.4	18.2	20.4	17.6	17.4	19.8
Unknown	(%)	25.8	27.0	25.6	17.0	17.8	15.5

Table 2. Liver cancer: age-standardized net survival (%) at 1-, 3- and 5-years for females (15-99 years) diagnosed 2001-2009, by race and calendar period of diagnosis.

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34	8	3		.3	7	1		3	3	8		9	2	.8		.5	0	.6		.4	.9	.9		.9
$\frac{35}{26}$ 3	16.	15.	-	16	15.	15.	1	16.	13.	11.	-	14.	20.	20	-	20	19.	19	1	20	16	15	-	17
30 37	2	8		.7	7	3		2	2	9		4	5	.1		.8	9	.5		.3	.5	.5		.5
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Table 3. Liver cancer: 5-year age-standardized net survival (%) for females (15-99 years) diagnosed 2001-2009, by SEER Summary Stage (SS2000) at diagnosis, race and calendar period of diagnosis.

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stages	.2	.8			7	.3			1	0			8	.4			.3	.8		.8	.4	.3		.5
Logali	22	22	-	23.8	22.	21	-	23.4	15	13	-	18.2	25.	24	-	26.5	24	23	-	25	20	18	-	23
zed	.9	.1			4	.4			.8	.3			7	.9			.8	.9		.7	.8	.4		.3
R eg io	8.	7.	-	9.0	7.6	6.	-	8.4	8.	6.	-	10.4	9.5	8.	-	10.2	9.	8.	-	9.	7.	5.	-	8.
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Figure 2

86x60mm (600 x 600 DPI)

	_		2001-2003			2004-2009	
	Stage	All races	White	Black	All races	White	Black
UNITED STATES							
	No. of patientsLocalized(%)Regional(%)Distant(%)Unknown(%)	33,690 33.4 22.4 18.4 25.8	25,500 33.2 21.6 18.2 27.0	4,225 30.4 23.6 20.4 25.6	92,571 41.0 24.4 17.6 17.0	69,374 40.9 23.8 17.4 17.8	13,002 38.8 25.9 19.8 15.5
NORTHEAST							
Connecticut (SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	492 36.6 17.5 19.5 26.4	421 36.8 16.6 19.5 27.1	53 35.8 22.6 17.0 24.5	1,411 41.2 24.9 18.9 15.0	1,170 40.8 23.9 19.4 15.9	164 42.1 32.3 15.9 9.8
Massachusetts (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	998 34.4 25.4 15.8 24.4	827 34.0 24.9 16.2 24.9	75 28.0 32.0 14.7 25.3	2,741 40.9 26.4 16.7 16.0	2,299 41.0 26.1 16.8 16.1	178 33.7 32.6 15.7 18.0
New Hampshire (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	133 24.8 24.1 16.5 34.6	118 24.6 21.2 17.8 36.4	- 66.7 33.3 0.0 0.0	355 35.5 27.9 17.2 19.4	332 35.5 28.6 17.8 18.1	- 50.0 50.0 0.0 0.0
Rhode Island (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	176 29.5 29.0 15.3 26.1	161 29.8 28.6 13.7 28.0	10 30.0 40.0 30.0 0.0	409 - - - -	353 - - - -	32 - - - -
Mid Atlantic							
New Jersey (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	1,421 30.6 19.7 20.1 29.6	1,093 29.1 19.7 20.4 30.8	199 33.2 21.1 21.6 24.1	3,339 41.6 21.2 16.4 20.8	2,587 41.0 21.3 16.2 21.5	488 40.8 20.7 18.0 20.5
New York (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	3,465 28.1 21.0 17.7 33.2	2,458 27.8 20.5 17.4 34.3	578 23.9 24.2 19.7 32.2	8,877 41.4 23.9 18.6 16.1	6,052 40.4 24.0 18.7 16.9	1,670 39.2 25.5 21.0 14.4
Pennsylvania (NPCR)	No. of patientsLocalized(%)Regional(%)Distant(%)Unknown(%)	2,004 31.2 24.5 20.5 23.8	1,569 31.2 25.7 20.0 23.0	322 29.2 20.8 23.6 26.4	5,026 42.6 26.5 18.2 12.8	3,957 41.7 26.3 18.7 13.3	821 43.7 28.7 16.9 10.6
SOUTH							
Delaware (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	106 41.5 21.7 16.0 20.8	87 41.4 17.2 17.2 24.1	16 43.8 43.8 12.5 0.0	310 45.8 26.1 19.7 8.4	218 47.2 25.7 19.3 7.8	81 40.7 27.2 22.2 9.9
Florida (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	2,721 29.1 19.8 20.3 30.8	2,337 29.3 19.3 20.1 31.4	276 26.4 25.4 22.8 25.4	7,339 38.9 23.3 16.5 21.3	6,063 39.6 23.0 16.0 21.3	946 33.4 26.6 20.0 20.0
Georgia (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	813 35.9 21.5 19.8 22.8	540 36.3 20.4 20.6 22.8	217 33.6 24.0 19.4 23.0	2,698 43.7 25.8 18.9 11.6	1,798 44.4 25.0 17.7 12.9	764 42.3 27.7 21.9 8.1

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			2001-2003			2004-2009	
	Stage	All races	White	Black	All races	White	Black
Maryland (NPCR)	No. of patients Localized (%) Regional (%) Distant (%)	657 - - -	411 - - -	192 - - -	1,524 - - -	901 - - -	517 - - -
North Carolina	Unknown (%) No. of patients	- 934	- 695	- 197	- 2,873	- 2,094	- 631
(NPCR)	Localized (%) Regional (%) Distant (%) Unknown (%)	38.1 21.1 17.8 23.0	41.3 20.4 16.3 22.0	28.9 21.8 21.8 27.4	41.8 25.5 17.9 14.8	41.8 25.6 17.3 15.3	40.9 26.0 18.9 14.3
South Carolina (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	485 36.9 17.5 15.5 30.1	352 38.9 18.2 15.1 27.8	118 30.5 16.1 16.1 37.3	1,339 40.0 22.3 17.8 19.9	951 40.9 22.0 17.4 19.8	347 37.5 23.1 19.9 19.6
West Virginia (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	230 25.7 16.1 19.1 39.1	220 25.9 16.4 19.1 38.6	25.0 0.0 12.5 62.5	562 35.6 21.4 15.1 27.9	531 35.6 21.7 14.5 28.2	27 33.3 14.8 29.6 22.2
East South Centr	al						
Alabama (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	514 30.2 21.6 18.7 29.6	381 29.7 21.5 19.7 29.1	119 30.3 20.2 16.8 32.8	1,408 43.4 20.7 17.0 18.8	1,068 44.7 19.9 16.0 19.4	317 38.8 23.7 19.9 17.7
Kentucky (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	466 35.8 21.2 17.2 25.8	418 35.4 20.6 17.7 26.3	41 36.6 31.7 14.6 17.1	1,353 43.7 23.7 18.6 14.1	1,207 42.8 24.3 17.9 15.0	129 50.4 17.8 24.8 7.0
Mississippi (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	128 35.9 20.3 22.7 21.1	91 37.4 19.8 24.2 18.7	28 35.7 14.3 21.4 28.6	899 38.2 29.0 20.2 12.6	622 41.0 26.5 19.3 13.2	251 32.3 34.3 21.9 11.6
Tennessee (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	177 40.7 22.6 19.2 17.5	149 42.3 24.2 16.1 17.4	22 36.4 9.1 36.4 18.2	1,805 46.1 22.7 16.8 14.4	1,417 46.4 22.4 16.7 14.5	334 42.8 23.1 19.8 14.4
West South Cent	ral				4 =0.0	4 0 0 0	
Louisiana (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	694 41.2 24.9 18.0 15.9	464 43.8 24.6 15.5 16.2	211 37.0 25.1 22.7 15.2	1,739 49.7 23.1 18.0 9.3	1,066 50.3 22.1 17.4 10.2	609 47.5 25.0 19.2 8.4
Oklahoma (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	425 28.7 15.3 21.9 34.1	319 28.5 14.4 23.2 33.9	37 18.9 16.2 24.3 40.5	1,280 37.3 20.0 19.8 23.0	979 39.0 19.0 19.1 22.9	85 31.8 24.7 24.7 18.8
Texas (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	3,543 34.1 17.3 17.6 31.0	2,944 34.2 16.5 17.4 31.8	405 33.1 22.2 20.0 24.7	10,265 41.5 20.7 17.2 20.6	8,253 42.7 19.7 16.7 20.9	1,422 35.6 26.1 19.9 18.4

			2001-2003			2004-2009	
	Stage	All races	White	Black	All races	White	Black
MIDWEST							
East North Centra	al						
Michigan	No. of patients	1,412	1,072	278	3,485	2,559	755
(NPCR/SEER)	Localized (%)	30.5	30.1	31.3	35.0	35.0	34.8
	Distant (%)	20.0	10.9	21.9	19.3	18.8	21.5
	Unknown (%)	30.0	31.8	21.9	29.5	30.1	27.9
Ohio	No of patients	1 301	1 036	215	3 476	2 735	634
(NPCR)	Localized (%)	28.5	29.0	26.5	35.5	34.8	36.1
	Regional (%)	17.8	18.0	17.2	21.9	20.7	26.7
	Distant (%)	15.5	15.6	14.9	15.0	15.1	14.8
	Unknown (%)	38.1	37.5	41.4	27.6	29.4	22.4
Wisconsin	No. of patients	660	587	45	1,661	1,370	158
(NPCR)	Localized (%)	-	-	-	-	-	-
	Distant (%)	-	-	-	-	-	-
	Unknown (%)	-	-	-	-	-	-
West North Centr	ral						
Iowa	No. of patients	295	276	-	861	795	28
(SEER)	Localized (%)	30.2	30.1	40.0	36.4	37.0	32.1
	Regional (%)	28.8	29.7	20.0	30.0	29.1	42.9
	Unknown (%)	20.3	20.3	20.0	20.6	20.0	25.0
Nebraska	No of patients	243	217	11	595	513	44
(NPCR)	Localized (%)	33.3	32.7	54.5	34.6	35.3	29.5
(Regional (%)	22.2	21.7	18.2	31.1	31.0	31.8
	Distant (%)	15.6	14.7	18.2	17.8	16.6	25.0
	Unknown (%)	28.8	30.9	9.1	16.5	17.2	13.6
WEST							
Mountain	No of notionto	504	400	20	4 4 4 0	4.055	74
(NPCR)	l ocalized (%)	521 37 0	430	32 25 0	1,442	1,200	74 33.8
	Regional (%)	21.9	20.9	34.4	25.0	24.5	27.0
	Distant (%)	20.2	19.5	25.0	19.2	19.7	25.7
	Unknown (%)	20.9	21.8	15.6	13.9	14.3	13.5
Idaho	No. of patients	92	88	-	332	316	-
(NPCR)	Localized (%)	33.7	33.0	-	38.0	38.0	-
	Regional (%)	29.3	30.7	-	26.2	26.9	-
	Unknown (%)	18.5	19.3	-	14.8	13.6	-
Montana	No. of patients	76	67		232	101	
(NPCR)	Localized (%)	25.0	23.9	100.0	40.5	42.4	_
· · · · ·	Regional (%)	23.7	23.9	0.0	31.5	29.8	-
	Distant (%)	10.5	11.9	0.0	17.2	17.8	-
	Unknown (%)	40.8	40.3	0.0	10.8	9.9	-
New Mexico	No. of patients	332	293	-	911	783	13
(SEER)	Localized (%)	42.8	43.3	33.3	42.7	42.5	38.5
	Distant (%)	10.3	14.7	33.3	10.9	17.2	30.8
	Unknown (%)	21.7	22.2	33.3	21.6	21.1	15.4
Utah	No. of patients	139	117	-	456	405	11
(SEER)	Localized (%)	46.0	46.2	-	44.5	45.4	45.5
	Regional (%)	24.5	21.4	-	30.9	30.1	18.2
	Distant (%)	15.1	17.1	-	14.5	14.3	18.2
	Unknown (%)	14.4	15.4	-	10.1	10.1	18.2
Wyoming	No. of patients	41	38	-	131	125	-
(NPCK)	Regional (%)	17.1 17.1	18.4 18.4	0.0	43.5 22 Q	44.U 23.2	-
	Distant (%)	14.6	15.8	0.0	13.7	12.8	-
	Unknown (%)	51.2	47.4	100.0	19.8	20.0	-

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			2001-2003		2	004-2009	
	Stage	All races	White	Black	All races	White	Black
Pacific							
Alaska (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	100 28.0 22.0 18.0 32.0	62 22.6 21.0 16.1 40.3	- 50.0 25.0 0.0 25.0	238 43.7 23.9 16.4 16.0	141 41.8 23.4 14.9 19.9	16 56.3 18.8 6.3 18.8
California (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	6,206 38.2 27.4 18.1 16.3	4,044 38.0 26.1 17.8 18.1	456 32.9 32.2 21.3 13.6	16,772 43.1 28.0 17.5 11.5	11,251 42.7 27.4 17.7 12.2	1,285 38.7 31.1 21.0 9.2
Hawaii (SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	364 40.7 34.3 19.8 5.2	49 38.8 36.7 16.3 8.2	- 100.0 0.0 0.0 0.0	818 41.7 27.9 18.2 12.2	185 36.2 28.1 20.0 15.7	11 18.2 27.3 45.5 9.1
Oregon (NPCR)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	430 24.9 26.0 18.6 30.5	362 24.9 24.3 19.1 31.8	- 33.3 33.3 11.1 22.2	1,440 36.6 29.7 18.4 15.3	1,219 36.3 28.9 18.5 16.3	39 35.9 25.6 15.4 23.1
Washington (NPCR/SEER)	No. of patients Localized (%) Regional (%) Distant (%) Unknown (%)	896 37.9 33.4 14.4 14.3	701 37.1 31.7 14.8 16.4	34 41.2 44.1 11.8 2.9	2,169 38.7 31.0 18.9 11.3	1,613 36.9 31.1 19.4 12.6	119 48.7 31.9 16.8 2.5

1 2					20	01-2003					21	104-2009		
2 3			A	All races		White		Black	A	II races		White		Black
4		Years	NS _	95% CI	NS _	95% CI	NS _	95% CI	NS	95% CI	NS	95% CI	NS	95% CI
5	UNITED STATES	1	31.8	31.3 - 32.3	31.7	31.1 - 32.3	27.3	25.8 - 28.9	38.2	37.8 - 38.5	38.0	37.6 - 38.4	32.9	31.9 - 33.9
6		3	16.2	15.8 - 16.7	15.7	15.3 - 16.2	13.2	11.9 - 14.4	20.5	20.1 - 20.8	19.9	19.5 - 20.3	16.5	15.5 - 17.5
7	NORTHEAST	5	12.2	11.8 - 12.5	11.7	11.3 - 12.1	9.1	8.0 - 10.2	14.8	14.4 - 15.2	14.3	13.8 - 14.8	11.4	10.3 - 12.5
8	NORTHEAST New England													
9	Connecticut	1	35.4	31.0 - 39.8	36.6	31.8 - 41.4	30.5	18.1 - 42.9	42.8	40.0 - 45.6	42.7	39.7 - 45.8	43.9	35.0 - 52.9
10	(SEER)	3	17.4	13.9 - 20.9	18.3	14.4 - 22.3	17.3 12.5	6.9 - 27.7 3 4 - 23 5	22.3	19.6 - 25.1	22.7	19.6 - 25.8	20.4	12.2 - 28.7
11	Massachusetts	1	36.4	9.2 - 15.5 33 3 - 39 4	35.3	32.0 - 38.7	34.2	23.3 - 15.0	/3.0	10.4 - 17.7	14.5	39.5 - 14.0	/1.8	33.1 - 50.5
12	(NPCR)	3	17.9	15.4 - 20.3	16.1	13.5 - 18.7	16.8	8.2 - 25.3	24.2	22.1 - 26.4	21.8	19.5 - 24.1	27.5	18.2 - 36.8
13		5	14.0	11.7 - 16.4	13.1	10.6 - 15.5	10.3	3.4 - 17.2	15.6	13.0 - 18.2	13.6	10.9 - 16.4	20.3	13.0 - 27.6
14	New Hampshire	1	32.4	24.9 - 39.8	29.6	21.9 - 37.3		-	34.9 15 7	29.6 - 40.2	35.5	30.1 - 41.0		-
10	(NFCR)	5	12.2	6.9 - 17.5	14.5	5.7 - 20.4 5.7 - 16.1		-	12.5	8.6 - 16.4	12.4	8.3 - 16.4		-
10	Rhode Island	1	30.3	23.6 - 37.0	29.6	23.1 - 36.2	40.7	12.4 - 69.0	36.1	30.9 - 41.2	34.9	29.7 - 40.0	51.6	34.0 - 69.3
10	(NPCR)	3	16.9	11.3 - 22.5	16.4	10.9 - 21.9	20.6	0.0 - 42.9	16.8	12.3 - 21.3	14.4	10.2 - 18.7	28.5	10.6 - 46.4
19	Mid Atlantia	5	12.8	7.7 - 17.8	11.7	6.8 - 16.6	20.6	0.0 - 42.9	10.7	6.8 - 14.7	9.9	6.1 - 13.6	14.3	0.0 - 31.3
20	New Jersey	1	33.6	31.1 - 36.1	32.7	29.9 - 35.5	29.9	23.3 - 36.6	41.1	39.3 - 43.0	42.5	40.5 - 44.6	33.3	28.2 - 38.5
21	(NPCR/SEER)	3	17.9	15.8 - 20.0	17.6	15.2 - 20.0	10.3	6.3 - 14.3	20.2	18.5 - 22.0	20.8	18.8 - 22.8	15.0	10.1 - 19.9
22	New Yest	5	12.6	10.7 - 14.4	12.3	10.2 - 14.4	6.9	3.8 - 10.0	14.8	12.8 - 16.8	15.4	13.1 - 17.6	8.8	4.2 - 13.4
23	(NPCR)	3	20.8	34.9 - 36.2 19.4 - 22.2	35.3 19.0	33.3 - 37.2 17.3 - 20.6	32.1 17.5	27.8 - 30.4 13.9 - 21.0	43.7 25.9	42.0 - 44.0 24.8 - 27.1	42.4 23.8	41.0 - 43.7 22.4 - 25.1	40.3 23.2	37.5 - 43.1 20.4 - 26.0
24	· · ·	5	16.8	15.5 - 18.2	14.6	13.1 - 16.2	13.1	9.9 - 16.4	20.4	19.1 - 21.7	18.2	16.6 - 19.8	16.5	13.5 - 19.5
25	Pennsylvania	1	32.1	29.9 - 34.2	32.7	30.2 - 35.1	29.4	23.7 - 35.1	39.8	38.3 - 41.3	39.5	37.8 - 41.2	39.0	34.6 - 43.4
26	(NPCR)	3 5	17.0 12.3	15.2 - 18.7 10.7 - 13.9	17.0 12.2	14.9 - 19.0 10.4 - 14.0	13.3 7.9	9.0 - 17.6 4.8 - 11.1	20.1 15.1	18.7 - 21.6 13.5 - 16.8	20.0 14.7	18.4 - 21.7 12.8 - 16.5	14.3 13.4	11.2 - 17.5 10.2 - 16.5
27	SOUTH													
28	South Atlantic			00.4.44.0		00.0 45.0		15.0 01.0		00 5 44 0	40 5	00.0 47.4	44.0	00.4 50.0
29	(NPCR)	1	35.2 19.6	26.4 - 44.0 12.3 - 26.8	35.5 20.8	26.0 - 45.0 12.8 - 28.7	38.0 13.5	15.0 - 61.0 0.0 - 28.5	38.7	32.5 - 44.8 16.9 - 29.2	40.5 21.9	33.6 - 47.4 15.2 - 28.7	41.2 30.6	30.1 - 52.2 19.4 - 41.8
30		5	12.1	5.8 - 18.3	13.3	6.3 - 20.3	7.6	0.0 - 18.9	14.5	8.0 - 21.1	13.5	7.1 - 19.9	16.8	3.0 - 30.5
31	Florida	1	33.8	32.0 - 35.6	34.6	32.6 - 36.6	26.2	20.4 - 32.0	41.3	40.1 - 42.5	42.1	40.7 - 43.5	33.1	29.4 - 36.7
3Z 22	(NPCR)	35	18.5 14.8	16.9 - 20.0 13.3 - 16.2	18.4 14.5	16.7 - 20.1 12.9 - 16.1	17.3 14.3	12.0 - 22.6 9.0 - 19.6	24.8 20.9	23.5 - 26.0 19.3 - 22.4	25.1 20.8	23.7 - 26.5 19.1 - 22.6	18.9 17.4	15.5 - 22.3 13.7 - 21.1
33 34	Georgia	- 1	25.6	22.5 - 28.8	25.7	21.9 - 29.5	23.7	17.5 - 29.9	35.0	32.9 - 37.1	36.1	33.6 - 38.5	31.6	27.2 - 36.0
35	(NPCR/SEER)	3	11.4	9.1 - 13.7	11.7	8.9 - 14.5	8.9	4.8 - 12.9	17.7	15.8 - 19.7	18.5	16.1 - 20.8	15.6	11.5 - 19.8
36	Mandand	5	7.6	5.6 - 9.6	8.2	5.7 - 10.6	4.5	1.7 - 7.2	12.5	10.4 - 14.6	13.3	10.8 - 15.7	10.9	6.3 - 15.4
37	(NPCR)	3	20.9 13.7	23.4 - 30.4 10.9 - 16.5	20.0 12.6	24.3 - 33.4 9.3 - 15.9	13.7	8.5 - 18.8	34.5 16.9	31.9 - 37.1 14.5 - 19.4	35.5 17.0	32.1 - 30.0 14.0 - 19.9	12.4	24.9 - 34.5 8.5 - 16.2
38		5	10.7	8.1 - 13.3	9.7	6.7 - 12.7	10.8	6.1 - 15.5	13.4	10.8 - 16.0	13.5	10.6 - 16.5	8.9	5.0 - 12.7
39	North Carolina	1	25.0	22.2 - 27.8	26.8	23.4 - 30.1	16.8	11.7 - 21.8	35.4	33.4 - 37.4	36.9	34.5 - 39.2	28.6	23.9 - 33.3
40	(NPCR)	5	10.2	8.1 - 12.4	14.3	8.2 - 13.2	6.6 5.7	2.8 - 8.6	17.4	9.9 - 14.1	13.3	10.8 - 15.9	5.9	2.5 - 9.3
41	South Carolina	1	27.6	23.6 - 31.6	28.8	24.2 - 33.5	29.9	20.8 - 39.0	30.1	27.4 - 32.9	31.7	28.4 - 35.0	23.4	17.9 - 28.8
42	(NPCR)	3	14.5	11.2 - 17.7	15.4	11.6 - 19.2	16.0	8.1 - 23.8	13.3	10.7 - 15.9	15.7	12.5 - 18.8	6.8	3.4 - 10.3
43	West Virginia	1	23.5	17.9 - 29.1	23.8	18 1 - 29 5	0.7	2.2 - 11.1	30.1	26.0 - 34.3	30.2	25.8 - 34.5	31.7	2.3 - 10.4 12.8 - 50.7
44	(NPCR)	3	9.1	5.4 - 12.9	9.6	5.7 - 13.5		-	16.3	12.2 - 20.3	15.9	11.8 - 20.0	8.7	0.0 - 20.8
45		5	6.3	3.1 - 9.5	6.6	3.3 - 10.0		-	9.2	5.4 - 13.1	7.9	4.5 - 11.4	9.0	0.0 - 21.3
46	East South Centr	al	24.8	21.0 28.6	25.0	20 7 20 4	24.3	15.6 33.0	21.4	287 341	32.5	20.3 35.7	20.3	23 5 35 2
47 10	(NPCR)	3	11.5	8.6 - 14.4	10.6	7.5 - 13.7	12.8	6.1 - 19.4	16.5	13.9 - 19.0	18.9	15.9 - 21.8	11.9	7.0 - 16.8
40 70		5	8.3	5.6 - 10.9	7.3	4.5 - 10.0	7.8	3.3 - 12.3	9.8	7.3 - 12.3	11.4	8.2 - 14.6	4.5	1.4 - 7.7
49 50	Kentucky	1	30.6	26.3 - 34.9	30.4	25.9 - 34.9	35.2	20.7 - 49.6	32.5	29.8 - 35.2	32.6	29.8 - 35.5	36.6	27.7 - 45.5
51	(NPCR/SEER)	5	10.3	7.4 - 13.2	10.3	7.3 - 13.3	14.2	3.0 - 24.8 1.8 - 21.9	11.2	8.5 - 14.0	11.6	8.6 - 14.5	9.8	1.8 - 17.8
52	Mississippi	1	24.6	17.2 - 32.0	28.2	19.9 - 36.5	18.2	4.5 - 31.9	31.2	27.8 - 34.6	32.5	28.4 - 36.6	25.7	19.4 - 32.1
53	(NPCR)	3	13.8	7.8 - 19.9	16.9	9.7 - 24.1	3.7	0.0 - 9.3	16.1	12.9 - 19.2	17.3	13.5 - 21.0	16.8	10.5 - 23.1
54	Tennessee	5 1	26.9	2.0 - 11.0	28.0	21.0 - 13.2	23.2	65-400	35.1	32 5 - 37 7	35.0	32 1 - 37 8	32.3	25.9 - 38.8
55	(NPCR)	3	11.8	7.8 - 15.9	14.0	9.3 - 18.6	4.8	0.0 - 12.1	17.0	14.6 - 19.4	16.2	13.6 - 18.8	18.3	12.2 - 24.4
56		5	8.2	4.6 - 11.7	10.0	5.9 - 14.1	0.0	-	11.5	9.0 - 13.9	10.7	8.2 - 13.2	12.0	5.9 - 18.1
57	West South Centre	ral 1	26.4	23 1 - 29 8	29.5	253-336	21 7	156-277	32.6	30 1 - 35 1	34 9	317-381	27 8	23 4 - 32 3
58	(NPCR/SEER)	3	11.5	9.1 - 13.9	15.0	11.7 - 18.2	6.2	3.0 - 9.4	15.7	13.4 - 18.0	18.3	15.3 - 21.3	10.7	7.1 - 14.3
59		5	9.1	6.8 - 11.4	11.9	8.9 - 15.0	5.0	2.1 - 7.9	9.3	7.1 - 11.6	11.1	8.1 - 14.0	6.8	3.4 - 10.2
bU														

1					•	04 2002					~	04 2000		
2		-	Δ	II races	20	White		Black		All races	20	White		Black
3		Years	NS	95% CI	NS	95% CI	NS	95% CI	NS	95% CI	NS	95% CI	NS	95% CI
4	Oklahoma	1	26.3	22.1 - 30.6	27.4	22.4 - 32.3	27.7	13.5 - 42.0	31.5	28.7 - 34.3	32.6	29.3 - 35.8	36.1	24.7 - 47.6
5	(NPCR)	3	11.9	8.7 - 15.1	11.3	7.6 - 15.0	18.2	5.8 - 30.5	16.2	13.6 - 18.9	15.7	12.7 - 18.6	23.3	12.9 - 33.7
6		5	8.1	5.4 - 10.8	6.9	4.0 - 9.8	13.2	1.8 - 24.5	10.9	8.0 - 13.9	11.1	8.1 - 14.2	23.7	12.6 - 34.8
7	Texas	1	33.2	31.6 - 34.8	33.8	32.0 - 35.6	28.8	23.3 - 34.4	37.0	35.9 - 38.0	37.3	36.1 - 38.5	29.5	26.4 - 32.7
8	(NPCR)	3	16.4	15.0 - 17.7	16.3	14.9 - 17.7	12.7	8.7 - 16.7	19.7	18.7 - 20.8	19.8	18.7 - 21.0	13.1	10.2 - 16.0
9		5	12.0	10.9 - 13.2	11.9	10.6 - 13.2	10.0	6.0 - 14.1	14.1	12.9 - 15.3	14.3	12.9 - 15.6	8.0	5.8 - 10.3
10	Fast North Central													
11	Michigan	1	28.2	25.7 - 30.6	29.5	26.7 - 32.3	24.5	18.4 - 30.6	34.3	32.6 - 36.1	35.6	33.6 - 37.7	27.6	23.5 - 31.6
12	(NPCR)	3	15.6	13.6 - 17.6	15.9	13.6 - 18.2	14.3	9.3 - 19.4	19.2	17.5 - 20.9	19.8	17.8 - 21.8	16.7	12.8 - 20.6
12		5	11.0	9.2 - 12.8	11.6	9.5 - 13.7	7.9	4.3 - 11.5	15.2	13.3 - 17.1	16.4	14.2 - 18.6	6.1	4.1 - 8.0
13	Ohio	1	27.0	24.5 - 29.5	28.4	25.5 - 31.2	24.4	18.4 - 30.5	33.1	31.3 - 34.8	33.5	31.6 - 35.5	29.9	25.4 - 34.4
14	(NPCR)	3	12.7	10.8 - 14.7	14.1	11.8 - 16.4	7.8	4.3 - 11.2	17.2	15.6 - 18.9	17.1	15.3 - 19.0	15.8	11.9 - 19.6
15	Wieconcin	1	9.1	7.4 - 10.6	10.3	0.2 - 12.3	4.7	2.1 - 7.3	12.7	10.8 - 14.3	12.2	10.2 - 14.3	13.9	10.0 - 17.7
16	(NPCR)	3	34.4 16.8	30.0 - 30.1 13.8 - 19.9	34.9 16.8	31.1 - 30.0 13 5 - 20 0	30.2 22.8	24.1 - 52.4	40.5 20.4	37.9 - 43.1 17 8 - 22 9	20.9	30.4 - 44.1 18 1 - 23 6	30.7 13.4	21.7 - 39.7 7 1 - 19 7
17		5	13.9	10.9 - 16.9	14.0	10.8 - 17.2	13.9	4.0 - 23.9	11.5	9.0 - 14.1	12.0	9.2 - 14.7	10.1	1.6 - 18.6
18	West North Centra	I												
19	lowa	1	27.1	22.0 - 32.2	27.5	22.5 - 32.4		-	38.7	35.2 - 42.2	39.7	36.0 - 43.3	43.5	25.5 - 61.6
20	(SEER)	3	14.6	10.6 - 18.7	15.5	11.5 - 19.5		-	19.4	16.0 - 22.9	20.7	17.1 - 24.4	19.8	2.2 - 37.3
21		5	12.0	8.3 - 15.7	12.6	8.9 - 16.3		-	16.5	12.9 - 20.1	17.7	13.9 - 21.5	19.9	2.2 - 37.5
22	Nebraska	1	32.9	27.0 - 38.8	34.3	28.0 - 40.6	37.0	10.9 - 63.1	40.3	36.2 - 44.3	41.4	37.1 - 45.8	38.8	24.0 - 53.5
23	(NPCR)	3 5	17.3	12.0 - 22.0	17.5	12.5 - 22.4 8 1 - 17 0	28.5 23.7	4.2 - 52.9 0.0 - 48.2	19.9	10.0 - 23.8	20.6	10.5 - 24.7	18.5 19.0	5.3 - 31.7 5.5 - 32.5
20	WEST	Ū		0.0 10.0		0.1 11.0	20.7	0.0 10.2	1.1.0	11.0 10.0	10.0	11.0 10.1	10.0	0.0 02.0
24	Mountain													
20	Colorado	1	29.8	25.7 - 33.8	28.7	24.3 - 33.1	41.2	24.5 - 57.9	37.5	34.7 - 40.4	36.7	33.7 - 39.7	27.8	16.8 - 38.7
20	(NPCR)	3	13.9	10.9 - 17.0	13.8	10.5 - 17.1	9.8	0.1 - 19.5	20.1	17.5 - 22.8	19.6	16.8 - 22.4	10.9	1.5 - 20.3
27		5	11.5	8.7 - 14.3	11.3	8.3 - 14.4	0.9	0.0 - 15.0	16.0	13.2 - 18.9	15.6	12.6 - 18.6	11.0	1.5 - 20.5
28		1	31.5 19.4	22.5 - 40.5	32.1	22.8 - 41.4		-	36.8	31.5 - 42.2	37.6	32.0 - 43.1		-
29		5	15.4	8.1 - 22.6	15.2	7.7 - 22.7		-	11.5	6.5 - 16.4	11.8	6.6 - 17.1		-
30	Montana	1	29.1	19.1 - 39.1	28.6	18.1 - 39.1		-	35.9	29.6 - 42.2	38.2	31.3 - 45.1		-
31	(NPCR)	3	14.7	7.3 - 22.1	15.2	7.5 - 22.8		-	15.4	9.7 - 21.0	16.8	10.6 - 23.0		-
32		5	13.9	5.7 - 22.1	13.9	5.2 - 22.7		-	11.1	5.5 - 16.6	11.8	5.9 - 17.8		-
33	New Mexico	1	27.2	22.4 - 32.0	25.9	20.9 - 31.0		-	32.0	28.6 - 35.3	31.5	27.9 - 35.1	37.2	13.1 - 61.4
34	(SEER)	3	11.2	7.7 - 14.7	11.0	7.3 - 14.6		-	13.9	11.1 - 16.8	13.4	10.3 - 16.4	18.9	0.0 - 41.2
35	1.11 - 1-	5	7.0	4.3 - 9.7	6.9	4.0 - 9.7		-	9.7	7.1 - 12.4	9.9	7.0 - 12.9	07.4	-
36	(SEER)	3	28.8	21.0 - 30.0	29.4 13.2	22.0 - 36.9		-	38.7 18 9	33.7 - 43.7 14 3 - 23 6	40.4 20.7	35.0 - 45.7	27.4	3.6 - 51.2
37	(OLLIV)	5	11.4	6.5 - 16.3	11.7	6.5 - 17.0		-	9.8	5.9 - 13.7	10.7	6.4 - 15.0	0.2	-
38	Wyoming	1	30.4	16.3 - 44.4	32.8	17.8 - 47.7		-	31.8	24.2 - 39.5	32.3	24.6 - 40.0		-
20	(NPCR)	3	5.4	0.0 - 12.0	5.9	0.0 - 12.9		-	16.0	9.9 - 22.1	16.3	10.1 - 22.5		-
39		5	2.7	0.0 - 7.0	3.0	0.0 - 7.6		-	8.1	2.2 - 13.9	8.1	2.3 - 14.0		-
40	Pacific													10.0 50.0
41	Alaska	1	33.3	23.4 - 43.2	34.3	22.6 - 46.1		-	38.5	31.6 - 45.4	37.1	28.2 - 46.0	31.5	10.0 - 52.9
42		5	9.0	3.9 - 14.0	9.8	2.6 - 17.0		_	16.6	9.4 - 23.7	13.1	6.9 - 19.4	0.7	-
43	California	1	32.9	317-341	31.2	298-327	25.6	21 4 - 29 8	39.5	387-403	37.2	362-382	31.5	28 4 - 34 5
44	(NPCR/SEER)	3	16.3	15.3 - 17.3	14.4	13.3 - 15.6	10.0	7.4 - 12.6	21.1	20.3 - 21.9	18.7	17.7 - 19.6	16.1	13.2 - 18.9
45		5	11.4	10.6 - 12.3	10.1	9.1 - 11.1	7.2	5.1 - 9.3	14.8	13.8 - 15.8	12.8	11.7 - 13.9	11.7	8.5 - 14.9
46	Hawaii	1	34.8	29.8 - 39.8	37.3	23.9 - 50.7		-	40.5	36.9 - 44.1	34.3	26.9 - 41.7	53.6	25.1 - 82.2
47	(SEER)	3	18.2	14.2 - 22.3	21.2	9.7 - 32.7		-	23.1	19.4 - 26.8	23.0	15.9 - 30.1	21.4	0.0 - 44.1
48	2	5	15.2	11.3 - 19.1	19.8	8.4 - 31.1		-	13.2	8.8 - 17.6	16.8	9.0 - 24.7	21.8	0.0 - 44.9
49	Oregon	1	26.8	22.6 - 31.1	25.5	20.9 - 30.1		-	34.7	31.9 - 37.5	33.2	30.2 - 36.2	42.1	26.2 - 57.9
50	(INFUR)	3 5	6.9	1.2 - 13.2 4.3 - 9.5	0.0 5.9	3.3 - 8.5		-	11.2	8.7 - 13.8	14.1	7.4 - 12.8	24.3 6.3	0.0 - 39.0 0.0 - 15.3
51	Washington	1	32.2	29.0 - 35.4	31.2	27.6 - 34.9	35.8	199 - 517	40.3	38 1 - 42 5	38.4	35.9 - 40.9	49.0	394 - 587
52	(NPCR)	3	15.3	12.8 - 17.8	13.9	11.2 - 16.7	21.1	7.4 - 34.8	22.1	20.0 - 24.2	20.4	18.0 - 22.7	21.6	12.5 - 30.8
52		5	11.8	9.5 - 14.1	10.7	8.1 - 13.2	12.3	1.6 - 23.1	14.7	12.4 - 17.0	13.9	11.3 - 16.4	8.1	4.6 - 11.7
55														

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	-			20	001-2003			. <u> </u>		20	004-2009		
	SEED	A	Il races		White		Black	A	Il races		White		Black
	Summary	NS		NS		NS		NS		NS		NS	
	Stage	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI
UNITED STATES													
	All stages	12.2	11.8 - 12.5	11.7	11.3 - 12.1	9.1	8.0 - 10.2	14.8	14.4 - 15.2	14.3	13.8 - 14.8	11.4	10.3 - 12.5
	Localized	22.9	22.1 - 23.8	22.4	21.4 - 23.4	15.8	13.3 - 18.2	25.7	24.9 - 26.5	24.8	23.9 - 25.7	20.8	18.4 - 23.3
	Regional	8.3	7.6 - 9.0	7.6	6.8 - 8.4	8.3	6.3 - 10.4	9.5	8.8 - 10.2	9.2	8.4 - 9.9	7.1	5.4 - 8.9
	Distant	2.8	2.4 - 3.3	2.4	2.0 - 2.9	2.5	1.2 - 3.8	3.5	3.0 - 4.0	2.9	2.3 - 3.4	3.8	2.6 - 5.1
	Unknown	8.2	7.6 - 8.9	7.9	7.2 - 8.7	7.0	5.3 - 8.8	8.9	8.2 - 9.6	9.0	8.1 - 9.8	6.2	4.6 - 7.8
NORTHEAST													
New England		40.4	0.0 45 5	40.0	0.4.40.0	10 5	24 025	445	44 4 47 7	44.0	44.4.40.5	40.4	77 044
Connecticut	All stages	12.4	9.2 - 15.5	12.8	9.4 - 10.2	13.5	3.4 - 23.5	14.5	11.4 - 17.7	14.9	11.4 - 18.5	16.1	1.1 - 24.4 6.2 - 28.6
(SEER)	Degional	23.0	34-119	25.5	13.72	34.3	88-598	23.7	17.2 - 30.3	23.0	10.0 - 30.0	22.4	0.2 - 30.0
	Distant	1.1	0.0 - 3.8	4.5 0.0	0.0 - 0.0	04.0	-	5.8	26-90	4 1	06-76	15 1	05-297
	Unknown	8.6	3.9 - 13.2	9.6	4.5 - 14.8	0.0	-	9.5	6.0 - 13.1	9.3	5.7 - 13.0		-
Massashusatta		14.0	117 164	12.1	10.6 15.5	10.2	24 17 2	15.6	120 192	12.6	10.0 16.4	20.2	12.0 27.6
(NIDCD)	All slayes	31.0	25.4 - 36.6	28.5	22 0 - 34 0	22.2	37-407	28.1	13.0 - 18.2	26.5	21 1 - 31 0	14.6	13.0 - 27.0
(NF CIX)	Regional	8.0	20.4 - 30.0 4 6 - 11 4	20.5	46-113	9.9	0.0 - 21.0	10.5	67-144	9.5	56-134	9.3	0.0 - 32.3
	Distant	2.6	05-46	2.2	04-40	0.0	-	4.7	24-70	2.2	0.0 - 4.5	0.0	-
	Unknown	3.8	1.4 - 6.1	2.8	1.1 - 4.6	0.0	-	3.9	1.8 - 6.0	1.6	0.5 - 2.8	10.0	0.0 - 20.9
New Hampshire		12.2	69 175	10.9	57 161		-	12.5	86-164	12.4	83-164		
(NPCR)	L ocalized	32.9	16 2 - 49 5	33.7	158-516		-	24.2	15.9 - 32.4	25.6	17 2 - 34 1		-
	Regional	10.1	02-200	4.3	00-108		_	10.0	26 - 17.3	87	16-159		-
	Distant	0.0	-	0.0	-		-	10.0	-	0.7	-		-
	Unknown	2.3	0.0 - 6.1	2.5	0.0 - 6.5		-	3.5	0.0 - 8.5	4.0	0.0 - 9.6		-
Rhode Island	All stages	12.8	77-178	11.7	68-166	20.6	00-429	10.7	68-147	9.9	61-136	14.3	00-313
(NPCR)	l ocalized	22.2	10.0 - 34.5	19.8	7 5 - 32 1	20.0	-		-	0.0	-	11.0	-
(11 014)	Regional	11.3	2.4 - 20.3	12.5	2.7 - 22.4		-		-		-		-
	Distant	8.5	0.0 - 18.2	5.7	0.0 - 14.2		-		-		-		-
	Unknown	4.5	0.0 - 10.2	4.6	0.0 - 10.4		-		-		-		-
Mid Atlantic													
New Jersey	All stages	12.6	10.7 - 14.4	12.3	10.2 - 14.4	6.9	3.8 - 10.0	14.8	12.8 - 16.8	15.4	13.1 - 17.6	8.8	4.2 - 13.4
(NPCR/SEER)	Localized	23.4	19.3 - 27.4	23.0	18.3 - 27.7	21.7	11.2 - 32.2	23.9	20.1 - 27.6	25.0	20.8 - 29.2	16.5	7.1 - 25.9
	Regional	7.9	4.7 - 11.1	9.0	5.2 - 12.8	2.5	0.0 - 6.5	10.0	6.5 - 13.5	9.3	5.6 - 12.9	11.2	3.3 - 19.0
	Distant	0.9	0.0 - 1.8	1.2	0.0 - 2.5	0.0	-	3.4	1.6 - 5.2	4.1	2.0 - 6.2	2.2	0.0 - 5.0
	Unknown	12.0	8.6 - 15.3	10.2	7.0 - 13.5	13.3	3.5 - 23.0	11.1	7.7 - 14.5	12.0	7.9 - 16.0		-
New York	All stages	16.8	15.5 - 18.2	14.6	13.1 - 16.2	13.1	9.9 - 16.4	20.4	19.1 - 21.7	18.2	16.6 - 19.8	16.5	13.5 - 19.5
(NPCR)	Localized	32.0	28.8 - 35.2	30.3	26.5 - 34.1	18.2	11.3 - 25.2	34.0	31.4 - 36.7	30.2	27.0 - 33.4	30.2	23.9 - 36.4
	Regional	14.9	12.2 - 17.6	11.0	8.1 - 13.8	18.5	11.7 - 25.3	13.9	11.6 - 16.2	13.1	10.3 - 15.9	12.2	8.0 - 16.5
	Distant	5.9	4.1 - 7.8	4.0	2.2 - 5.8	3.3	1.3 - 5.3	5.3	3.7 - 6.8	4.1	2.6 - 5.6	9.1	5.3 - 12.9
	Unknown	10.5	8.6 - 12.4	8.7	6.5 - 10.9	9.0	4.3 - 13.7	13.5	11.1 - 16.0	13.6	10.8 - 16.5	4.1	1.7 - 6.5
Pennsylvania	All stages	12.3	10.7 - 13.9	12.2	10.4 - 14.0	7.9	4.8 - 11.1	15.1	13.5 - 16.8	14.7	12.8 - 16.5	13.4	10.2 - 16.5
(NPCR)	Localized	23.5	19.9 - 27.0	23.6	19.6 - 27.5	9.9	5.2 - 14.5	25.4	22.1 - 28.7	25.6	21.9 - 29.3	23.4	16.2 - 30.6
	Regional	7.8	5.3 - 10.3	7.2	4.5 - 9.8	8.1	2.2 - 14.1	8.7	6.4 - 11.1	9.4	6.6 - 12.2	10.6	5.4 - 15.7
	Distant	1.5	0.3 - 2.6	1.3	0.0 - 2.6	0.0	0.0 - 0.0	5.4	3.5 - 7.2	4.5	2.7 - 6.4	5.1	1.1 - 9.1
	Unknown	9.2	6.2 - 12.3	6.7	3.8 - 9.0	8.7	2.9 - 14.5	8.0	5.2 - 10.9	5.9	3.2 - 8.0	11.5	2.8 - 20.2
SOUTH South Atlantic													
Delaware	All stages	12.1	5.8 - 18.3	13.3	6.3 - 20.3	7.6	0.0 - 18.9	14.5	8.0 - 21.1	13.5	7.1 - 19.9	16.8	3.0 - 30.5
(NPCR)	Localized	25.5	11.1 - 39.8	27.8	11.4 - 44.2		-	24.7	13.0 - 36.4	17.5	9.6 - 25.3	40.5	13.6 - 67.5
	Regional	10.2	0.0 - 22.2	15.6	0.0 - 33.5		-	0.0	0.0 - 0.1	9.1	0.0 - 19.0	0.7	0.0 - 2.3
	Distant	0.0	-	0.0	-		-		-		-		-
	Unknown	0.0	-	0.0	-		-	5.9	0.0 - 14.5	8.4	0.0 - 20.5		-
Florida	All stages	14.8	13.3 - 16.2	14.5	12.9 - 16.1	14.3	9.0 - 19.6	20.9	19.3 - 22.4	20.8	19.1 - 22.6	17.4	13.7 - 21.1
(NPCR)	Localized	26.4	23.0 - 29.7	26.8	23.2 - 30.4	14.8	6.6 - 22.9	32.8	29.9 - 35.6	32.7	29.7 - 35.7	30.3	22.3 - 38.3
	Regional	10.7	7.9 - 13.5	9.4	6.6 - 12.2	15.8	6.7 - 24.8	14.8	11.8 - 17.7	14.5	11.3 - 17.8	9.5	4.9 - 14.1
	Distant	5.5	3.4 - 7.5	4.7	2.7 - 6.7	6.9	0.7 - 13.1	8.1	5.8 - 10.4	7.0	4.6 - 9.3	9.7	3.3 - 16.1
	Unknown	12.5	10.1 - 15.0	12.4	9.7 - 15.0	14.4	6.5 - 22.3	16.3	13.3 - 19.2	16.4	13.0 - 19.7	11.2	6.0 - 16.5
Georgia	All stages	7.6	5.6 - 9.6	8.2	5.7 - 10.6	4.5	1.7 - 7.2	12.5	10.4 - 14.6	13.3	10.8 - 15.7	10.9	6.3 - 15.4
(NPCR/SEER)	Localized	16.5	11.9 - 21.2	19.4	13.7 - 25.1	6.9	1.5 - 12.2	22.7	18.6 - 26.9	22.7	18.0 - 27.3	24.4	15.3 - 33.6
	Regional	2.4	0.0 - 4.9	2.6	0.0 - 5.9	2.0	0.0 - 5.2	6.4	3.7 - 9.2	8.3	4.8 - 11.8	4.4	1.7 - 7.0
	Distant	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.1	0.0 - 0.3	4.1	1.8 - 6.4	5.0	2.1 - 7.8	3.3	0.0 - 6.8
	Unknown	5.5	2.5 - 8.5	3.2	1.0 - 5.3	9.2	0.5 - 17.8	8.4	4.6 - 12.2	8.0	4.1 - 11.9	8.7	0.0 - 18.1
Maryland	All stages	10.7	8.1 - 13.3	9.7	6.7 - 12.7	10.8	6.1 - 15.5	13.4	10.8 - 16.0	13.5	10.6 - 16.5	8.9	5.0 - 12.7
(NPCR)	Localized		-		-		-		-		-		-
	Regional		-		-		-		-		-		-
	Distant		-		-		-		-		-		-
	Unknown		-		-		-		-		-		-

Cancer

				2(001-2003		Black			2	004-2009		B L I
	SEER	A	Il races		White		Black	A	ll races		White		Black
	Summary Stage	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI
North Carolina	All stages	10.2	8.1 - 12.4	10.7	8.2 - 13.2	5.7	2.8 - 8.6	12.0	9.9 - 14.1	13.3	10.8 - 15.9	5.9	2.5 - 9.3
(NPCR)	Localized	17.5	13.1 - 21.8	17.6	12.7 - 22.5	9.7	3.3 - 16.2	21.7	17.2 - 26.2	25.3	19.9 - 30.6	6.4	3.0 - 9.9
	Regional	6.7	3.2 - 10.1	5.1	1.8 - 8.4	11.9	2.6 - 21.1	6.2	3.5 - 8.9	6.0	3.0 - 9.0	3.2	0.0 - 7.3
	Distant Unknown	2.7 7 4	0.8 - 4.6 3 9 - 10 8	3.3 8.0	1.1 - 5.4 4 1 - 12 0	0.0	- 03-36	3.4 6.0	1.2 - 5.6 2 9 - 9 0	3.1 4.6	0.9 - 5.2 2 1 - 7 2	10.3	- 22-185
South Carolina		10.0	7.2 - 12.7	11.6	8.2 - 15.1	6.7	2.2 - 11.1	10.4	77-131	11.0	85-152	6.5	2.2 - 10.0
(NPCR)	Localized	18.2	12.7 - 23.7	20.0	13.4 - 26.5	12.7	1.3 - 24.2	20.8	15.4 - 26.2	24.5	18.2 - 30.9	13.5	5.1 - 21.9
	Regional	7.9	3.1 - 12.8	10.6	4.5 - 16.7	5.4	0.0 - 13.8	4.3	1.4 - 7.1	3.8	0.0 - 7.8	0.1	0.0 - 0.2
	Distant	0.0	-	0.0	-	0.0	-	3.5	0.1 - 6.8	5.2	0.3 - 10.1		-
	Unknown	4.8	1.9 - 7.8	4.2	1.0 - 7.4	7.6	0.0 - 15.5	6.0	2.8 - 9.2	5.3	0.4 - 10.2	6.0	0.0 - 13.4
West Virginia	All stages	6.3	3.1 - 9.5	6.6	3.3 - 10.0		-	9.2	5.4 - 13.1	7.9	4.5 - 11.4	9.0	0.0 - 21.3
(NPCR)	Localized	11.5 15.6	2.9 - 20.1	11.9 16 1	3.0 - 20.8		-	16.2	8.7 - 23.7 6.0 - 24.5	16.9 15.2	9.1 - 24.7 5 9 - 24 5		-
	Distant	3.0	0.0 - 7.4	3.1	3.8 - 28.3 0.0 - 7.7		-	8.3	0.0 - 24.5 1.5 - 15.1	9.0	5.9 - 24.5 1.7 - 16.3		-
	Unknown	0.0	-	0.0	-		-	2.2	0.0 - 5.5	2.0	0.0 - 5.0		-
East South Cent	ral												
Alabama	All stages	8.3	5.6 - 10.9	7.3	4.5 - 10.0	7.8	3.3 - 12.3	9.8	7.3 - 12.3	11.4	8.2 - 14.6	4.5	1.4 - 7.7
(NPCR)	Localized	15.1	9.7 - 20.5	13.2	7.5 - 18.9	24.2	9.9 - 38.6	19.7	15.4 - 24.0	20.3	15.9 - 24.6	13.9	4.1 - 23.8
	Distant	5.3 3.4	1.3 - 9.2	5.5 1.1	0.0 - 2.4	4.3	-	3.4 28	1.2 - 5.0 0 0 - 5 7	3 .3	2.0-0.5 01-63	0.1	0.0 - 0.3
	Unknown	4.7	1.5 - 7.9	4.0	0.8 - 7.1	6.0	0.0 - 13.0	2.8	0.5 - 5.1	3.8	1.0 - 6.5	0.1	0.0 - 0.3
Kentucky	All stages	10.3	7.4 - 13.2	10.3	7.3 - 13.3	11.9	1.8 - 21.9	11.2	8.5 - 14.0	11.6	8.6 - 14.5	9.8	1.8 - 17.8
(NPCR/SEER)	Localized	21.9	15.7 - 28.2	21.8	15.4 - 28.2	24.2	2.8 - 45.6	18.8	13.7 - 24.0	20.0	15.0 - 25.1	16.5	1.6 - 31.4
	Regional	2.2	0.0 - 4.5	1.4	0.0 - 3.6	8.3	0.0 - 20.9	10.6	6.5 - 14.6	11.6	7.3 - 16.0		-
	Distant	0.0	0.0 - 0.0	0.0	0.0 - 0.0		-	2.1	0.3 - 3.9	1.8	0.0 - 4.3	6.4	0.0 - 14.1
•••	UTIKHOWH	0.2	5.5 - 9.2	7.0	3.0 - 10.2		-	4.4	1.5 - 7.5	2.9	0.5 - 5.4		-
Mississippi	All stages	7.1	2.6 - 11.6 2 3 - 21 0	8.0 13.3	2.8 - 13.2 1 5 - 25 1	3.7 10.4	0.0 - 9.3	11.3	8.0 - 14.6 16 7 - 20 8	13.5	9.6 - 17.4 17.2 - 32.2	8.6	3.6 - 13.5 5 5 - 32 8
(NFOR)	Regional	12.1	0.2 - 24.2	11.8	0.0 - 25.5	10.4	-	23.3 5.1	1.0 - 9.2	3.7	0.0 - 8.0	4.8	0.0 - 10.8
	Distant	0.0	-	0.0	-		-	3.8	0.2 - 7.5	5.2	0.4 - 9.9		-
	Unknown	0.0	-	0.0	-		-	3.7	0.0 - 8.5	3.2	0.0 - 7.8	16.0	2.0 - 30.0
Tennessee	All stages	8.2	4.6 - 11.7	10.0	5.9 - 14.1	0.0	-	11.5	9.0 - 13.9	10.7	8.2 - 13.2	12.0	5.9 - 18.1
(NPCR)	Localized	14.6	7.8 - 21.3	19.0	9.0 - 29.0		-	20.4	15.8 - 25.0	18.6	13.9 - 23.4	24.2	12.9 - 35.5
	Regional	5.4 3.5	0.0 - 11.8	6.0 1 3	0.0 - 13.1		-	6.6	3.7 - 9.6	7.5	3.9 - 11.1 0.0 - 0.1	0.2	0.0 - 0.7
	Unknown	3.3	0.0 - 8.4	4.0	0.0 - 10.0		-	6.2	2.7 - 9.8	3.9	0.5 - 7.3	0.3	0.0 - 12.5
West South Cent	tral												
Louisiana	All stages	9.1	6.8 - 11.4	11.9	8.9 - 15.0	5.0	2.1 - 7.9	9.3	7.1 - 11.6	11.1	8.1 - 14.0	6.8	3.4 - 10.2
(NPCR/SEER)	Localized	17.9	13.2 - 22.7	21.8	16.0 - 27.6	11.4	4.2 - 18.7	15.1	11.2 - 19.0	17.8	12.8 - 22.8	11.2	5.4 - 17.0
	Regional	4.1	1.3 - 7.0	4.9	1.2 - 8.5	1.9	0.0 - 4.9	6.2 2 3	3.4 - 8.9	8.4	4.8 - 12.0	2.5	0.0 - 5.3
	Unknown	5.0	1.2 - 8.8	4.2	0.0 - 8.5	3.3	- 0.0 - 8.5	5.3	0.0 - 4.0 1.0 - 9.7	6.0	0.0 - 0.0 0.4 - 11.7	4.2	0.0 - 9.3
Oklahoma	All stages	8.1	54-108	6.9	40-98	13.2	18-245	10.9	80-139	11.1	81-142	23.7	126-348
(NPCR)	Localized	15.6	10.1 - 21.2	12.8	7.4 - 18.1		-	17.3	11.7 - 22.8	18.6	12.9 - 24.3	22.8	0.0 - 46.4
	Regional	3.8	0.0 - 8.2	2.5	0.0 - 6.4		-	3.5	0.6 - 6.5	5.0	1.3 - 8.8	8.7	0.0 - 21.1
	Distant	1.2	0.0 - 3.0	0.0	0.0 - 0.0		-	3.7	0.4 - 7.0	3.7	0.4 - 6.9	13.1	0.0 - 27.0
	Unknown	7.2	3.5 - 11.0	6.3	1.3 - 11.3	13.8	0.0 - 29.5	11.0	7.3 - 14.6	9.9	6.2 - 13.7	27.3	5.8 - 48.7
Texas	All stages	12.0	10.9 - 13.2	11.9	10.6 - 13.2	10.0	6.0 - 14.1	14.1	12.9 - 15.3	14.3	12.9 - 15.6	8.0	5.8 - 10.3
(NPCR)	Localized	19.5	17.0 - 22.0 5 3 - 0 8	19.0	16.3 - 21.7	16.3	9.3 - 23.3	22.6	20.3 - 24.9	22.2	19.7 - 24.7	15.1	10.0 - 20.1
	Distant	3.7	2.2 - 5.2	3.7	4.3 - 0.9 2.1 - 5.4	2.3	0.2 - 4.3	3.0	1.9 - 4.2	3.1	1.8 - 4.3	4.4	1.4 - 7.4
	Unknown	11.4	9.4 - 13.4	11.0	8.9 - 13.1	8.0	2.0 - 14.0	12.2	10.0 - 14.4	12.6	10.2 - 15.0	10.2	6.4 - 13.9
IDWEST East North Cent	-al												
Michigan	All stages	11.0	9.2 - 12.8	11.6	9.5 - 13.7	7.9	4.3 - 11.5	15.2	13.3 - 17.1	16.4	14.2 - 18.6	6.1	4.1 - 8.0
(NPCR)	Localized	23.9	19.3 - 28.4	24.5	19.4 - 29.5	14.2	6.2 - 22.1	26.7	22.2 - 31.2	28.3	23.4 - 33.2	13.5	9.3 - 17.8
	Regional	7.2	4.3 - 10.2	7.9	4.7 - 11.0	9.1	1.8 - 16.4	16.2	11.7 - 20.7	16.3	11.1 - 21.5	9.6	1.4 - 17.8
	Distant	1.6 6 1	0.3 - 2.8 3 8 - 8 5	1.7	0.3 - 3.1 2 7 - 6 7	3.1	0.0 - 6.9 0.6 - 12 2	5.7	3.5 - 7.9 5 7 - 10 1	5.4 2 0	3.0 - 7.7 6 2 - 11 5	2.5	0.0 - 5.6
Ohio		0.1	7 4 40.0	40.0	2.7 - 0.7		0.0 - 10.0	40.7	10.0 14.5	40.0	10.0 11.0	42.0	10.0 47.7
(NPCR)	All stages	9.1 17 9	7.4 - 10.8 13.8 - 22.0	10.3	8.2 - 12.3 14 1 - 23 5	4. 7	2.1 - 7.3 5.6 - 24.3	28.9	10.8 - 14.5 24.6 - 33.1	12.2	10.2 - 14.3	28.2	10.0 - 17.7
	Regional	5.6	3.0 - 8.2	6.9	3.6 - 10.3	5.6	0.0 - 12.3	8.3	5.6 - 11.0	8.9	5.7 - 12.1	12.1	5.8 - 18.4
	Distant	1.7	0.4 - 3.1	1.9	0.3 - 3.4	0.0	-	3.3	1.2 - 5.3	2.9	1.1 - 4.8	5.3	0.0 - 10.7
	Unknown	6.5	4.1 - 8.9	8.2	5.5 - 10.9	3.0	0.0 - 6.5	2.9	1.3 - 4.5	2.3	0.8 - 3.7	2.0	0.3 - 3.8

				2001-2003 White						20	004-2009			
		All races					Black	All races		White		Black		
	SEER Summary Stage	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	NS (%)	95% CI	
Wisconsin	All stages	13.9	10.9 - 16.9	14.0	10.8 - 17.2	13.9	4.0 - 23.9	11.5	9.0 - 14.1	12.0	9.2 - 14.7	10.1	1.6 - 18.6	
(NPCR)	Localized		-		-		-		-		-		-	
	Regional		-		-		-		-		-		-	
	Distant		-		-		-		-		-		-	
	Unknown		-		-		-		-		-		-	
West North Cent	ral													
lowa	All stages	12.0	8.3 - 15.7	12.6	8.9 - 16.3		-	16.5	12.9 - 20.1	17.7	13.9 - 21.5	19.9	2.2 - 37.5	
(SEER)	Localized	31.9	23.8 - 40.0	32.8	24.3 - 41.3		-	38.7	30.9 - 46.5	40.4	32.6 - 48.2		-	
	Regional	1.2	0.0 - 3.0	1.2	0.0 - 3.0		-	9.1	5.3 - 12.8	9.9	6.0 - 13.7		-	
	Distant	1.8	0.0 - 4.9	2.0	0.0 - 5.3		-	1.3	0.0 - 3.2	0.7	-		-	
	UTIKITOWIT	1.0	0.0 - 4.0	1.9	0.0 - 5.0		-	2.7	0.0 - 0.9	2.1	0.0 - 0.0			
Nebraska	All stages	12.7	8.5 - 16.9	12.6	8.1 - 17.0	23.7	0.0 - 48.2	14.9	11.3 - 18.5	15.3	11.5 - 19.1	19.0 50.0	5.5 - 32.5	
(NPCR)	Localized	23.1 12.5	15.3 - 32.1 3 4 - 21 6	23.5 11 1	14.4 - 32.0		-	20.0 12.2	19.5 - 33.5 7 5 - 16 0	25 .7	18.0 - 32.8 7.0 - 21.1	02.8 15.5	17.3 - 88.3	
	Distant	3.6	00-88	0.0	-		-	12.2	-	14.1	-	15.5	-	
	Unknown	4.5	0.0 - 9.1	4.7	0.0 - 9.5		-	6.9	0.7 - 13.0	7.5	0.8 - 14.2		-	
WEST														
Mountain														
Colorado	All stages	11.5	8.7 - 14.3	11.3	8.3 - 14.4	6.9	0.0 - 15.0	16.0	13.2 - 18.9	15.6	12.6 - 18.6	11.0	1.5 - 20.5	
(NPCR)	Localized	20.5	15.1 - 25.9	20.4	14.7 - 26.2		-	28.2	22.3 - 34.1	27.0	20.9 - 33.2	19.0	0.8 - 37.3	
	Regional	7.7	3.5 - 12.0	7.6	3.1 - 12.1	0.0	-	6.4	3.2 - 9.6	5.9	2.7 - 9.0	15.2	0.0 - 34.1	
	Linknown	3.0 5.3	0.7 - 0.4	0.6	0.0 - 1.3		-	3.0	0.2 - 5.9 1 0 - 13 0	3.2 8.4	0.2 - 0.1 1 3 - 12 1		-	
Link .		45.4	2.4 00.0	45.0	3.0 - 5.0			0.5	4.5 - 10.0	44.0	4.0 - 12.4			
Idaho	All stages	15.4	8.1 - 22.6	15.2	1.1 - 22.1		-	11.5	6.5 - 16.4	11.8	6.6 - 17.1		-	
(NPCR)	Regional	37.0	10.1 - 50.0 0.0 - 10.0	30.1	10.5 - 55.0		-	6.9	12.0 - 32.2	23.1	12.4 - 33.7		-	
	Distant	6.7	0.0 - 16.7	7.6	0.0 - 18.8		-	1.0	0.0 - 3.4	1.0	0.0 - 3.2		-	
	Unknown	6.0	0.0 - 15.3	6.0	0.0 - 15.3		-	0.7	0.0 - 2.3	0.9	0.0 - 2.7		-	
Montana	All stages	13.9	5.7 - 22.1	13.9	5.2 - 22.7			11.1	5.5 - 16.6	11.8	5.9 - 17.8			
(NPCR)	Localized	27.3	7.9 - 46.7	32.1	10.0 - 54.3		-	16.4	6.1 - 26.8	16.4	5.8 - 26.9		-	
	Regional	6.8	0.0 - 16.6	7.6	0.0 - 18.6		-	8.1	0.0 - 16.2	8.8	0.0 - 17.9		-	
	Distant		-		-		-		-		-		-	
	Unknown	13.0	0.6 - 25.4	10.1	0.0 - 21.7		-	21.3	2.2 - 40.4	20.8	0.6 - 41.1		-	
New Mexico	All stages	7.0	4.3 - 9.7	6.9	4.0 - 9.7		-	9.7	7.1 - 12.4	9.9	7.0 - 12.9		-	
(SEER)	Localized	11.5	6.5 - 16.4	11.6	6.3 - 16.9		-	17.0	11.6 - 22.3	15.9	10.6 - 21.3		-	
	Regional	2.3	0.0 - 5.6	0.0	-		-	0.0	0.0 - 0.0	2.2	0.0 - 5.2		-	
	Distant	4.8	0.8 - 8.9	4.9	0.9 - 8.9		-	5.5	1.3 - 9.6	4.6	0.5 - 8.7		-	
	UTIKITOWIT	3.0	0.0 - 0.2	3.5	0.0 - 0.0		-	0.0	2.4 - 11.2	0.0	1.9 - 11.5		-	
Utah	All stages	11.4	6.5 - 16.3	11.7	6.5 - 17.0		-	9.8	5.9 - 13.7	10.7	6.4 - 15.0		-	
(SEER)	Degional	12.5	9.0 - 24.1 1.8 - 23.2	10.0	10.3 - 27.2		-	23.9	0.0 - 7.4	23.0	0.0 - 8.8		-	
	Distant	0.0	-	0.9	-		-	2.9	0.0 - 7.4	3.4 1.2	0.0 - 8.8		-	
	Unknown	5.5	0.0 - 13.9	6.1	0.0 - 15.4		-	0.0	-	0.0	-		-	
Wyoming	All stages	27	00-70	3.0	00-76			8.1	22-139	8.1	23-140			
(NPCR)	Localized		-	0.0	-		-	15.9	5.3 - 26.6	15.7	5.2 - 26.3		-	
. ,	Regional		-		-		-		-		-		-	
	Distant		-		-		-		-	0.0	-		-	
	Unknown	0.0	-	0.0	-		-	6.5	0.0 - 15.9	6.8	0.0 - 16.6		-	
Pacific														
Alaska	All stages	9.0	3.9 - 14.0	9.8	2.6 - 17.0		-	16.6	9.4 - 23.7	13.1	6.9 - 19.4		-	
(NPCR)	Localized	20.1	10.1 - 42.0	22.0	2.0 - 42.0		-	34.8	20.4 - 49.2	40.1 1 8	29.1 - 03.2		-	
	Distant		0.0 - 11.0	10.0	0.0 - 24.6		-	0.0	0.0 - 0.0	4.0 0.1	0.0 - 0.5		-	
	Unknown	7.5	0.0 - 14.1	4.1	0.0 - 10.4		-	10.0	0.0 - 21.9	0.0	0.0 - 0.0		-	
California	All stages	11 4	10.6 - 12.3	10 1	91-111	7 2	51-93	14.8	13.8 - 15.8	12.8	117-139	11 7	85-149	
(NPCR/SEER)	Localized	21.8	20.0 - 23.6	18.9	16.8 - 20.9	13.9	9.1 - 18.7	26.1	24.1 - 28.0	22.6	20.4 - 24.8	25.1	19.0 - 31.3	
(Regional	7.8	6.4 - 9.2	7.5	5.7 - 9.3	5.0	2.1 - 7.8	10.1	8.6 - 11.6	8.8	7.1 - 10.4	5.9	2.3 - 9.5	
	Distant	1.9	1.1 - 2.6	1.8	0.9 - 2.8	3.4	0.0 - 7.0	1.7	1.0 - 2.4	1.4	0.7 - 2.1	3.3	0.7 - 5.9	
	Unknown	3.8	2.5 - 5.1	3.9	2.3 - 5.5	1.1	0.0 - 2.4	5.8	4.2 - 7.3	5.5	3.7 - 7.3	4.4	0.0 - 10.3	
Hawaii	All stages	15.2	11.3 - 19.1	19.8	8.4 - 31.1		-	13.2	8.8 - 17.6	16.8	9.0 - 24.7	21.8	0.0 - 44.9	
(SEER)	Localized	31.4	23.9 - 38.9	43.2	21.5 - 65.0		-	27.0	18.7 - 35.3	31.4	11.1 - 51.6		-	
	Regional	6.9	2.7 - 11.2	5.9	0.0 - 14.9		-	4.5	0.0 - 10.0	11.6	1.4 - 21.8		-	
	Distant	1.0	0.0 - 2.1		-		-	1.4	0.0 - 3.4	5.4	0.0 - 12.7		-	
	Unknown	0.0	-		-		-	0.1	0.0 - 0.3	7.5	0.0 - 18.2		-	

Fage 55 01 55						U	ancer							
					20	01-2003					20	04-2009		
1		SEER	Α	ll races		White		Black	<u>A</u>	II races		White		Black
2		Summary	NS		NS		NS		NS		NS		NS	
2		Stage	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI	(%)	95% CI
<u>л</u>	Oregon	All stages	6.9	4.3 - 9.5	5.9	3.3 - 8.5		-	11.2	8.7 - 13.8	10.1	7.4 - 12.8	6.3	0.0 - 15.3
7 5	(NPCR)	Localized	13.4	6.8 - 20.0	10.5	4.2 - 16.8		-	22.8	16.9 - 28.7	20.0	14.0 - 26.0	0.0	0.0 - 0.1
5		Regional	8.0	2.6 - 13.3	10.1	3.5 - 16.8		-	7.9 2.8	4.5 - 11.3 0 1 - 5 1	7.2	3.6 - 10.7	0.1	0.0 - 0.2
0		Unknown	3.6	0.0 - 4.0	2.2	0.0 - 4.1		-	4.2	0.7 - 3.4 0.5 - 8.0	3.3	0.7 - 7.0		-
8	Washington	All stages	11.8	9.5 - 14.1	10.7	8.1 - 13.2	12.3	1.6 - 23.1	14.7	12.4 - 17.0	13.9	11.3 - 16.4	8.1	4.6 - 11.7
0	(NPCR)	Localized	23.9	18.9 - 28.8	24.4	18.7 - 30.1	22.9	1.7 - 44.0	28.1	23.1 - 33.0	28.2	22.7 - 33.7	13.2	0.0 - 27.5
9 10		Regional	6.4	3.5 - 9.4	4.1	1.5 - 6.6	6.8	0.0 - 17.0	7.4	4.8 - 10.1	5.3	2.9 - 7.8	5.5	0.0 - 12.9
10		Distant	1.9	0.3 - 3.6	1.6	0.1 - 3.1		-	0.9	0.0 - 2.2	1.2	0.0 - 2.7		-
10		UNKNOWN	1.5	0.0 - 3.0	1.0	0.0 - 3.0		-	5.0	2.4 - 0.9	5.1	1.7 - 0.5		-
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