

# CANCER

## IN NORTH CAROLINA

2007 REPORT

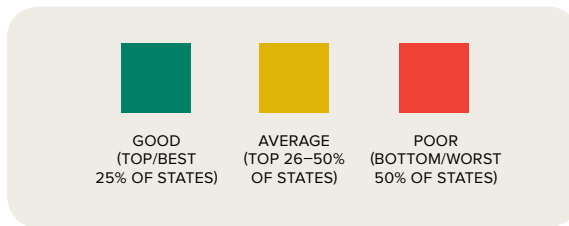
**PURPOSE** Cancer is currently the number two cause of death in North Carolina. But, as deaths from heart disease continue to decline and as baby boomers age, **cancer will become the number one cause of death.** Moreover, despite continued declines in new cancer cases, population trends over the next thirty years **will double the absolute number of cancer patients.** And, with continued improvement in treatment and screening, **the number of survivors**—persons living with cancer—**will more than double.**

This report identifies key indicators for cancer in North Carolina. The report has ➔

five sections: Deaths, New Cases, Screening, Treatment, and Prevention. Within each section, the report examines cancer sites or factors that contribute to cancer's burden. In addition to all cancers combined, the focus is on five cancer sites: breast (female), cervical, colon-rectum, lung-bronchus, and prostate. These five cancers account for the majority of North Carolina's cancer deaths and new cases. These sites also are associated with screening and/or preventive behaviors that can reduce cancer death and/or new cancer cases.

**DATA AND METHODS** Data were obtained from publicly available sources, primarily Cancer Control PLANET. Other key resources include: the NC Central Cancer Registry, SEER, the Behavioral Risk Factor Surveillance Survey (both US/CDC, and NC), the National Cancer Database, the National Youth Tobacco Survey, and the NC Youth Tobacco Survey. Data were primarily from 2003 and 2004.

When possible, this report presents North Carolina's rank among the 50 states and the District of Columbia, as well as data for the US as a whole. North Carolina's initial goal is to rank among the top (or best) quarter of all states reporting. Color coding indicates North Carolina's current ranking: Green = Good (top or best 25% of states); Yellow = Average (top 26%–50% of states); and Red = Poor (bottom or worst 50% of states).



**FINDINGS** North Carolina has a mixed report card. For new cancer cases, the state performs relatively well, ranking in the top (or best) 25% of states for all, breast, colon-rectum, and prostate cancers. North Carolina also ranks in the top 25% of states in screening for cervical, breast, and colon cancers. At the same time, North Carolina performs relatively poorly in terms of cancer deaths, ranking in the bottom (or worst) 50% of states for all, breast, lung-bronchus, and prostate cancers. The state also ranks in the bottom 50% of states for several preventive behaviors (adult smoking, physical activity, and maintaining a healthy weight). Although North Carolina ranks relatively well in colon cancer screening, screening rates are low for all states and should increase.

Tobacco remains a major health issue for the state. North Carolina’s lung cancer death rate is worse than the national rate and ranks 35th worst among all states. The state’s adult smoking rate is worse than the national rate and ranks 34th worst among states. The percentage of North Carolina’s high school students who report using tobacco during

the previous month is also worse than the national rate.

**CONCLUSION** This first report surveys key areas and indicators for measuring progress in reducing North Carolina’s cancer burden. North Carolina has been a leader in cancer prevention and control. By focusing attention on key areas and indicators, this report can help North Carolina sustain and enhance its effectiveness in addressing the cancer problem.

**ACKNOWLEDGEMENTS** This report was developed by the UNC Lineberger Comprehensive Cancer Center, the Comprehensive Cancer Control Collaborative of North Carolina, and the Carolina Community Network in collaboration with the NC Advisory Committee on Cancer Coordination and Control and the NC Comprehensive Cancer Program. Thanks also to the NC Central Cancer Registry and the NC BRFSS for their support and advice. Finally, thanks to Barbara Wiedemann and UNC Design Services and the UNC Lineberger Dissemination Research Core for their many contributions. ■

### Cancer Deaths Per 100,000

	Rank	NC	US
All Cancers	31st	202.0	195.7
Breast (female)	28th	25.3	25.2
Cervical	13th*	2.3	2.5
Colon-Rectum	17th	18.2	19.0
Lung-Bronchus	35th	58.3	54.2
Prostate	47th	30.9	26.6




\*Insufficient cases in 13 states to estimate a stable rate; NC ranked 13th among 38 states reporting.

Notes: Data through 2003. From Cancer Control PLANET – State Cancer Profiles – Deaths (<http://statecancerprofiles.cancer.gov>); accessed 11/12/2006 and 11/26/06.

### New Cancer Cases per 100,000

	Rank	NC	US
All Cancers	5th	416.9	462.2
Breast (female)	6th	116.3	124.9
Cervical	29th	8.6	8.7
Colon-Rectum	7th	46.5	52.0
Lung-Bronchus	22nd	67.3	67.5
Prostate	10th	146.6	161.2

Notes: Data through 2002. From Cancer Control PLANET – State Cancer Profiles – Incidence (<http://statecancerprofiles.cancer.gov>); accessed 02/04/07.

		
GOOD (TOP/BEST 25% OF STATES)	AVERAGE (TOP 26–50% OF STATES)	POOR (BOTTOM/WORST 50% OF STATES)

### Cancer Screening

BREAST: Percentage of women ≥ 40 years reporting a <b>mammogram</b> in the past two years	8th	77.4%	74.9%
CERVICAL: Percentage of women ≥ 18 years reporting a <b>PAP smear</b> in the past three years	8th	88.4%	85.9%
COLON-RECTUM: Percentage of adults ≥ 50 years reporting a <b>Home Blood Stool Test</b> in past year or a <b>sigmoidoscopy</b> or <b>colonoscopy</b> in past five years	10th	58.5%	na
COLON-RECTUM: Percentage of adults ≥ 50 years reporting a <b>Home Blood Stool Test</b> in the past year	1st	40.3%	26.5%
COLON-RECTUM: Percentage of adults ≥ 50 years reporting ever having a <b>sigmoidoscopy</b> or <b>colonoscopy</b>	21st	54.6%	53.5%
PROSTATE: Percentage of men ≥ 40 years reporting ever having talked about prostate cancer screening with a health professional	na	67.0%	na
	<b>Rank</b>	<b>NC</b>	<b>US</b>

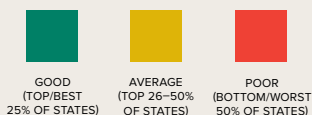
Notes: Data are from: Cancer Control PLANET, State Profiles, Screening and Risk Factors (<http://statecancerprofiles.cancer.gov/>); accessed 02/02/07. BRFSS Prevalence Data for 2004, States and DC (<http://apps.nccd.cdc.gov/brfss/>); accessed 02/02/07 and 02/15/07. NC BRFSS, 2004 (<http://www.schs.state.nc.us/SCHS/brfss/2004/>); accessed 02/16/07.

Data on prostate cancer screening discussion are from the NC BRFSS and are not available from other states. US figure represents median for all states reporting. na – data are not available.

### Cancer Treatment

BREAST CANCER, STAGE I: Among women who had breast conserving surgery (partial mastectomy), % receiving <b>Adjuvant Radiation Therapy</b>	na	62.7%	63.2%
COLON CANCER, STAGE III: percentage receiving <b>Adjuvant Chemotherapy</b>	na	54.4%	49.8%
	<b>Rank</b>	<b>NC</b>	<b>US</b>

Notes: Data for initial treatment are from the American College of Surgeons' National Cancer Database (NCDB) Benchmark Reports (<http://web.facs.org/ncdbbmr/ncdbbenchmarks.cfm>); accessed 2/16/07. For 2004, NCDB included data from 31 hospitals in North Carolina and ~1325 hospitals nationwide.

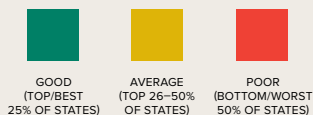


## Cancer Prevention

TOBACCO USE: Percentage of adults ≥ 18 years who are current smokers	34th	23.1%	20.9%
TOBACCO USE: Percentage of high school students who used tobacco during the previous 30 days	na	28.5%	27.4%
TOBACCO USE: Percentage of middle school students who used tobacco during the previous 30 days	na	10.5%	11.8%
DIET: Percentage of adults ≥ 18 years consuming five or more fruits or vegetables each day	21st	23.1%	22.6%
PHYSICAL ACTIVITY: Percentage of adults ≥ 18 years engaging in leisure time physical activity during the past month	36th	75.3%	77.5%
PHYSICAL ACTIVITY: Percentage of adults ≥ 18 years engaging in moderate or vigorous physical activity during the past month	49th	37.7%	47.4%
WEIGHT: Percentage of adults ≥ 18 years who have healthy weight-body mass index < 25.0	35th	38.7%	39.8%
SUN PROTECTION: Percentage of adults ≥ 18 years protecting their skin from the sun when outdoors during the summer	na	50.8%	na
	<b>Rank</b>	<b>NC</b>	<b>US</b>

Notes: Data are from: Cancer Control PLANET, State Profiles, Screening and Risk Factors (<http://statecancerprofiles.cancer.gov>); accessed 02/16/07. BRFSS Prevalence Data for 2004, States and DC (<http://apps.nccd.cdc.gov/brfss>); accessed 02/02/07 and 02/16/07. National Youth Tobacco Survey – 2004 – corrected (<http://www.cdc.gov/tobacco/NYTS/CorrectionNotice.htm>); accessed 02/16/07. NC Youth Tobacco Survey—2005: Detailed Summary Tables – Statewide. NC BRFSS 2004 Prevalence Data (<http://www.schs.state.nc.us/SCHS/brfss/2004>); accessed 02/16/07.

Data on skin protection are from the NC BRFSS and are not available from other states. US figure represents median for all states reporting. na – data are not available.



# RACIAL DISPARITIES

## SPECIAL REPORT

2007 REPORT

**PURPOSE** This special report presents key cancer indicators and compares rates/proportions for NC African-Americans to those for NC Whites. Color coding indicates the relative standing for African-Americans: Green = better than Whites; Yellow = same as Whites; and Red = worse than Whites. Data were obtained from the same sources used in the overall report.





**FINDINGS** Compared to Whites, African-Americans have higher rates of new cases (all, colon-rectum, prostate) and deaths (all, breast, cervical, colon-rectum, prostate). African-Americans report lower use of colon cancer screening with endoscopy (sigmoidoscopy, colonoscopy). They also less often report daily consumption of the recommended number of servings of fruits and vegetables, and physical activity.

**CONCLUSION** Racial disparities in key North Carolina cancer indicators are significant. Poverty’s contribution to these disparities is unclear. Disparities may also exist for other racial/ethnic groups and for other populations. Efforts to reduce cancer in North Carolina should address these disparities. ■

### Cancer Deaths per 100,000

All Cancers	226.2	190.4
Breast (female)	33.5	23.4
Cervical	3.6	2.0
Colon-Rectum	22.7	17.3
Lung-Bronchus	56.1	59.2
Prostate	76.2	26.4
	<b>NC African-American</b>	<b>NC White</b>

Notes: Data through 2003. From Cancer Control PLANET – State Cancer Profiles – Deaths (<http://statecancerprofiles.cancer.gov>); accessed 11/12/06 and 11/26/06.

### New Cancer Cases per 100,000

All Cancers	432.5	414.3
Breast (female)	106.5	118.7
Cervical	9.2	6.9
Colon-Rectum	55.3	44.8
Lung-Bronchus	65.8	67.7
Prostate	221.7	131.9
	<b>NC African-American</b>	<b>NC White</b>

Notes: Data through 2002. From Cancer Control PLANET – State Cancer Profiles – Incidence (<http://statecancerprofiles.cancer.gov>); accessed 02/04/07.



BETTER  
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## Cancer Screening

BREAST: Percentage of women ≥ 40 years reporting a <b>mammogram</b> in the past two years	79.4%	78.1%
CERVICAL: Percentage of women ≥ 18 years reporting a <b>PAP smear</b> in the past three years	89.9%	88.1%
COLON-RECTUM: Percentage of adults ≥ 50 years reporting a <b>Home Blood Stool Test</b> in past year or a <b>sigmoidoscopy</b> or <b>colonoscopy</b> in past five years	na	na
COLON-RECTUM: Percentage of adults ≥ 50 years reporting a <b>Home Blood Stool Test</b> in the past year	38.9%	42.6%
COLON-RECTUM: Percentage of adults ≥ 50 years who report ever having a <b>sigmoidoscopy</b> or <b>colonoscopy</b>	46.0%	57.2%
PROSTATE: Percentage of men ≥ 40 years reporting ever having talked about prostate cancer screening with a health professional	64.8%	69.5%
	<b>NC African-American</b>	<b>NC White</b>

Notes: Data are from: Cancer Control PLANET, State Profiles, Screening and Risk Factors (<http://statecancerprofiles.cancer.gov/>); accessed 02/02/07. BRFSS Prevalence Data for 2004, States and DC (<http://apps.nccd.cdc.gov/brfss/>); accessed 02/02/07 and 02/15/07. NC BRFSS, 2004 (<http://www.schs.state.nc.us/SCHS/brfss/2004/>); accessed 02/16/07.

Data on prostate cancer screening discussion are from the NC BRFSS and are not available from other states. US figure represents median for all states reporting. na – data are not available.

## Cancer Treatment

BREAST CANCER, STAGE I: Among women who had breast conserving surgery (partial mastectomy), % receiving <b>Adjuvant Radiation Therapy</b>	na	na
COLON CANCER, STAGE III: percentage receiving <b>Adjuvant Chemotherapy</b>	46.1%	55.0%
	<b>NC African-American</b>	<b>NC White</b>

Notes: Data for initial treatment are from the American College of Surgeons' National Cancer Database (NCDB) Benchmark Reports (<http://web.facs.org/ncdbbmr/ncdbbenchmarks.cfm>); accessed 2/16/07. For 2004, NCDB included data from 31 hospitals in North Carolina and ~1325 hospitals nationwide.



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## Cancer Prevention

TOBACCO USE: Percentage of adults ≥ 18 years who are current smokers	22.9%	23.7%
TOBACCO USE: Percentage of high school students who used tobacco during the previous 30 days	20.0%	32.1%
TOBACCO USE: Percentage of middle school students who used tobacco during the previous 30 days	11.6%	9.5%
DIET: Percentage of adults ≥ 18 years consuming five or more fruits or vegetables each day	18.6%	24.7%
PHYSICAL ACTIVITY: Percentage of adults ≥ 18 years engaging in leisure time physical activity during the past month	68.2%	78.9%
PHYSICAL ACTIVITY: Percentage of adults ≥ 18 years engaging in moderate or vigorous physical activity during the past month	34.2%	40.5%
WEIGHT: Percentage of adults ≥ 18 years who have healthy weight-body mass index < 25.0	37.9%	41.2%
SUN PROTECTION: Percentage of adults ≥ 18 years protecting their skin from the sun when outdoors during the summer	48.3%	52.7%
	<b>NC African-American</b>	<b>NC White</b>

Notes: Data are from: Cancer Control PLANET, State Profiles, Screening and Risk Factors (<http://statecancerprofiles.cancer.gov/>); accessed 02/16/07. BRFSS Prevalence Data for 2004, States and DC (<http://apps.nccd.cdc.gov/brfss/>); accessed 02/02/07 and 02/16/07. National Youth Tobacco Survey – 2004 – corrected (<http://www.cdc.gov/tobacco/NYTS/CorrectionNotice.htm>); accessed 02/16/07. NC Youth Tobacco Survey—2005: Detailed Summary Tables – Statewide. NC BRFSS 2004 Prevalence Data (<http://www.schs.state.nc.us/SCHS/brfss/2004/>); accessed 02/16/07.

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