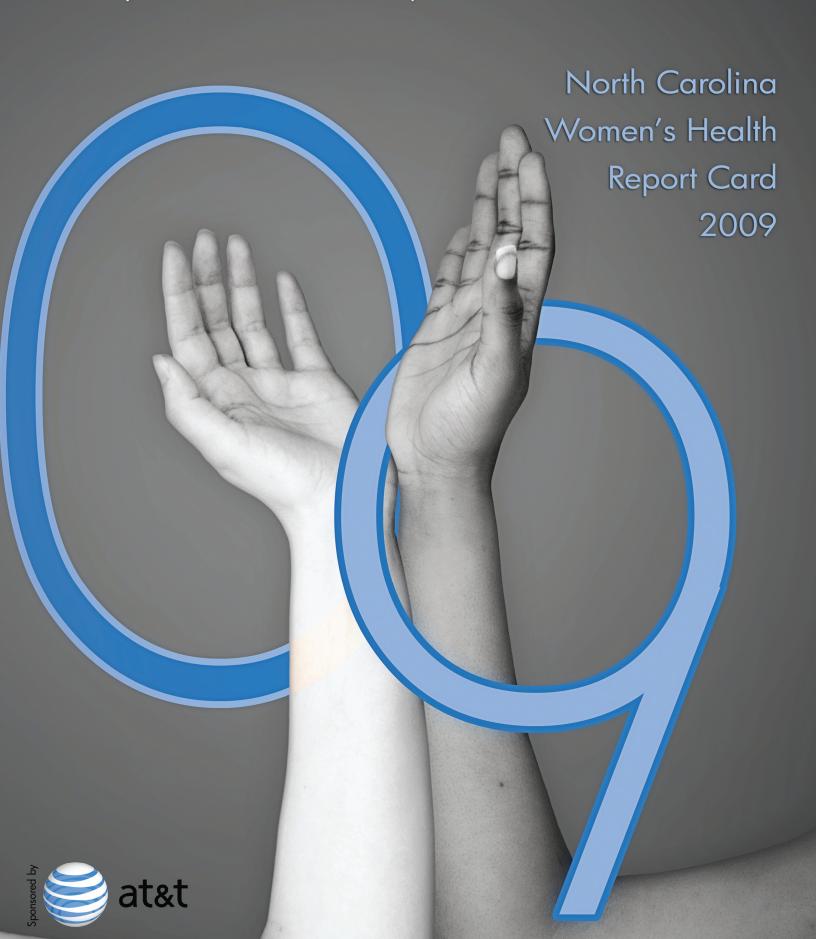
Center for Women's Health Research University of North Carolina at Chapel Hill





2009 NC Women's Health Report Card

Grading

Grades were based primarily on the percentage of change in the indicators from 2003 to 2007. Health disparities across racial subgroups and Healthy People 2010 goals were also considered.

The following guidelines were used:

A = > 20% improvement, or current status remains very good

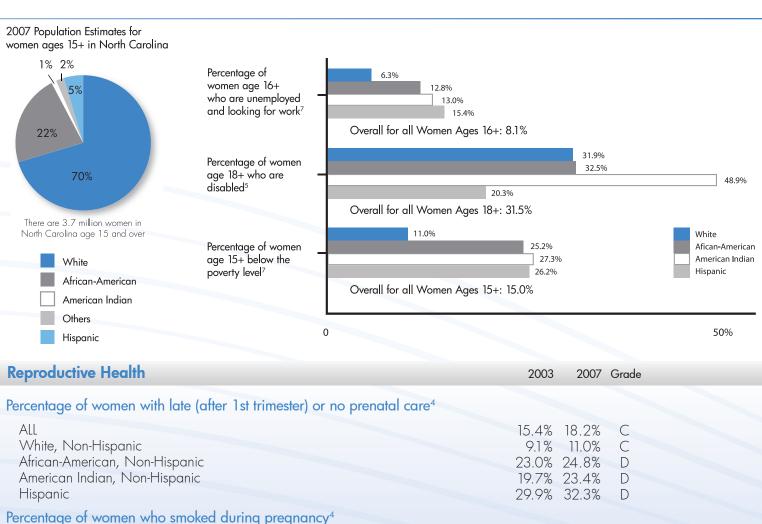
B = 10 - 20% improvement, or current status remains satisfactory

C = no significant change (between 10% improvement and 10% worsening), or current status remains mediocre

D = 10 - 20% worse, or current status remains unsatisfactory

F = > 20% worse, or current status remains very poor

Note: Unless otherwise indicated, all data are for women age 15 years and older, and for the years 2003 and 2007.



Hispanic	29.9%	32.3%	D
Percentage of women who smoked during pregnancy ⁴			
ALL White, Non-Hispanic African-American, Non-Hispanic American Indian, Non-Hispanic Hispanic	10.8% 24.0%	11.0% 14.5% 10.3% 24.1% 1.1%	B B C C A
Percentage of births that were of very low birthweight (<1500g) ⁴			
ALL White, Non-Hispanic African-American, Non-Hispanic American Indian, Non-Hispanic Hispanic	1.8% 1.3% 3.5% 2.2% 1.2%	1.8% 1.3% 3.5% 2.5% 1.3%	CCDDC

Reproductive Health cont.	2003	2007	Grade		2003	2007	Grade
Percentage of births to women age <18	years ⁴			Percentage of live births that were unin	itended (200	03,2006) ⁵	
ALL	3.9%	3.8%	C	ALL	42.3%	47.6%	D
White, Non-Hispanic	2.5%	2.4%	В	White, Non-Hispanic	35.5%	40.8%	D
African-American, Non-Hispanic	7.2%	6.5%	C	African-American, Non-Hispanic	57.6%	63.3%	D
American Indian, Non-Hispanic	6.1%	6.6%	C	American Indian, Non-Hispanic	65.8%	59.2%	C
Hispanic .	5.1%	5.1%	C	Hispanic ·	46.8%	49.6%	D
Number of infant deaths per 1,000 live births			Percentage of women not breastfeeding at 8 weeks (2003,2006) ⁵				
(infant mortality rate) ⁴				ALL	53.1%	49.5%	C
ALL	8.1	8.4	С	White, Non-Hispanic	53.3%	48.3%	\subset
White, Non-Hispanic	5.8	6.2	Č	African-American, Non-Hispanic	65.9%	66.4%	D
African-American, Non-Hispanic	14.9	14.3	D	American Indian, Non-Hispanic	64.3%	57.8%	\subset
American Indian, Non-Hispanic	10.6	17.6	F	Hispanic .	30.4%	27.7%	В



Hispanic

Reproductive Health Notes

7.0 C

- North Carolina ranks 44th in the nation on infant mortality⁶ and this rate is nearly twice the Healthy People 2010 objective.⁷ The infant mortality rates for African American and American Indian women are more than twice as high as the rates for White and Hispanic women.
- Unintended pregnancies are more likely to result in health problems for the mother and child.
 This indicator points to the need for available and accessible family planning services.
- •Breastfeeding guidelines set forth by UNICEF and other health professional organizations specify exclusive breastfeeding for the first 6 months, with continued breastfeeding through the first year and up to two years or longer along with age-appropriate complimentary feeding. Benefits of breastfeeding for the infant are numerous and include lower rates of sudden infant death syndrome, infectious diseases such as ear infections, childhood obesity, type 1 and type 2 diabetes mellitus and leukemia. Maternal health benefits include earlier return to prepregnancy weight and decreased risk of breast and ovarian cancer.

Chronic Disease 2003 2007 Grade 2003 2007 Grade

*Asterisk indicates that numbers were too small (fewer than 10) to calculate reliable estimates.

Heart Disease deaths per 100,000 w	omen ages	15 & ov	er ¹⁰
ALL	238.4	195.3	В
White, Non-Hispanic	227.0	187.2	В
African-American, Non-Hispanic	296.0	244.2	В
American Indian, Non-Hispanic	295.1	186.0	В

Stroke deaths per 100,000 women ages 15 & over¹⁰

ALL	81.3	59.1	Α
White, Non-Hispanic	75.6	55.6	Α
African-American, Non-Hispanic	108.8	76.4	Α
American Indian, Non-Hispanic	98.7	66.2	Α
Hispanic	*	*	

Lung Cancer deaths per 100,000 women ages 15 & over¹⁰

ALL	51.9	53.3	C
White, Non-Hispanic	55.4	56.5	C
African-American, Non-Hispanic	40.3	42.7	В
American Indian, Non-Hispanic	31.9	45.3	D
Hispanic	*	*	

Chronic Disease Notes

Hispanic

• Misclassification of race on death certificates may result in understating health problems in some minority populations, particularly American Indians 12

Breast cancer deaths per 100,000 women ages 15 & over¹⁰

ALL	31.7	31.1	\subset
White, Non-Hispanic	29.7	28.3	\subset
African-American, Non-Hispanic	42.3	43.9	D
American Indian, Non-Hispanic	30.4	36.9	F
Hispanic	*	8.7	

Colorectal cancer deaths per 100,000 women ages 15 & over¹⁰

ALL	19.3	8.7	C
White, Non-Hispanic	18.4	18.3	C
African-American, Non-Hispanic	23.4	17.5	C
American Indian, Non-Hispanic	*	23.5	
Hispanic	*	*	

Hospitalizations among women age 65+ for hip fracture per 100,000 women (2002,2006)¹¹

ALL	1076.9	*	$\overline{}$
/ \LL	10/0./		

Note: Racial breakdowns are not possible for hospital discharge data as almost half of all records are missing race.



Cili Cilic Discuss Collin	2000	2007	Olddo		2000	2007	Ordac
*Asterisk indicates that numbers were too small (fewer tha	n 10) to calcu	ate reliable	e estimates.				
Percentage of women age 18+ with hi	_		re ³	Percentage of women age 18+ with dic	ibetes (e	xcludin	9
ALL	30.0	29.6	C	gestational diabetes) ³			
White, Non-Hispanic	28.5	27.9	C	ALL	8.1	8.8	C
African-American, Non-Hispanic	38.5	42.8	D	White, Non-Hispanic	7.3	7.7	\subset
American Indian, Non-Hispanic	46.9	30.2	В	African-American, Non-Hispanic	11.8	14.2	F
Hispanic	16.9	14.7	Α	American Indian, Non-Hispanic	19.9	14.8	D
Percentage of women age 18+ with hi	gh choles	sterol ³		Hispanic	*	5.8	
ALL	34.6	38.1	D	Percentage of women age 18+ who are	e obese ((BMI 3C).O+) ³
White, Non-Hispanic	35.8	38.7	D	ALL	25.2	29.4	D
African-American, Non-Hispanic	30.8	38.0	F	White, Non-Hispanic	20.9	25.7	F
American Indian, Non-Hispanic	44.2	38.3	В	African-American, Non-Hispanic	42.4	45.4	F
Hispanic	35.6	30.3	В	American Indian, Non-Hispanic	37.9	34.2	C
				Hispanic	18.7	26.7	F

2003

2007 Grade

2007 Grade

2003

Chronic Disease Notes cont.

Chronic Disease cont.

- Despite improvements for these measures, the rate of deaths due to heart disease is 21% higher and the rate of deaths due to stroke is 18% higher than the Healthy People 2010 objectives. Many of these chronic diseases are associated with factors such as tobacco use, diet, and exercise.
- •Overall, the percentage of women in North Carolina who are obese increased by 17% and is nearly twice the Healthy People 2010 objective. Obesity among Hispanic women increased by 43%. Almost 1 in 2 African American women and 1 in 3 American Indian women are obese. Obesity is an important risk factor for several diseases, including heart disease, stroke, and diabetes
- Despite a higher incidence of breast cancer among white women, minority women have a higher death rate, primarily due to later diagnosis and treatment among minority women.¹³
- Because cervical cancer is caused primarily by the human papillomavirus (HPV), we have moved this indicator to the infectious disease section.
- •The diabetes deaths indicator was dropped from the 2009 Report Card.

Infectious Disease	2003	2007	Grade		2003	2007	Grade	
*Asterisk indicates that numbers were too small (fewer than	O) to calcul	ate reliable	estimates.					
HIV disease cases per 100,000 women	14			Gonorrhea cases per 100,000 wome	n ¹⁴			
ALL	14.9	12.4	C	ALL	171.6	198.0	D	
White, Non-Hispanic	3.4	2.8	В	White, Non-Hispanic	46.5	57.1	D	
African-American, Non-Hispanic	50.5	42.9	F	African-American, Non-Hispanic	584.2	578.0	F	
American Indian, Non-Hispanic	*	*		American Indian, Non-Hispanic	230.6	241.1	F	
Hispanic	17.4	12.2	C	Hispanic	68.2	65.7	C	
Early latent, primary, and secondary sy	philis di	sease		Cervical cancer deaths per 100,000	women			
cases per 100,000 women ¹⁴				ages 15 & over ¹⁰				
ALL	3.7	3.3	В	ALL	2.9	3.0	C	
White, Non-Hispanic	0.7	0.9	В	White, Non-Hispanic	2.6	2.7	C	
African-American, Non-Hispanic	11.9	10.2	В	African-American, Non-Hispanic	4.6	4.9	D	
American Indian, Non-Hispanic	*	*		American Indian, Non-Hispanic	*	*		
Hispanic	6.0	5.1	В	Hispanic	*	*		

Infectious Disease Notes

•HIV disease is an ongoing problem and racial and ethnic disparities persist. Although cases among African American and Hispanic women have decreased since 2003, their rates are 14 times and 4 times that of white women, respectively.

*Asterisk indicates that numbers were too small (fewer than 10) to calculate reliable estimates.

Percentage of	women age	18+ who are	current	smokers ³
reiceillage of	women age	10+ WIIO GIE	Correin	SHOKEIS

9	9			
ALL		21.8	20.7	\subset
White, Non-Hisp	anic	23.1	22.3	\subset
African-American	, Non-Hispanic	18.1	17.4	В
American Indian,		38.8	28.8	\subset
Hispanic	'	9.4	10.3	В

Percentage of women age 18+ drinking 5+ drinks on one occasion in past month³

ALL	7.4
White, Non-Hispanic	8.3
African-American, Non-Hispanic	5.6
American Indian, Non-Hispanic	*
Hispanic	*

BRFSS questions on alcohol consumption were different in 2003 and 2007. Because the data are incomparable, only the most current data are presented and no grade was assigned.

Percentage of crash-involved female drivers who had been drinking¹⁵

ALL	1.3	1.4	В
White, Non-Hispanic	1.4	1.6	\subset
African-American, Non-Hispanic	0.9	0.9	В
American Indian, Non-Hispanic	2.4	2.3	\subset
Hispanic	0.9	0.6	Α

Percentage of women age 18+ who reported poor mental health for 8 or more days over past month³

2007 Grade

ALL	14.0	16.4	D
White, Non-Hispanic	14.3	16.9	D
African-American, Non-Hispanic	13.7	16.0	D
American Indian, Non-Hispanic	18.5	30.1	F
Hispanic	11.5	10.1	В

Percentage of new mothers who report being moderately or very depressed in the month after delivery (2003,2006)⁵

ALL	37.6%
White, Non-Hispanic	35.8%
African-American, Non-Hispanic	36.8%
American Indian, Non-Hispanic	*
Hispanic	42.5%

PRAMS questions on postpartum depression were different in 2003 and 2006. Because the data are incomparable, only the most current data are presented and no grade assigned.

Suicide deaths per 100,000 women ages 15 & over³

ALL	5.6	6.8	D
White, Non-Hispanic	6.9	8.7	F
African-American, Non-Hispanic	2.2	1.7	Α
American Indian, Non-Hispanic	*	*	
Hispanic	*	*	

Substance Abuse and Mental Health Notes

- Data for indicators of mental health and substance abuse are very sparse. Few of the national surveys include questions on depression or other major psychiatric disorders. In North Carolina, there is limited information available regarding usage of state-run mental health facilities, including outpatient community mental health centers and inpatient psychiatric hospitals.
- •Tobacco use is a major contributor to lung disease, heart disease, and stroke mortality and is also associated with breast and cervical cancers. The percentage of North Carolinian women who smoke is decreasing in all racial groups except for Hispanics, who increased by 10%. Smoking in NC women remains 73% higher than the 2010 Healthy People objectives.
- Postpartum depression (PPD) is a widespread but under-acknowledged problem with a prevalence rate of at least 10%. Although the etiology remains unclear, the rapid decline in levels of gonadal hormones after giving birth may be a trigger for this condition. Other risk factors include the strength of support from family and friends, a prior history of depression or other psychiatric illness, family history of depression, preterm delivery and/or a newborn with serious health concerns. Good screening instruments exist and effective treatments are available for women with PPD. Educating physicians and screening all new mothers for postpartum depression are important steps in the identification and treatment of this illness.

Violence & Injuries 2003

*Asterisk indicates that numbers were too small (fewer than 10) to calculate reliable estimates.

Homicide deaths per 100,000 women ages 15 & over¹⁰

ALL	3.8	3.5	C
White, Non-Hispanic	2.7	2.4	Α
African-American, Non-Hispanic	6.2	6.2	D
American Indian, Non-Hispanic	*	*	
Hispanic	*	4.0	
·			

Percentage of women who reported physical abuse in the 12 months preceding pregnancy (2003,2006)⁵

2003

2007 Grade

ALL	6.7%
White, Non-Hispanic	5.3%
African-American, Non-Hispanic	6.0%
American Indian, Non-Hispanic	*
Hispanic	10.3%

PRAMS questions for physical abuse in the 12 months before pregnancy were different in 2003 and 2006. Because the data are incomparable, only the most current data are presented and no grade was assigned.

Violence & Injuries Notes

• No rate of domestic violence is acceptable. Domestic violence during pregnancy increases the risk of adverse outcomes for women during and after pregnancy. It demonstrates the need for effectively targeted health, community, and criminal justice services for victims, their children, and perpetrators.

•The motor vehicles deaths indicator was dropped from the 2009 Report Card

Barriers to Health	2003	2007	Grade
Percentage of women age 18+ with no	o health		
insurance coverage ³			
ALL	15.5%	16.5%	C
White, Non-Hispanic	12.2%	11.4%	C
African American, Non-Hispanic	15.4%	19.3%	F
American Indian, Non-Hispanic	22.6%	24.3%	D
Hispanic	63.1%	62.4%	F



Barriers to Health Notes

• White women are 6 times as likely as Hispanic women and about twice as likely as African American and American Indian women to have health insurance coverage.

Preventive Health Practices	2003	2007	Grade		2003	2007	Grade
*Asterisk indicates that numbers were too small (fewer that	n 10) to calcul	ate reliable	estimates.				
Percentage of women age 50+ who d	id not ha	ve a		Percentage of women age 65+ who d	d not ha	ve the fl	U
mammogram within the past 2 years	2002,2006) ³			shot in the past 12 months ³			
ALL	16.7	17.2	C	ALL	34.5	29.3	В
White, Non-Hispanic	17.0	17.2	C	White, Non-Hispanic	30.2	26.0	В
African-American, Non-Hispanic	13.2	15.9	D	African-American, Non-Hispanic	57.5	41.8	В
American Indian, Non-Hispanic Hispanic	19.9	19.1 22.8	С	American Indian, Non-Hispanic Hispanic	*	41.1	
Percentage of women age 18+ who d	d not ha	ve a Pap)	Percentage of women age 65+ who he	neven	r had a	
test within the past 2 years (2002,2006) ³	10.0		_	pneumonia shot ³			_
ALL	13.0	18.1	F	ALL	34.1	30.4	В
White, Non-Hispanic African-American, Non-Hispanic	14.2 6.7	18.4 14.9	F	White, Non-Hispanic African-American, Non-Hispanic	30.9 50.4	27.0 45.4	B C
American Indian, Non-Hispanic	*	14.4	1	American Indian, Non-Hispanic	42.9	46.4	D
Hispanic	15.7	20.5	F	Hispanic	*	*	
Percentage of women age 50+ who h	ave neve	r had a		Percentage of women age 18+ who di	d not me	et the	
sigmoidoscopy or colonoscopy exam				recommended level of physical activity			
ALL	51.5	37.8	Α	ALL	64.5	58.4	C
White, Non-Hispanic	49.4	36.3	Α	White, Non-Hispanic	62.1	55.4	C
African-American, Non-Hispanic	55.3	41.1	Α	African-American, Non-Hispanic	71.5	67.2	C
American Indian, Non-Hispanic	62.5	51.7	В	American Indian, Non-Hispanic	60.9	59.5	C
Hispanic	64.6	52.0	В	Hispanic	77.9	65.9	C
				Percentage of women age 18+ who ha	ve not v	isited a	dentist
				within the past 12 months (2002,2006) ³			
				ALL	30.4	31.9	C
				White, Non-Hispanic	27.1 36.1	28.2 39.2	C
				African American, Non-Hispanic	30.1	39.2	

Preventive Health Practices Notes

• The Pap test is one of the best cervical cancer screenings available. Early detection and treatment can keep most cases of cervical cancer from developing. The percentage of women 18+ who have not had a Pap test in the last two years increased by 40%.

Hispanic

American Indian, Non-Hispanic

32.6

55.8

40.3

50.7

D

- •The BRFSS definition for recommended physical activity level includes: moderate physical activity for 30 or more minutes per day, five or more days per week or vigorous physical activity for 20 or more minutes per day, three or more days per week.³
- •Tooth decay and gum disease are responsible not only tor oral pain, but it lett untreated, abscessed teeth allow intections to spread, which in some cases can be life-threatening. Recent evidence also suggests an association between gum disease and preterm birth.¹⁶ For every person in the US over age 19 who has dental insurance, three more lack insurance.¹⁷

Data Sources & Notes

Reporting data by race and ethnicity: There are advantages to showing data by race and ethnicity for targeting resources and interventions toward populations in need. However, race and ethnicity themselves do not cause a particular health problem. Factors such as income, education, access to health care, and stress are likely among the major causes of the poorer health status of minorities on many health measures compared to whites. Few sources of health data record these types of socio-economic data, although most do collect information on race and ethnicity.

- 1 Population estimates were compiled by the State Center for Health Statistics based on vintage 2007 estimates produced by the Population Estimates Program of the U.S. Census Bureau in collaboration with the National Center for Health Statistics (NCHS). These bridged-race population files contain estimates of the resident population of the United States as of July 1 of each year by age, sex, bridged-race category, and Hispanic origin. Available at: http://www.cdc.gov/nchs/about/major/dvs/popbridge/datadoc.htm
- 2 US Census Bureau, American Community Survey.
- 3 NC Behavioral Risk Factor Surveillance System (BRFSS), State Center for Health Statistics. BRFSS is an ongoing, monthly telephone survey through which data are collected from randomly selected, non-institutionalized NC adults (age 18 and older) in households with telephones. In 2007, over 9,000 women were interviewed for BRFSS; their survey responses were weighted to represent those of all adult women in the state. Available at: http://www.schs.state.nc.us/SCHS/brfss/
- 4 Live birth certificates for all NC residents. Infant deaths were taken from the matched infant death and birth file, State Center for Health Statistics.
- 5 Pregnancy Risk Assessment Monitoring System (PRAMS) for North Carolina, State Center for Health Statistics. PRAMS is an ongoing mail/phone survey of women who have recently given birth. Each month, a random sample of mothers are selected from NC birth certificates. Each year, approximately 1,500 NC women are interviewed for PRAMS; their responses are then weighted to represent those of all women giving birth in the state. There is no minimum age specification from PRAMS. Available at: http://www.schs.state.nc.us/SCHS/prams/
- 6 United Health Foundation. America's Health Rankings: A Call to Action for People and Their Communities. 2007 Edition. http://www.americashealthrankings.org/2008/pdfs/2007.pdf
- 7 Healthy People 2010 Database. http://wonder.cdc.gov/data2010/

- 8 UNICEF, "Nutrition: Infant and Young Child Feeding." http://www.unicef.org/nutrition/index_breastfeeding.html
- 9 "American Academy of Pediatrics Policy Statement: Breastfeeding and the Use of Human Milk," Pediatrics Vol. 115 No.2 February 2005.
- 10 Death certificates for all NC residents, State Center for Health Statistics. Based on primary cause of death. Ageadjusted by the direct method, using the projected 2000 US total population as the standard.
- 11 Statewide hospital discharge data reporting system, State Center for Health Statistics. NC hospitals only. Records with a primary diagnosis of hip fracture or mental disease/ substance abuse are included.
- 12 North Carolina State Center for Health Statistics, "Underreporting of American Indian Race on North Carolina Death Certificates" June 2007. http://www.schs.state.nc.us/SCHS/pdf/SB33.pdf
- 13 Ali, S. 2006. 'Female Breast Cancer incidence, State at Diagnosis, Treatment, and Mortality in North Carolina." State Center for Health Statistics, NC Division of Public Health, SCHS Study 150. http://www.schs.state.nc.us/SCHS/pdf/SCHS150.pdf
- 14 NC Division of Public Health, Epidemiology Section, HIV/STD Prevention and Care Branch.
- 15 Highway Safety Research Center, University of North Carolina at Chapel Hill. NC Reportable Crash Data.
- 16 Offenbacher S, Boggess KA, Murtha AP, et al. Progressive periodontal disease and risk of very preterm delivery. Obstet Gynecol Jan 2006; 107: 29-36.
- 17 Centers for Disease Control and Prevention, "Fact Sheet: Oral Health for Adults. December 2006. http://www.cdc.gov/OralHealth/publications/factsheets/adult.htm

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