

## North Carolina State Health Issues/Trends

Legislative Oversight Committee

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President & CEO

NCIOM

December 11, 2012



## North Carolina Institute of Medicine

- Quasi-state agency chartered in 1983 by the NC General Assembly to:
  - Be concerned with the health of the people of North Carolina
  - Monitor and study health matters
  - Respond authoritatively when found advisable
  - Respond to requests from outside sources for analysis and advice when this will aid in forming a basis for health policy decisions

*NCGS §90-470*



## North Carolina's Health: A Snapshot

- North Carolina ranks 32<sup>nd</sup> of the 50 states in population health measures in 2011. (America's Health Rankings, 2010)
  - North Carolina ranked 31<sup>st</sup> in determinants of health (eg, smoking, binge drinking, obesity, poverty, preventable hospitalizations).
  - North Carolina ranked 38<sup>th</sup> in health outcomes (eg, diabetes, poor physical and mental health days, cancer and cardiovascular deaths, infant mortality rate, premature deaths).

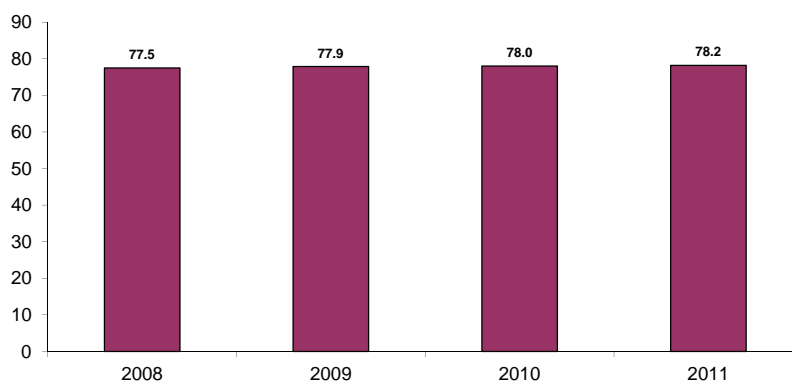


America's Health Rankings. 2011.

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## NC Life Expectancy Increasing

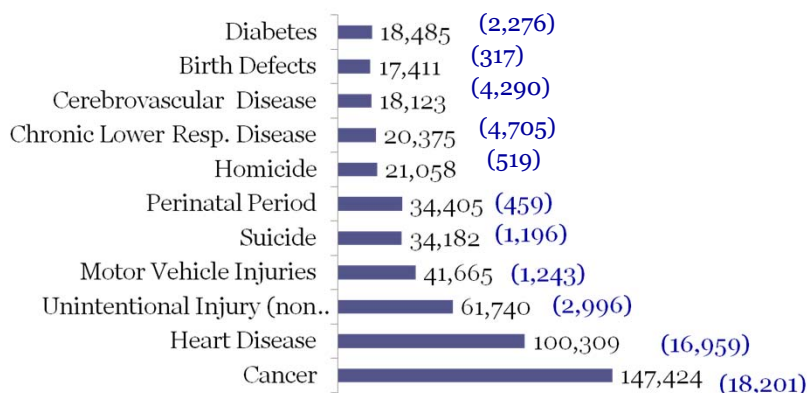
2008-2011 Life Expectancy at Birth: North Carolina



NC State Center for Health Statistics. Life Expectancy at Birth (2008-2011).

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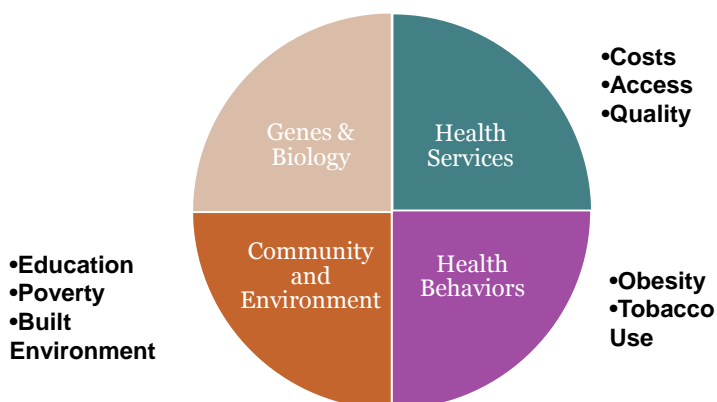
## Years of Potential Life Lost: NC, Causes of Death Before Age 75, 2011 (Years Life Lost/Number Deaths)



State Center for Health Statistics. Leading Causes of NC Resident Deaths, 1999-2011: Total Deaths and Year of Potential Life Lost Prior to Age 75.

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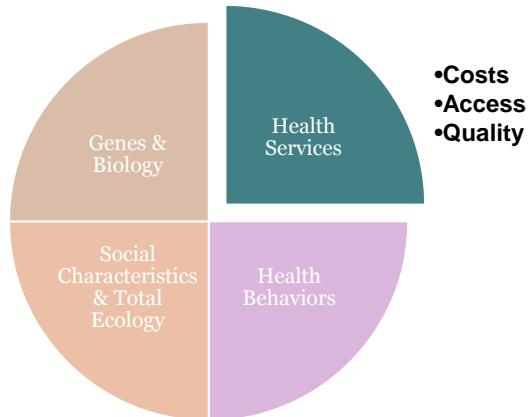
## Determinants of Health



Center for Disease Control and Prevention. Social Determinants of Health. Frequently Asked Questions. <http://www.cdc.gov/socialdeterminants/FAQ.html>

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## Determinants of Health



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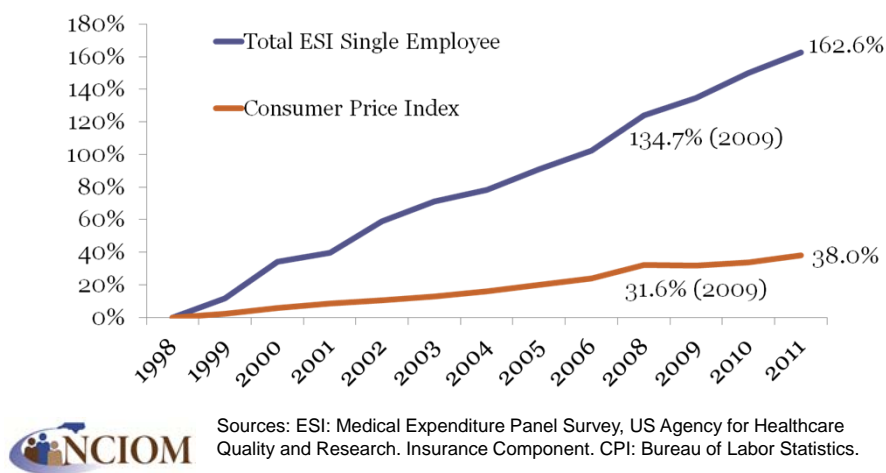
## Health Care Costs Rising Faster than Other Expenses

- US spending on health care rising far more rapidly than other costs in our society.
  - US spends more on health care than any other industrialized nation does.
  - Health care costs rising about 3 times the rate of inflation.



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## Employer-Sponsored Premiums Rising Much Faster than Inflation (NC, 1998-2009)



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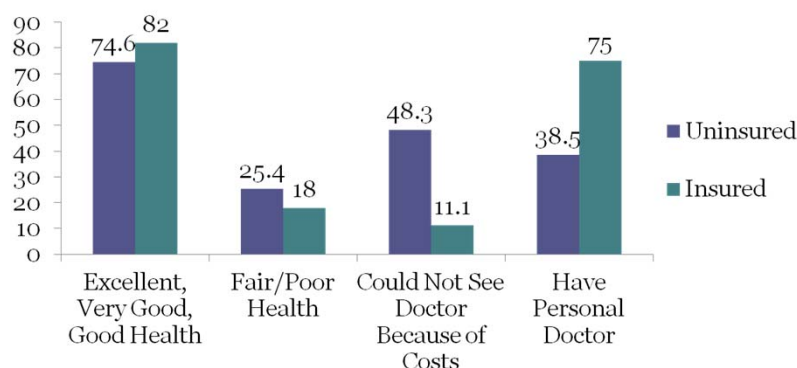
## Insurance Coverage

- Approximately 1.5 million uninsured in North Carolina (19% of the nonelderly population).
- Being uninsured has a profound impact on health and financial wellbeing.
  - People who are uninsured are less likely to have a personal doctor, more likely to report delaying care due to costs, and more likely to end up in the hospital for preventable health problems or late stage cancer.

US Census. Current Population Survey (CPS) Annual Social and Economic Supplement. Health Historical Tables. Table HIA-6.

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## Uninsured Report Worse Health, More Access Barriers



State Center for Health Statistics. North Carolina Behavior Risk Factor Surveillance Survey. 2011.

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## Quality

- US Agency for Healthcare Research and Quality creates a state “dashboard” on overall health care quality.
  - Comprised of more than 150 measures, reported at the state level.
  - Examines clinical care measures related to cancer, heart disease, diabetes, heart disease, maternal and child health, respiratory diseases, asthma, preventive services, functional well-being, institutional care.
- North Carolina is rated as “average” when compared to other states on different quality measures (2011).



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## NC Quality Improving Over Time

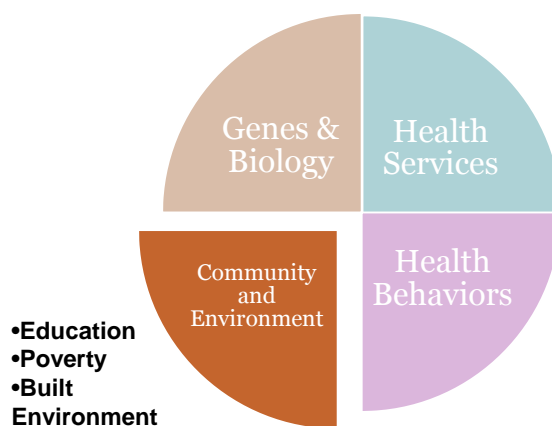
Sources of Care	Most Recent Data	Trend Data
<b>Hospital Care</b>	9 better than national, 18 same, 7 worse	31 measures with trend data: Improved (81%), unchanged (10%), worsened (10%).
<b>Ambulatory Care</b>	11 better than national, 45 same, 13 worse, 19 NA	39 measures with trend data: Improved (44%), unchanged (36%), worsened (18%).
<b>Nursing Home Care</b>	6 better than national, 1 same, 12 worse	19 measures with trend data: Improved (79%), unchanged (16%), worsened (5%)
<b>Home Health Care</b>	2 better than national, 2 same, 6 worse	10 measures with trend data: Improved (10%), unchanged (50%), worsened (40%)



Agency for Healthcare Research and Quality. North Carolina. Dashboard on Health Care Quality Compared tot All States. 2011.

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## Determinants of Health



Center for Disease Control and Prevention. Social Determinants of Health. Frequently Asked Questions. <http://www.cdc.gov/socialdeterminants/FAQ.html>

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## Educational Achievement Impacts Health

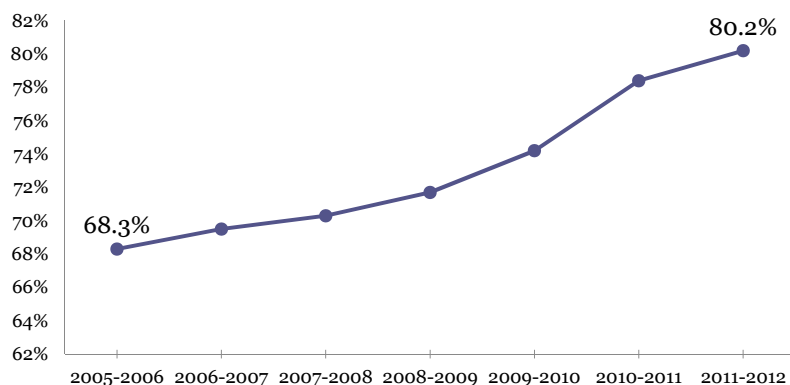
- Adults who do not graduate from high school are more likely to be in poor or fair health than college graduates.
  - They are more likely to suffer from acute and chronic health conditions including heart disease, high blood pressure, stroke, high cholesterol, asthma, and diabetes.
  - Individuals with less education are more likely to engage in risky health behaviors such as smoking and being physically inactive.



Robert Wood Johnson Foundation. Commission to Build a Healthier America. Education Matters for Health (2009), Cutler D. National Bureau of Economic Research. Education and health: evaluating theories and evidence. 2009.

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## Four-Year Cohort Graduation Rate (NC 2005-2006 to 2011-2012)



Data Source: NC Department of Public Instruction, Accountability Services Division. "4-Year Cohort Graduation Rates." Available online at: <http://www.ncpublicschools.org/accountability/reporting/cohortgradrate> Annie E. Casey Foundation. Kids Count. Data Center.



<http://datacenter.kidscount.org/data/bystate/Trend.aspx?state=NC&order=a&loc=35&ind=2269&dtm=8518&tf=19%2c104%2c118%2c105%2c857%2c909%2c1021>

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## Childhood Poverty Has Short and Long-term Health Consequences

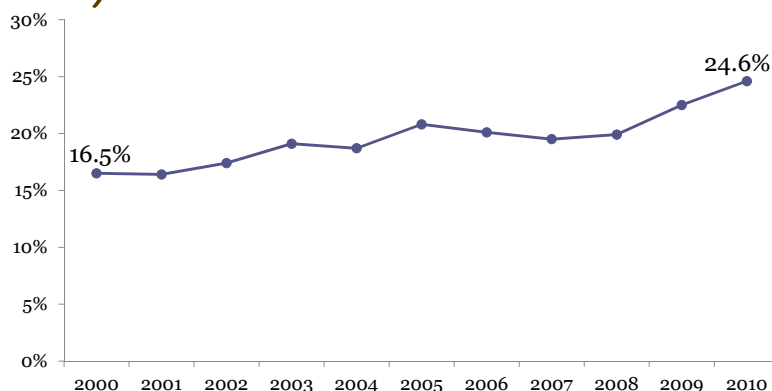
- Economic hardship experienced in childhood results in significantly higher risk of poor health in adulthood.
- Poor children are more likely to have a chronic illness and have higher rates of accidental injuries than higher income children.
- Children living in poverty lag behind more affluent children in cognitive, language, and socioemotional skills as early as three years of age.



Benzeval M. Evidence on the relationship between low-income and poor health. Fiscal Studies. 2000; Lundberg O. The impact of childhood living conditions on illness and mortality in adulthood. Soc Sci Med. 1993; Fiscella K. Disparities in academic achievement and health. Pediatrics. 2009.

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## Children in Poverty (NC, 2000-2010)



Source: Annie E. Casey Foundation. Kids Count. Data Center.

<http://datacenter.kidscount.org/data/bystate/Trend.aspx?state=NC&order=a&loc=35&ind=2238&dtm=4680&tf=11%2c12%2c13%2c14%2c15%2c16%2c18%2c35%2c38%2c133>

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## Built Environment Contributes to Health

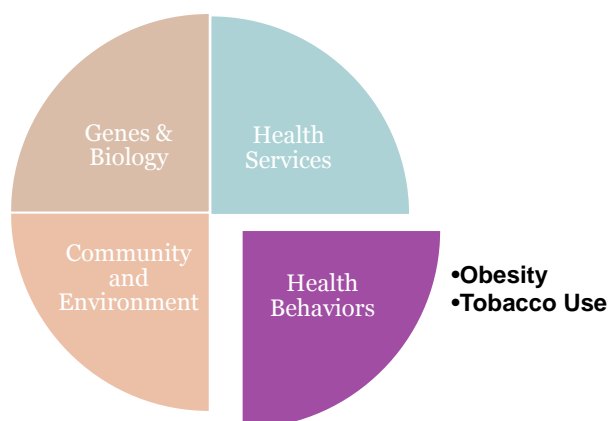
- National research has shown that aspects of the built environment—such as public transit, sidewalks, traffic-calming devices—are associated with greater physical activity and lower obesity rates.
- 60% of adults in North Carolina reported that they would be more physically active if their communities had more accessible sidewalks or walking trails (2007).
- North Carolina Department of Transportation has developed a statewide bicycle and pedestrian transportation plan and Complete Streets policy to promote bicycling and walking opportunities.



Conti E. North Carolina Department of Transportation's Vision for Healthy Communities through Sustainable Transportation, NCMJ 73(4), 2012.  
Behavioral Health Risk Factor Surveillance Survey, 2007. Robert Wood Johnson Foundation. Active Transportation. Summer 2009.

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## Determinants of Health



Center for Disease Control and Prevention. Social Determinants of Health. Frequently Asked Questions. <http://www.cdc.gov/socialdeterminants/FAQ.html>

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## Obesity Has Negative Health Consequences

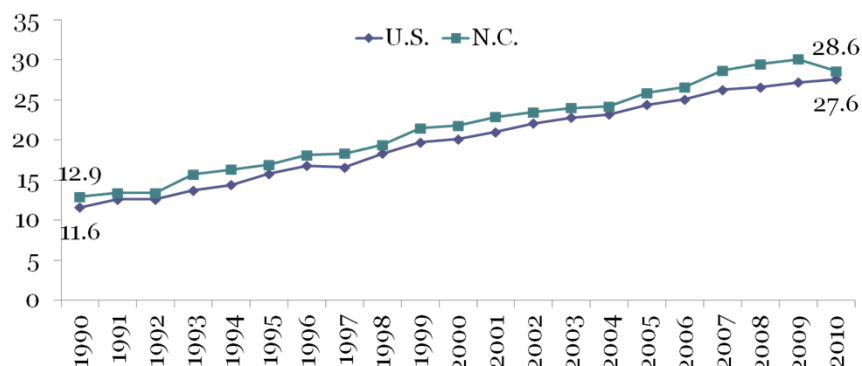
- Obesity related to consuming too many calories, and burning too few calories (lack of physical activity). This is an energy imbalance.
- Obesity contributes to heart disease, Type 2 diabetes, stroke, and certain types of cancer.
- The medical costs for obese people was estimated to be 42% higher than spending for normal weight people (2006).



CDC. Obesity. Causes and Consequences, Adult obesity facts. Finkelstein EA. At the intersection of health, health care, and policy. Health Affairs. 2009.

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## North Carolina Obesity Rate Higher Than US (1990-2010)



State Center for Health Statistics. Behavioral Risk Factor Surveillance Survey. Special data run. 2012.

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## Tobacco Use Is Leading Preventable Cause of Health Problems

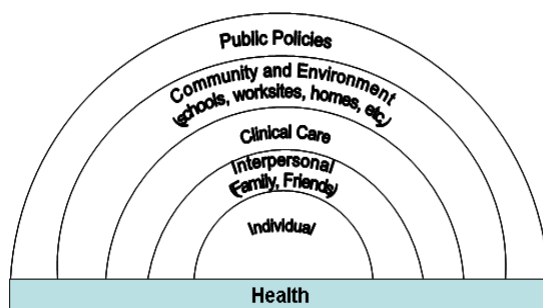
- Tobacco use causes more deaths than HIV, illegal drug use, alcohol use, motor vehicle injury, suicide, and murder combined.
- Cigarette smoking causes cardiovascular disease, emphysema, bronchitis, COPD, and many cancers including lung, mouth, pancreatic, stomach, and cervical cancer.
  - Secondhand smoke causes lung cancer and heart disease.
- Smoking attributable costs amount to \$2.5 billion/year in North Carolina in medical costs, and \$3.3 billion for lost productivity (2004).



CDC. Tobacco-related mortality; health effects of cigarette smoking; Secondhand smoke facts. CDC. Sustaining State Programs for Tobacco Control Data Highlights. 2006.

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## Successful Strategies to Improve Population Health Are Multifaceted



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**NEWS & OBSERVER**

TUESDAY, AUGUST 24, 1999

www.news-observer.com

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## Youth smoking up in N.C.

**A new CDC report says that 35.8 percent of teens use cigarettes. Another study suggests the state needs to spend more on prevention.**

By JOEL B. OBERMAYER  
STAFF WRITER

The smoking rate among high school students in North Carolina has increased by about 22 percent in six years, the U.S. Centers for Disease Control and Prevention reported Monday.

The CDC report shows that 35.8 percent, more than one out of three North Carolina high school students, smoked occasionally or regularly in 1997, the latest year for which data were available.

Experts worry that the overall rate will rise as these students grow into adult smokers. Some blame "smoking chic" emanating from Hollywood and easy access to cigarettes.

A related CDC report also suggests that North Carolina may be spending only a small fraction of the money needed to be effective in combating smoking among all segments of the population.

"It's a serious problem. ... The rates of smoking among youth in North Carolina have been increasing similar to the rest of the nation," said Terry Pechacek, associate director for science at the CDC Office on Smoking and Health in Atlanta. "We are estimating that even if the youth smoking rates level off, 166,000 youths in North Carolina now under

**Young smokers**  
Youth smoking continues to rise, even as adult rates have hit a plateau.

**N.C. high school smokers\***

Year	N.C. high school smokers*	N.C. adult smokers
1993	29.3%	26.7%
1995	31.3%	25.8%
1997	35.8%	25.8%

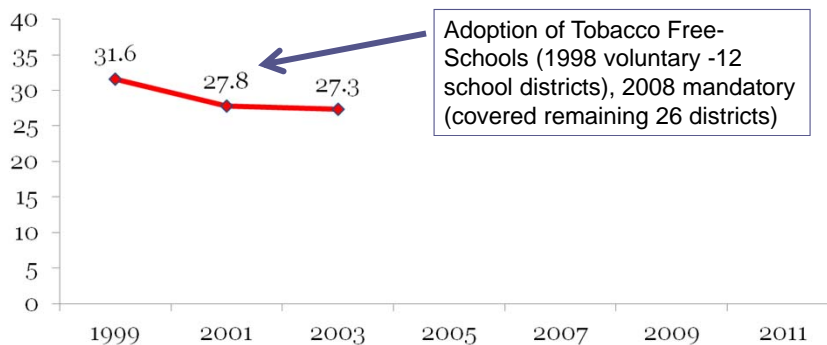
\*Percentage of students in grades 9 to 12 who said they had smoked in the past 30 days.  
Source: U.S. Centers for Disease Control and Prevention.  
FRANK MEDLIN / The News & Observer

SEE SMOKING, PAGE 8A

**NCIOM**

## North Carolina Has Been Successful in Reducing Youth Smoking

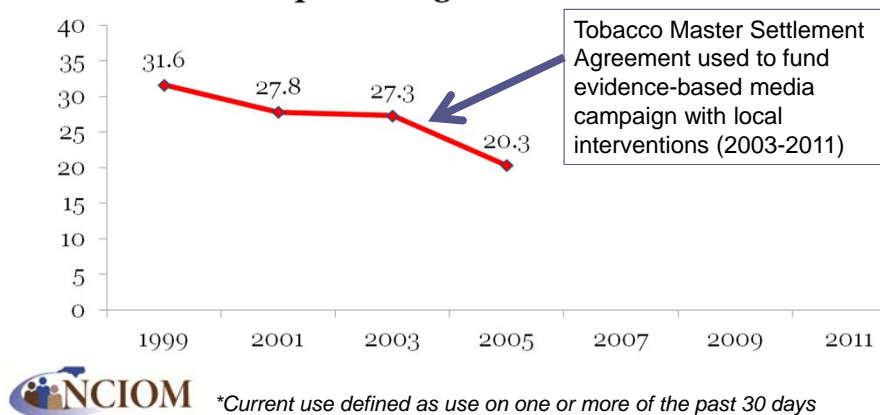
**Percentage of High School Students Who Report Being Current Smokers**



\*Current use defined as use on one or more of the past 30 days

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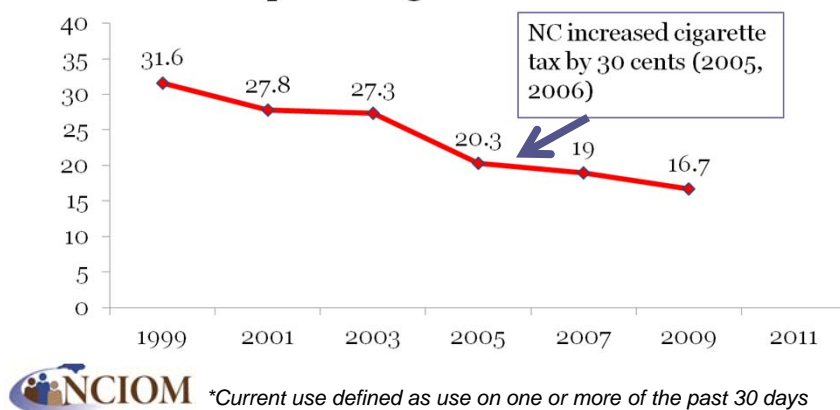
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## North Carolina Has Been Successful in Reducing Youth Smoking

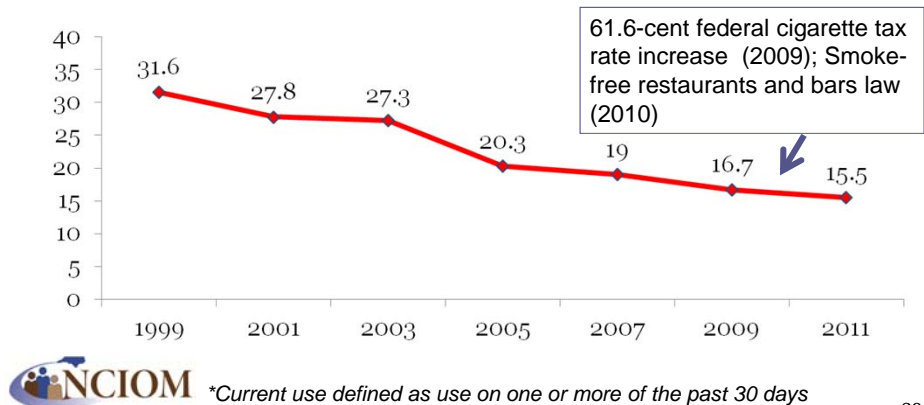
**Percentage of High School Students Who Report Being Current Smokers**



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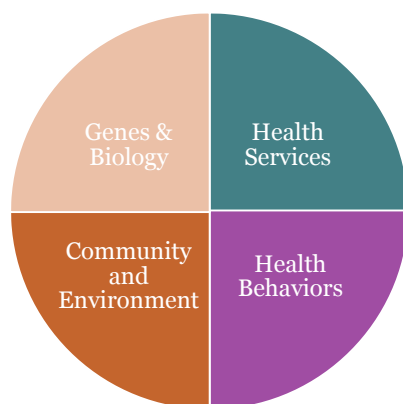
## North Carolina Has Been Successful in Reducing Youth Smoking

### Percentage of High School Students Who Report Being Current Smokers



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## Summary



To further improve the health of North Carolinians, we need to implement evidence-based strategies to:

- *Improve access, affordability and quality of health services*
- *Improve community and environmental factors that underlie health*
- *Reduce risky health behaviors*



Center for Disease Control and Prevention. Social Determinants of Health. Frequently Asked Questions. <http://www.cdc.gov/socialdeterminants/FAQ.html>

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## Questions



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## For More Information

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