

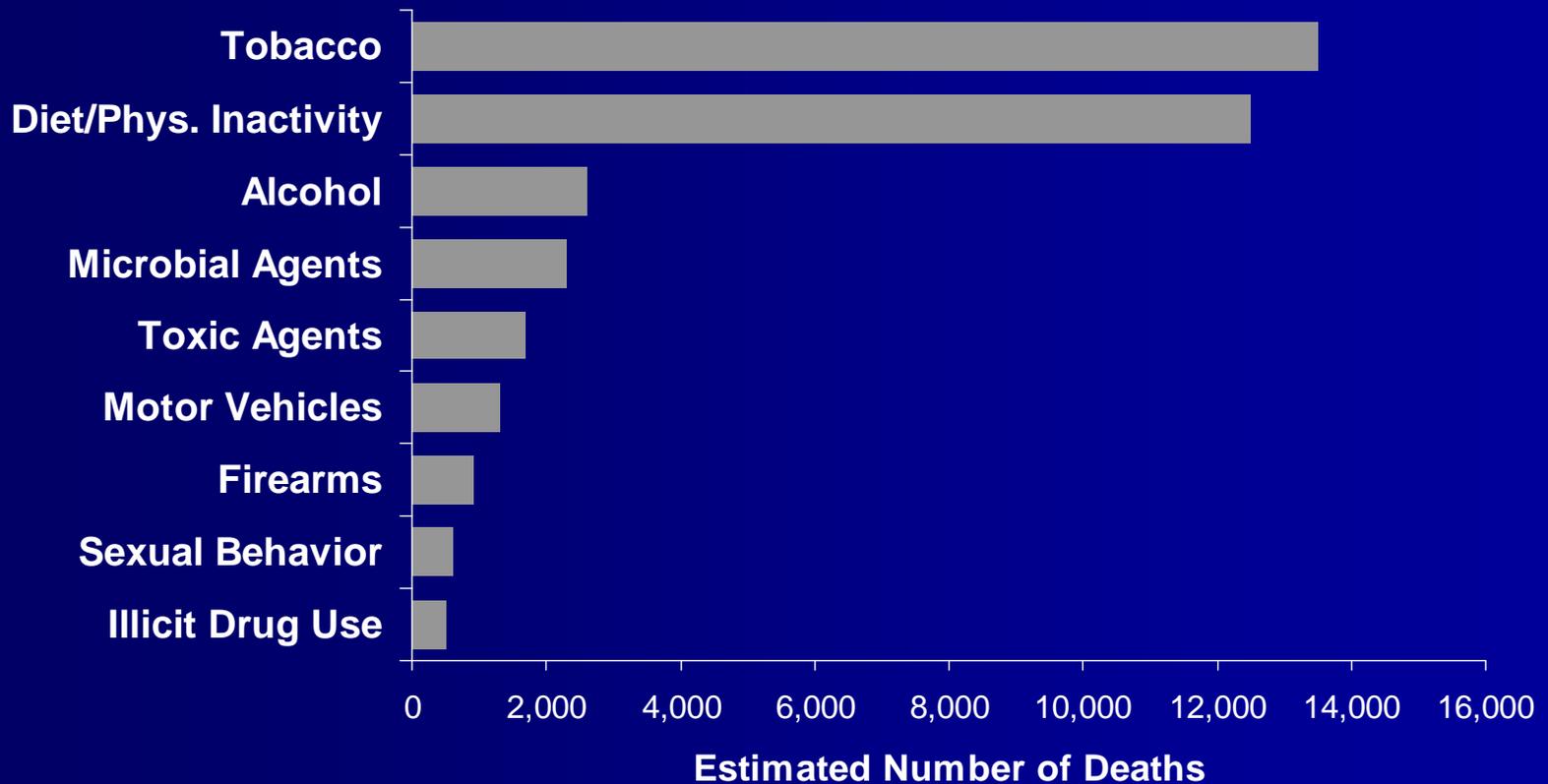
Health and Economic Costs of Tobacco Use in North Carolina

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Objectives

- Morbidity and mortality
- Secondhand smoke exposure
- Economic costs
- Prevalence
- Disparities
- Benchmarks

Estimated Preventable Causes of Death NC- 2006



Lung Cancer in NC

- > 5,000 lives lost in 2005
- 5520 new cases in 2006
- Almost 1/3 of all cancer deaths
- Leading cancer killer men & women
- Surpasses *combined* deaths for breast, colon and prostate cancer

Average Annual Smoking-Attributable * Years of Potential Life Lost (1997-2001)

- North Carolina 174,279 yrs
- United States 5,496,561 yrs

* Among adults aged 35 years and older.
Does not include burn or second hand smoke deaths.
Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Morbidity,
and Economic Costs (SAMMEC): Adult SAMMEC and Maternal and Child Health (MCH)
SAMMEC software, 2004. Available at <http://www.cdc.gov/tobacco/sammecc>.

Smoking Prevalence NC 2006

Adults

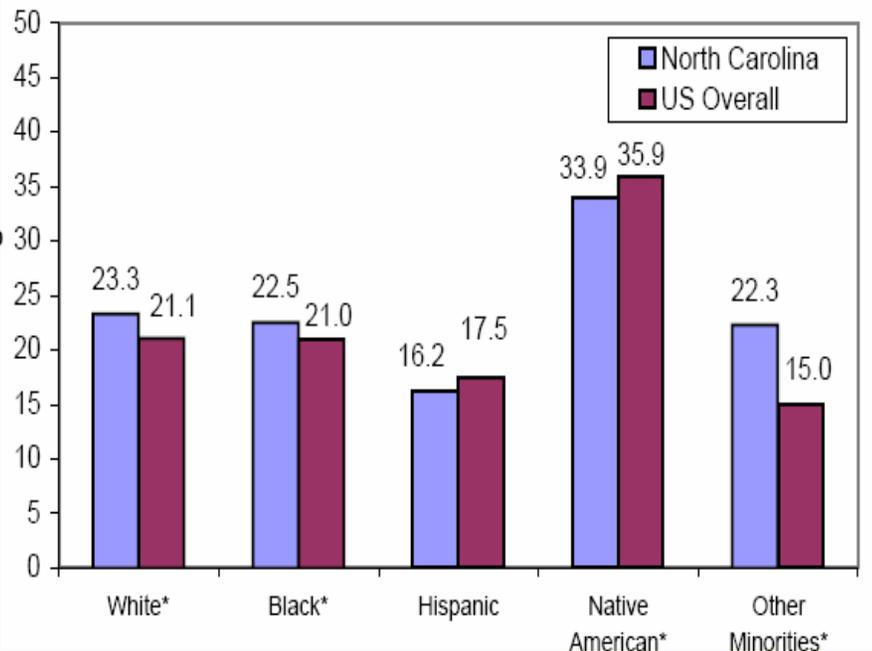
1,475,000 smokers

- NC 22% (ranked 34th- all states)
 - Male 25%
 - Female 19%
- US 20%

Smoking Prevalence NC 2006

Adults by Ethnicity, Education, Income,

Prevalence of current cigarette smoking among adults in North Carolina, by race/ethnicity: Behavioral Risk Factor Surveillance System, 2006



NC BRFSS, 2006

- *< HS* 29.6%
- *HS* 26.9%
- *> HS* 24.5%

- *<15K* 32.5%
- *>35K* 23.8%

- *Disability* 26.8%
- *None* 19.9%

Smoking Prevalence NC 2006

Adults by age

■ <i>18-24</i>	<i>27.8%</i>
■ 25-34	26.4%
■ 35-44	22.7%
■ 45-54	25.7%
■ 55-64	19.6%

Smoking Prevalence NC 2007- Youth

- > 75,000 youth smokers
- Current cigarette smoking among both MS and HS dropped significantly since 2003:
 - HS 27.3% in 2003 to 19.0% in 2007
 - MS 9.3% in 2003 to 4.5% in 2007
- 34,000 fewer HS and MS students are current smokers in 2007 than in 2003

2006 Surgeon General's Report on Secondhand Smoke (SHS) Major Conclusions

- Secondhand smoke causes premature death and disease in children and in adults who do not smoke.
- No risk-free level of exposure exists
- Eliminating indoor smoking only sure way to protect nonsmokers from exposure
- Even short-term exposure is harmful

Secondhand Smoke Exposure

- Between 1,190 and 2,110 (adults, children, and babies) North Carolinians die each year from secondhand smoke exposure
- >2600 cases of asthma in children annually
 - 15% asthma cases Middle School

Survey: active, passive smoking in N.C. middle school children boosts asthma cases 15 percent

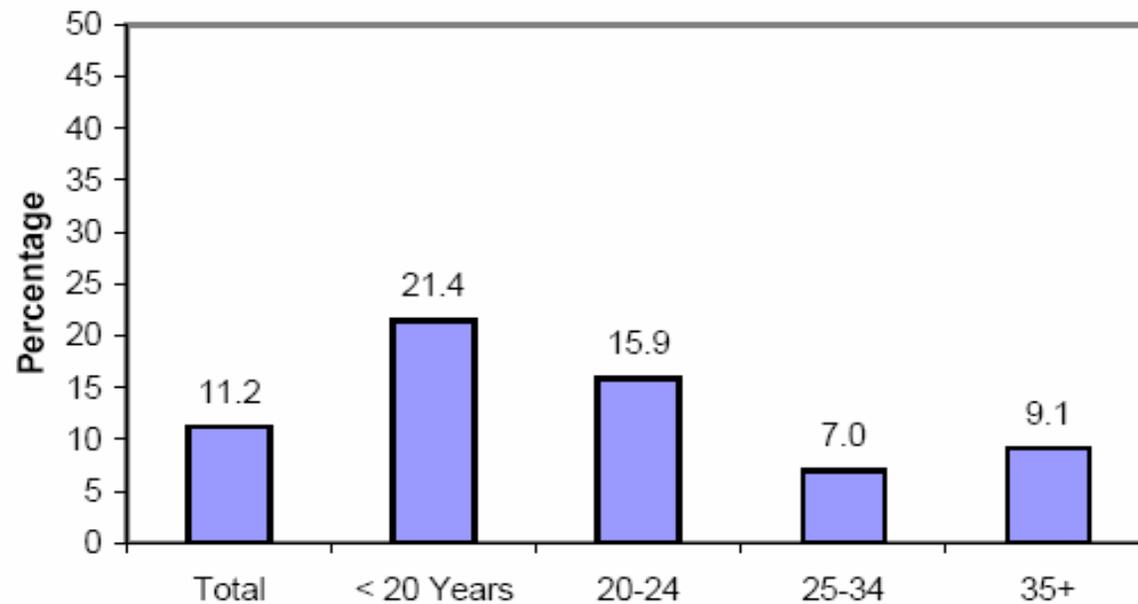
CHAPEL HILL -- One of the largest surveys ever done among North Carolina school children shows that those who smoke or are exposed to tobacco smoke at home or elsewhere suffer more asthma than their classmates.

Feb. 6, 2004

* Am J Pub Health, 2004

Secondhand Smoke Exposure NC Infants

Percentage of infants exposed to secondhand smoke,
by age group: N.C. PRAMS, 2003



*<http://www.schs.state.nc.us/SCHS/prams/pdf/InfantExposure2005.pdf>

Secondhand Smoke Exposure

- Worksites prohibiting smoking in public and private areas = 77%
- Blue-collar (56%) and service workers (61%) less likely to report a smoke-free worksite than white-collar workers
- North Carolina 35th in proportion of workforce reporting smoke-free place of employment

*Plescia, M, NC Med journal, Protecting workers from Secondhand Smoke in NC, 2005

* NC BRFSS, 2006

Smoking-Attributable Costs in NC

- Total *medical* costs in NC*
 - \$2.5 billion in 2004
- Average state medical cost*
 - \$1.9 billion
- Economic cost of smoking estimated at \$3,391 per smoker per year (CDC, 2002)



*CDC: Sustaining State Programs for Tobacco Control: Data Highlights 2006

Smoking-Attributable Costs in NC*

- Medicaid costs 2004
– \$769 million



- = \$120 per capita (adults)

*CDC: Sustaining State Programs for Tobacco Control: Data Highlights 2006

Average Annual Smoking-Attributable *Productivity* Losses (1997-2001)^{*}

- North Carolina \$3.1 Billion
- United States \$92 Billion

* Among adults aged 35 years and older.

Does not include burn or second hand smoke deaths.

Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC): Adult SAMMEC and Maternal and Child Health (MCH) SAMMEC software, 2004. Available at <http://www.cdc.gov/tobacco/sammeec>.

Secondhand Smoke Costs in NC

- Annual US costs = \$10 Billion
 - \$5 Billion direct medical cost
 - \$5 Billion indirect costs
- Methodology exists to estimate state costs of SHS exposure (BC/BS MN)
- Probably close to \$250 million direct/indirect
- \$1.3 million for NC 7th-8th graders*

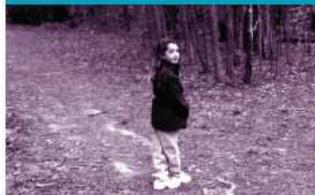
* Am J Pub Health, 2004

Tobacco Cessation & Cost-Effectiveness (QALY)

- Mammogram (40-49) = \$61,744
- High BP (40 yo m) = \$23,335
- Smoking Cessation = \$1108-\$4524

Benchmarks

HISTORIC OPPORTUNITIES FOR IMPROVED HEALTH



THE BEST WAY TO EXPLORE THE FUTURE IS TO CHOOSE THE PATH TO BETTER HEALTH.

NORTH CAROLINA'S
COMPREHENSIVE PLAN TO
PREVENT AND REDUCE
THE HEALTH EFFECTS OF
TOBACCO USE



Vision2010

Vision 2010 Background

- Diverse NC tobacco and public health professionals
- Comprehensive strategic plan
- Based on CDC goals
- Guided early MSA priorities
- Can measure progress

Vision 2010- Objectives

- Overarching Objectives (3)
- Goal 1- Youth Initiation (7)
- Goal 2- Secondhand Smoke (10)
- Goal 3- Cessation (4)
- Goal 4- Disparities (22)

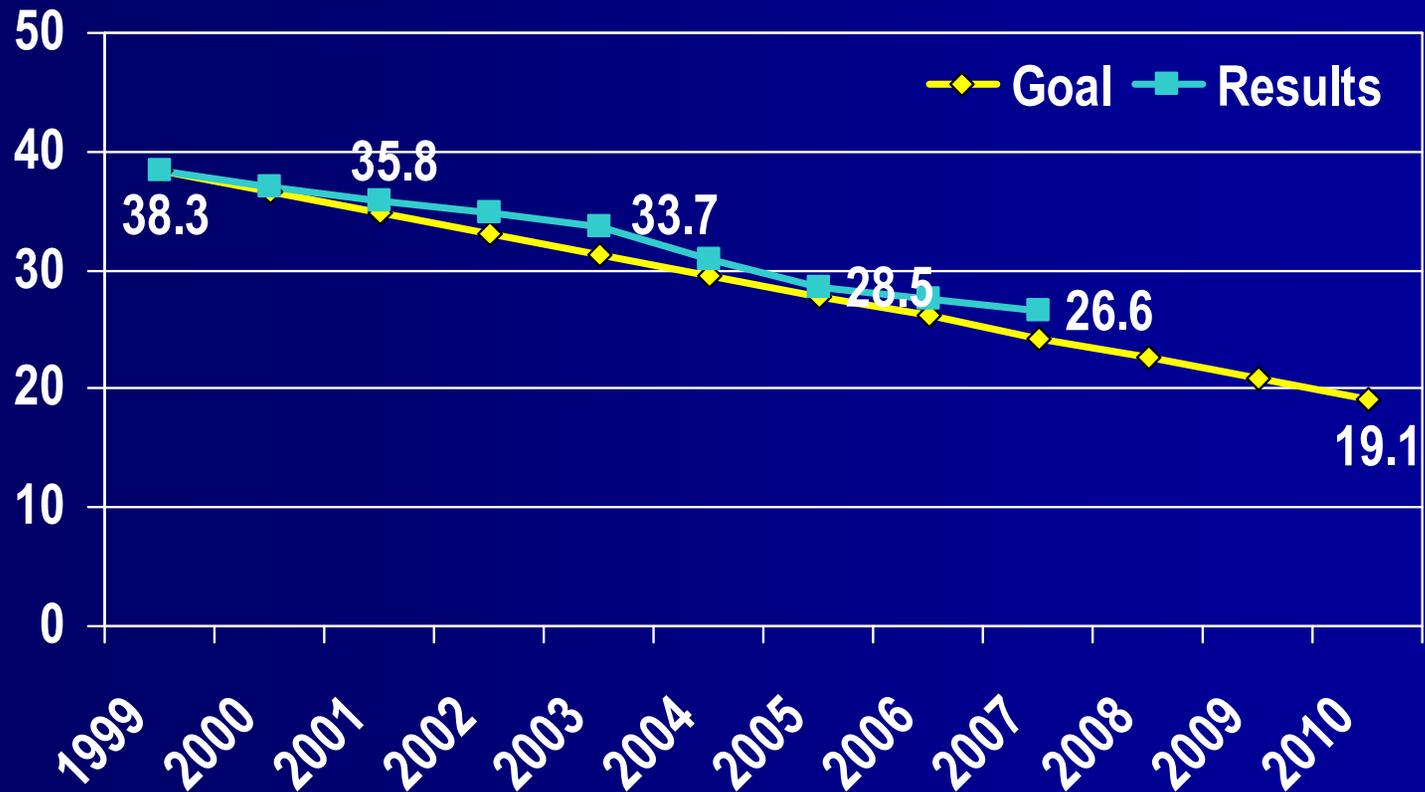
- TOTAL 46 objectives

Overarching 2010 Objectives

- [1] Decrease overall teen tobacco use from 38.3% to 19.1%.
- [2] Decrease the proportion of adults who smoke from 25% to 12%.
- [3] Reduce the proportion of pregnant women who smoke from 15.2% to 10%.

YOUTH INITIATION

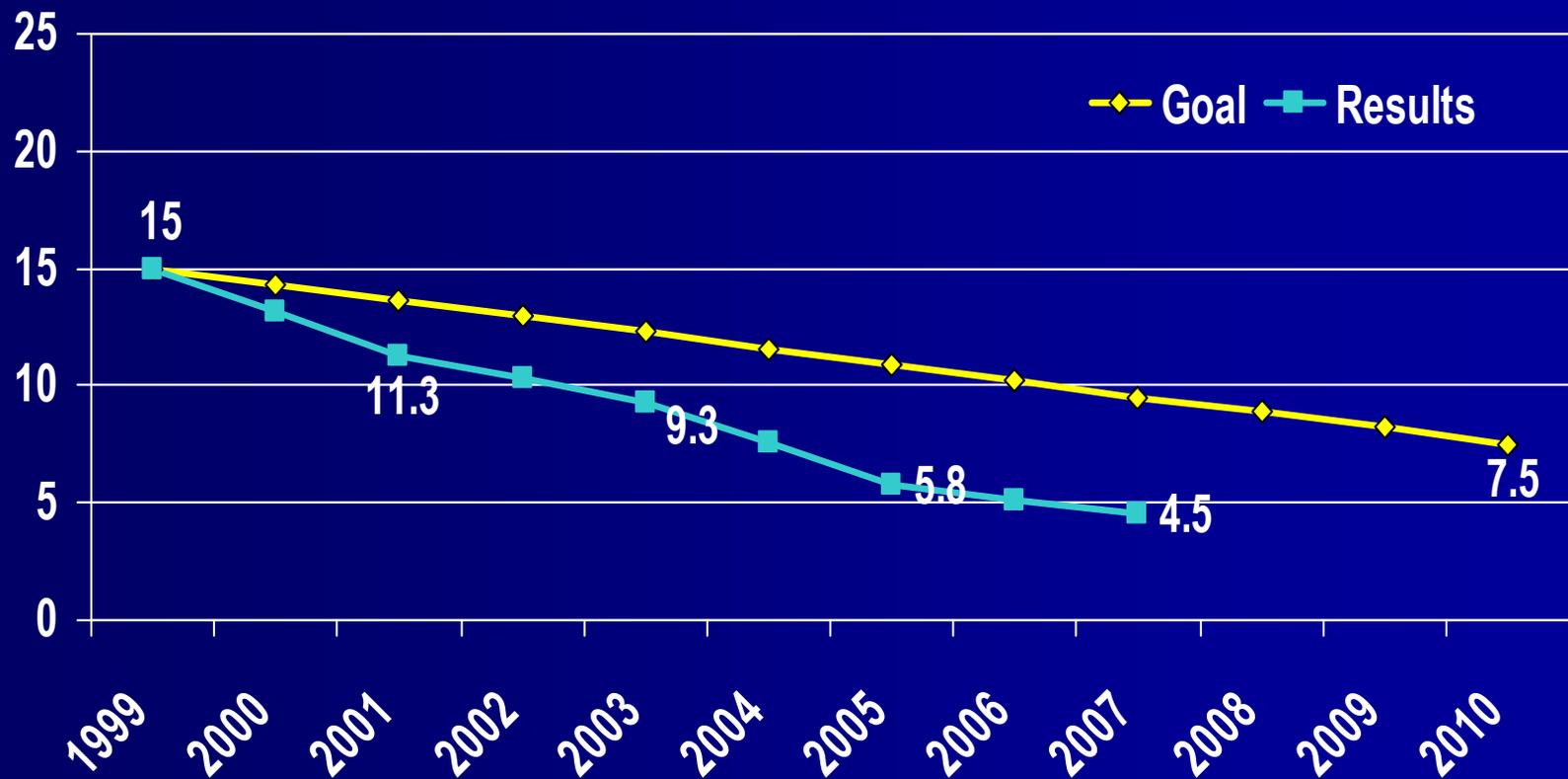
By 2010, decrease overall teen tobacco use from 38.3% to 19.1%.



Data source: NC YTS 1999-2007

YOUTH INITIATION

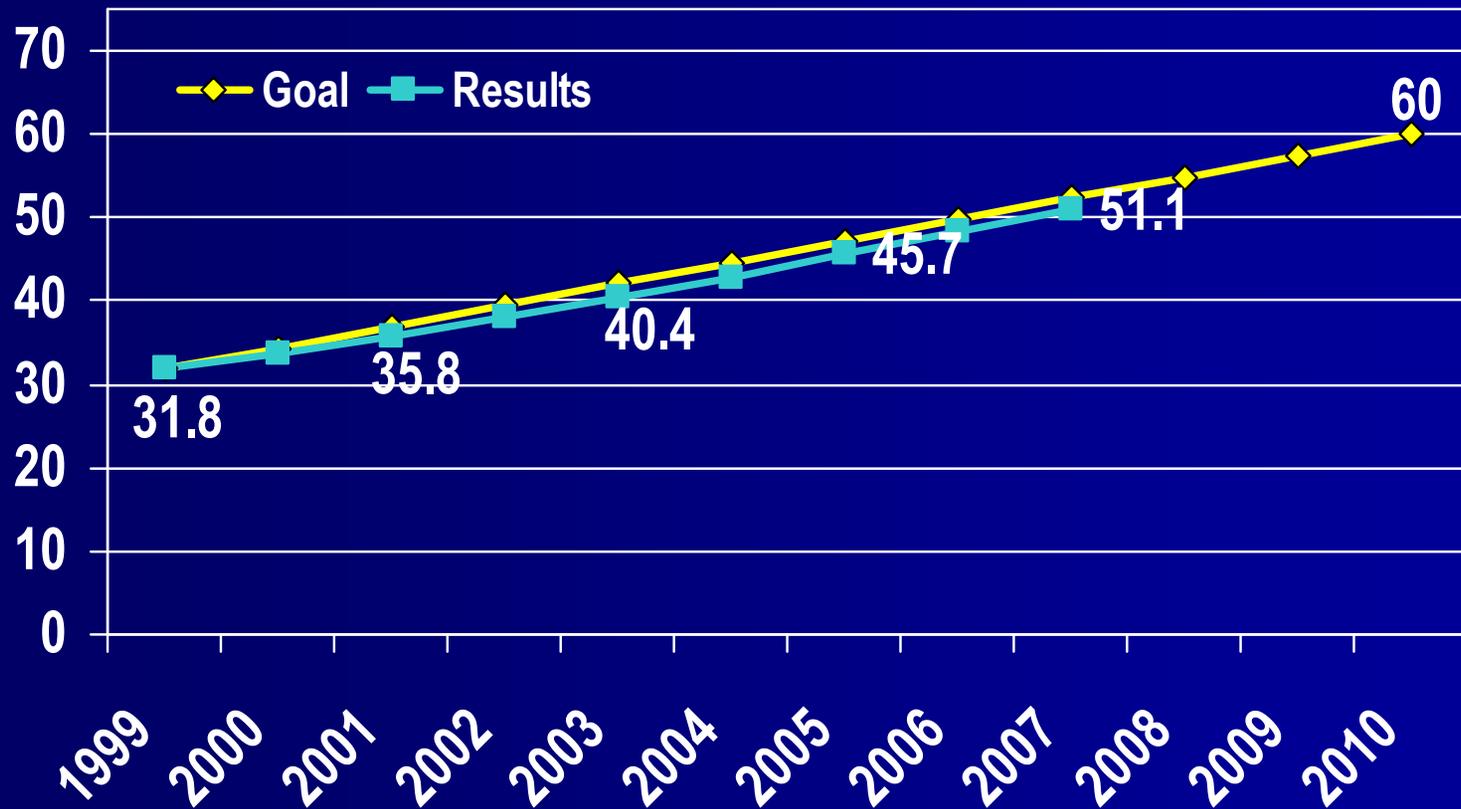
Decrease the proportion of middle school student who smoke from 15% to 7.5%.



* NC YTS 1999-2007

YOUTH INITIATION

Increase from 29.8% to 60% the proportion of young people in high school who have never smoked.



* NC YTS 1999-2007

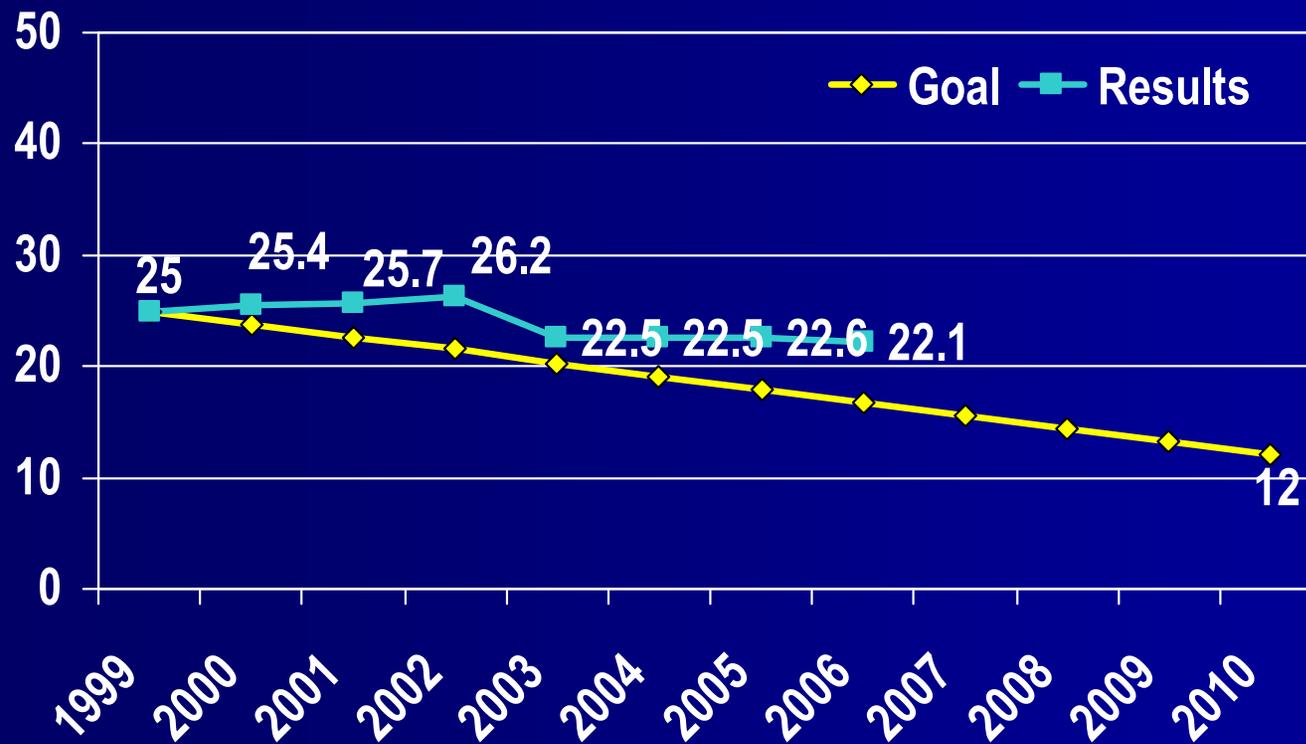
YOUTH INITIATION

Increase from 5.1% to 100% the proportion of school districts in North Carolina that are 100% tobacco free



CESSATION

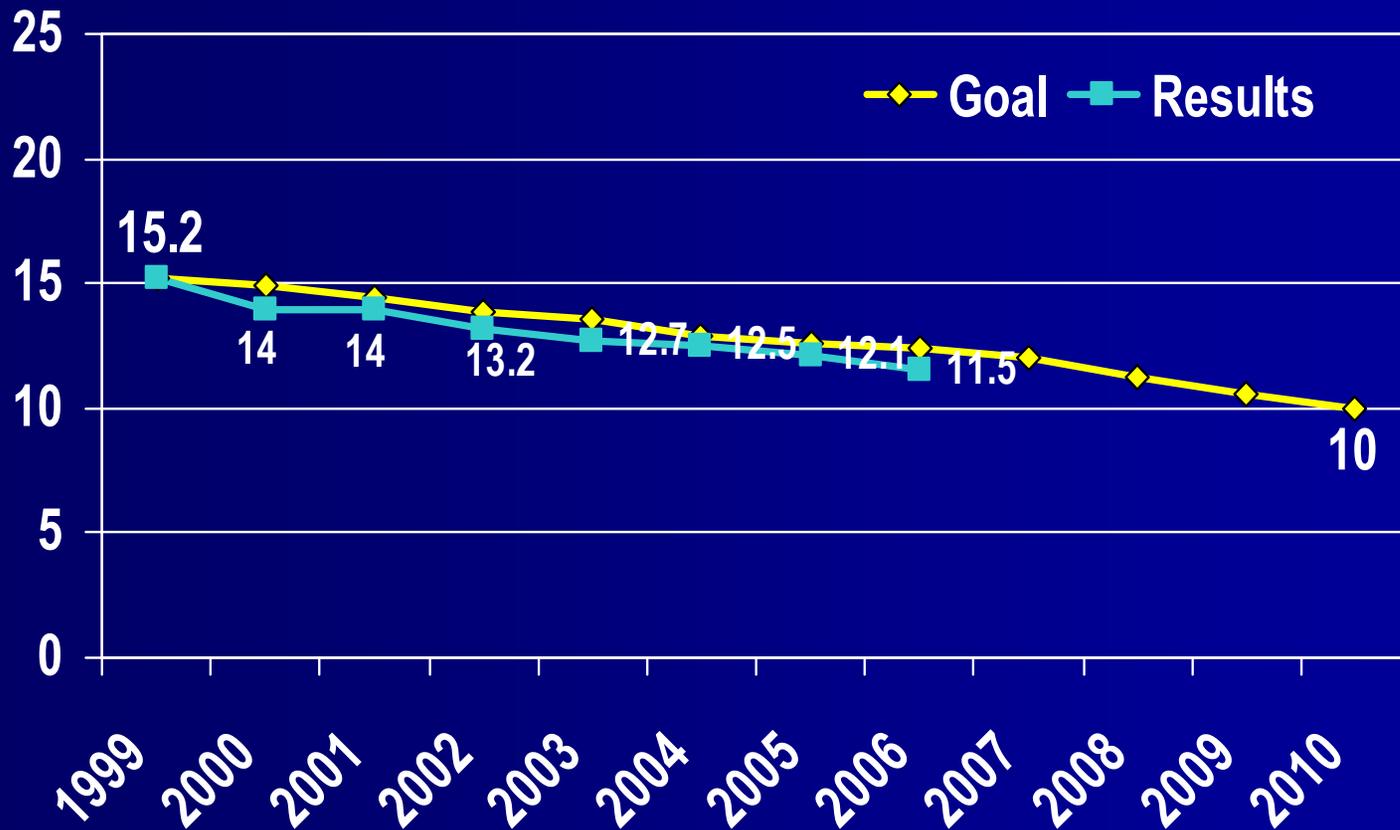
Decrease proportion of adults who smoke from 25% to 12%.



* NC BRFSS-current smoker: 1999-2007

PREGNANCY

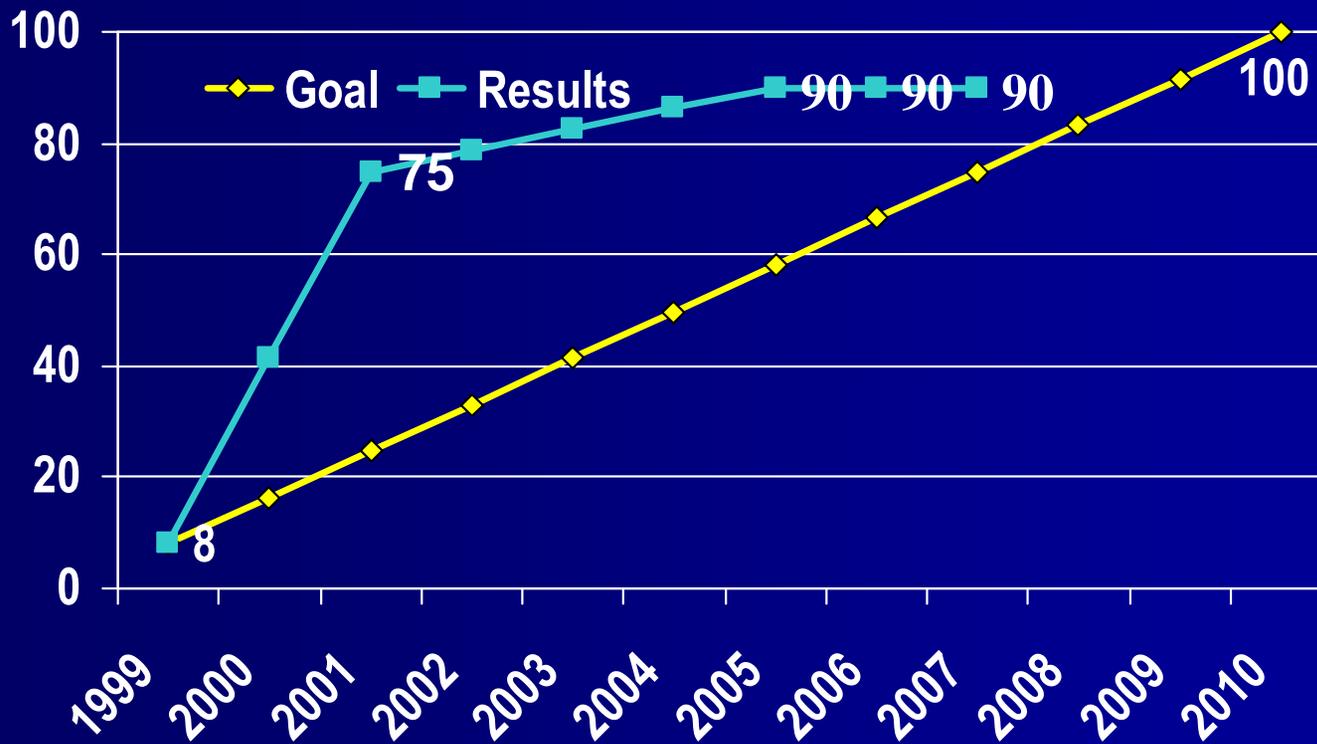
By 2010, reduce the proportion of pregnant women who smoke from 15.2% to 10%.



Data source: Vital Stats- www.schs.state.nc.us/SCHS/vitalstats/volume1/2006/nc.html

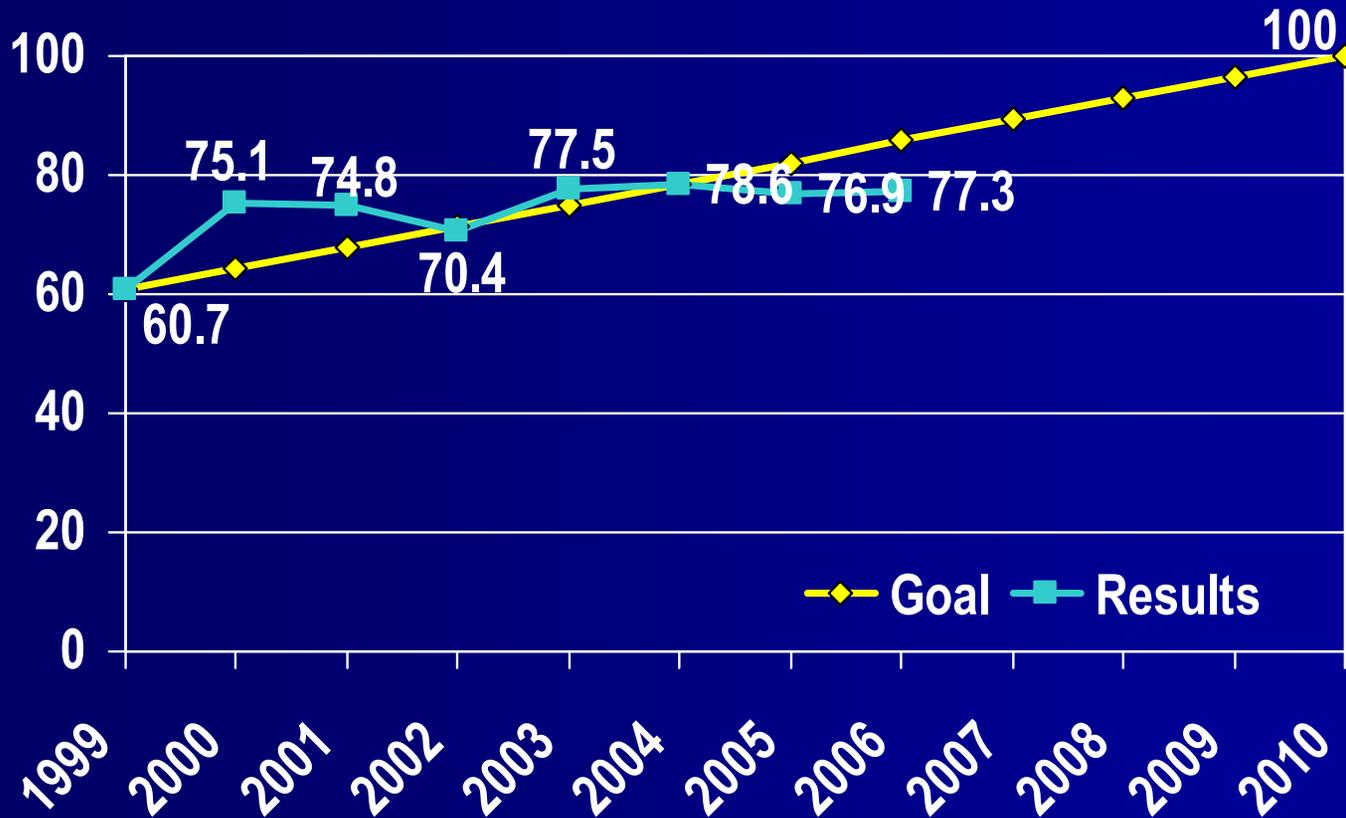
CESSATION

Increase from 8% to 100% health plans in NC that include the clinical practice guidelines for treating tobacco use as covered benefit (Prevention Partners Basic Program)



SECONDHAND SMOKE

Increase from 60.7% to 100% the proportion of North Carolina workers covered by a formal smoking policy that prohibits smoking ...



* NC BRFSS-workplace policy: 1999-2007

Attitudes Toward Policy Change

- Support is broad
 - Among parents
 - Among public
 - Among business managers/owners
 - In major tobacco-producing counties
 - Among legislators
- 90% of parents think it is very important for policymakers to take more steps to prevent and reduce tobacco use among NC children and adolescents

Parents support ban on secondhand smoke in public places, higher cigarette taxes  

TUESDAY, FEBRUARY 12, 2008

The results of an annual survey show that North Carolina parents support stepping up the state's anti-smoking efforts, including higher cigarette taxes and no-smoking policies in public places frequented by youth.

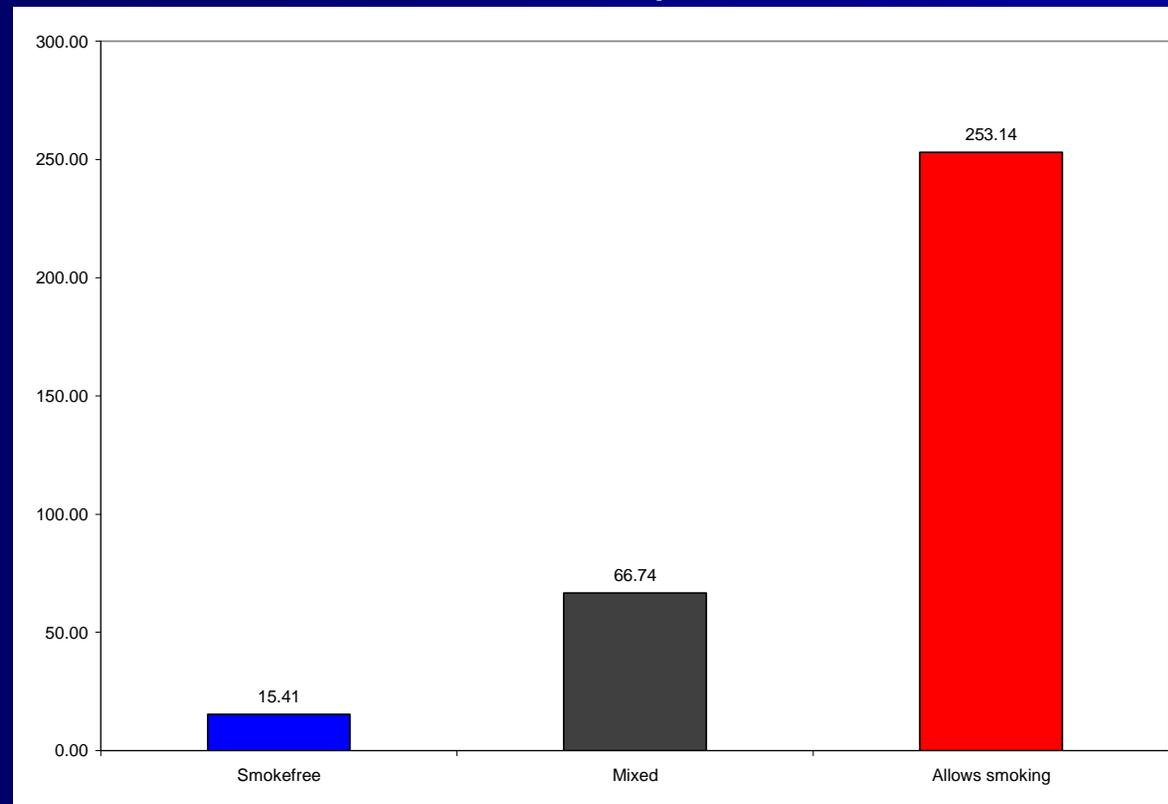
Actions to prevent and reduce youth tobacco use are "very important" to 90 percent of the parents surveyed, and another 8 percent agree they were "somewhat important," said Dr. Adam Goldstein, professor of family medicine at the University of North Carolina at Chapel Hill School of Medicine and director of its Tobacco Prevention and Evaluation Program. The program analyzed the results of the survey, which was conducted in 2006.

* TPEP Survey data 2005-2007

Change works...

Overall average PM2.5 levels by venue policy

NC Indoor Air Study 2005-2007



Economics of Policy Change

- Econometric analysis of 100% SHS limitations in NC show *no adverse economic effect*

Environmental Tobacco Smoke Regulations Have Not Hurt Restaurant Sales in North Carolina

Adam O. Goldstein, MD, and Rachel A. Sobel

North Carolina Medical Journal, 1998; 59: 284-287.

* Goldstein, NC Med J, 1998

Summary

- Tobacco *still* #1 preventable cause of death and disease
- SHS major contributor to poor health
- Economic cost extremely high
- Tremendous advancements in SHS school policy, teen cigarette consumption, smoking & pregnancy, traditional tobacco disparities, cessation policies
- Not likely to meet 2010 goals adult smoking rates
- Not likely to meet 2010 goals on SHS protection
- Current disparities (higher rates) of smoking and secondhand smoke exposure exist among:
 - Youth & SHS exposure
 - Adults and SHS exposure
 - Smoking rates among Young adults, those with lower income, less education, and disabilities