



# North Carolina Institute of Medicine Task Force on Substance Abuse Services:

## Implications for Adolescents

Pam Silberman, JD, DrPH  
President & CEO

# ● ● ● | Legislative Charge

- The North Carolina General Assembly asked the NC IOM to convene a task force to study substance abuse services in NC
  - Section 10.53A of Session Law 2007-323
- Requested to make interim report and recommendations to the 2008 session and a final report to the 2009 session
- Task Force chaired by: Rep. Verla Insko, Sen. Martin Nesbitt, and Dr. Dwayne Book
  - Includes 52 other members



# Data on Youth Substance Use and Abuse in North Carolina

# ● ● ● | Substance Abuse Problems in North Carolina: Overview

- According to the National Survey on Drug Use and Health:
  - 642,000 people 12 years and older (7.7%) in North Carolina reported illicit drug use in the past month
  - 1.63 million people in North Carolina (19.5% of people 12 years or older) reported alcohol binge drinking
  - ***Approximately 709,000 people reported either alcohol or drug abuse or dependence in North Carolina***
    - Most do not receive treatment



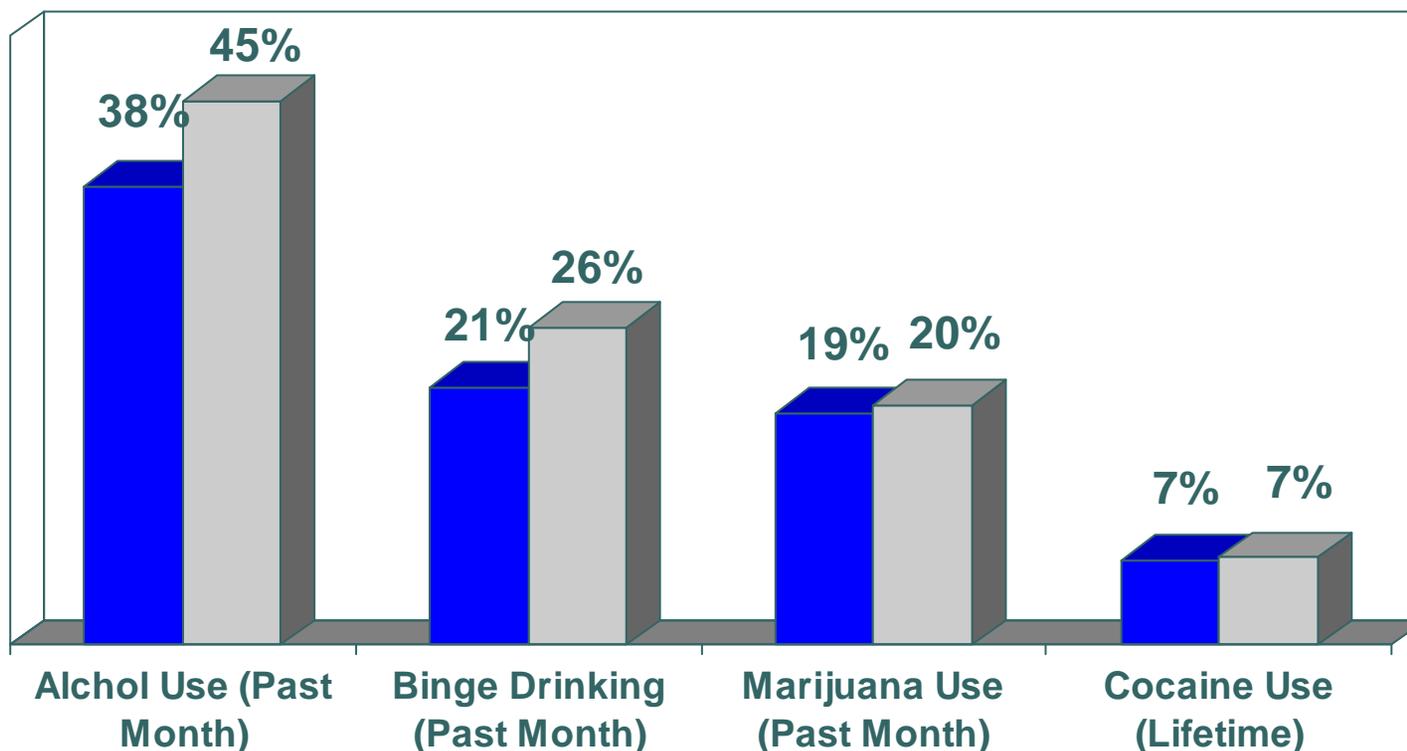
# Two Primary Sources of State-level Data for Youth Drug Use

- Youth Risk Behavior Survey
  - Conducted in middle and high schools
  - Information for youth 11-18 broken out by middle and high school
  - Can obtain gender, race/ethnicity data
  - Data only include in-school youth. Does not include out-of-school youth.
- National Survey on Drug Use and Health
  - Information for youth 12-17, 18-25
  - Most of the national substance abuse data uses NSDUH as data source
  - Telephone survey, reaches people in their home. NSDUH estimates for youth drug use/abuse are on the low-end



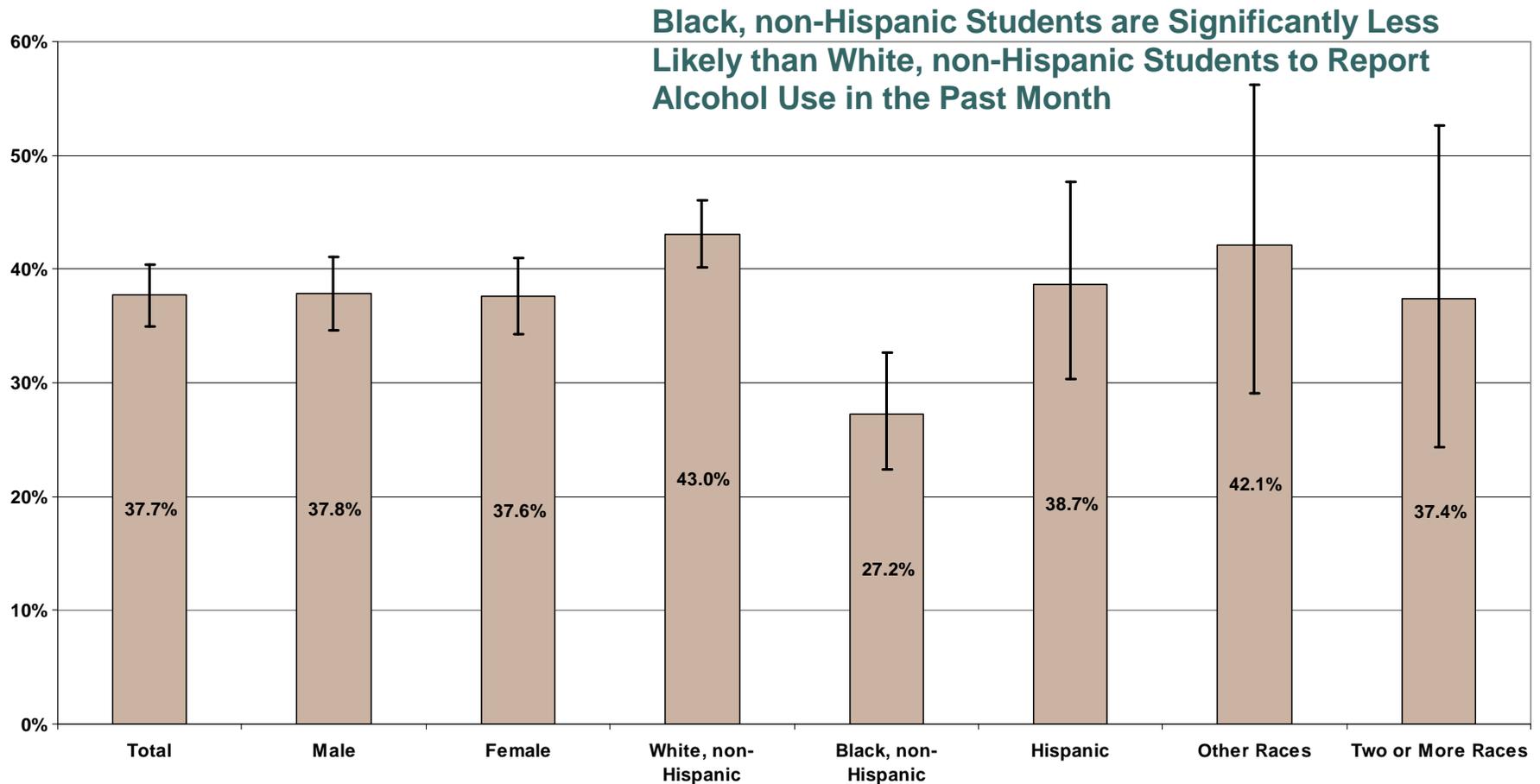
# NC High School Students Less or Equally Likely to Use Alcohol & Drugs than US

■ North Carolina ■ United States



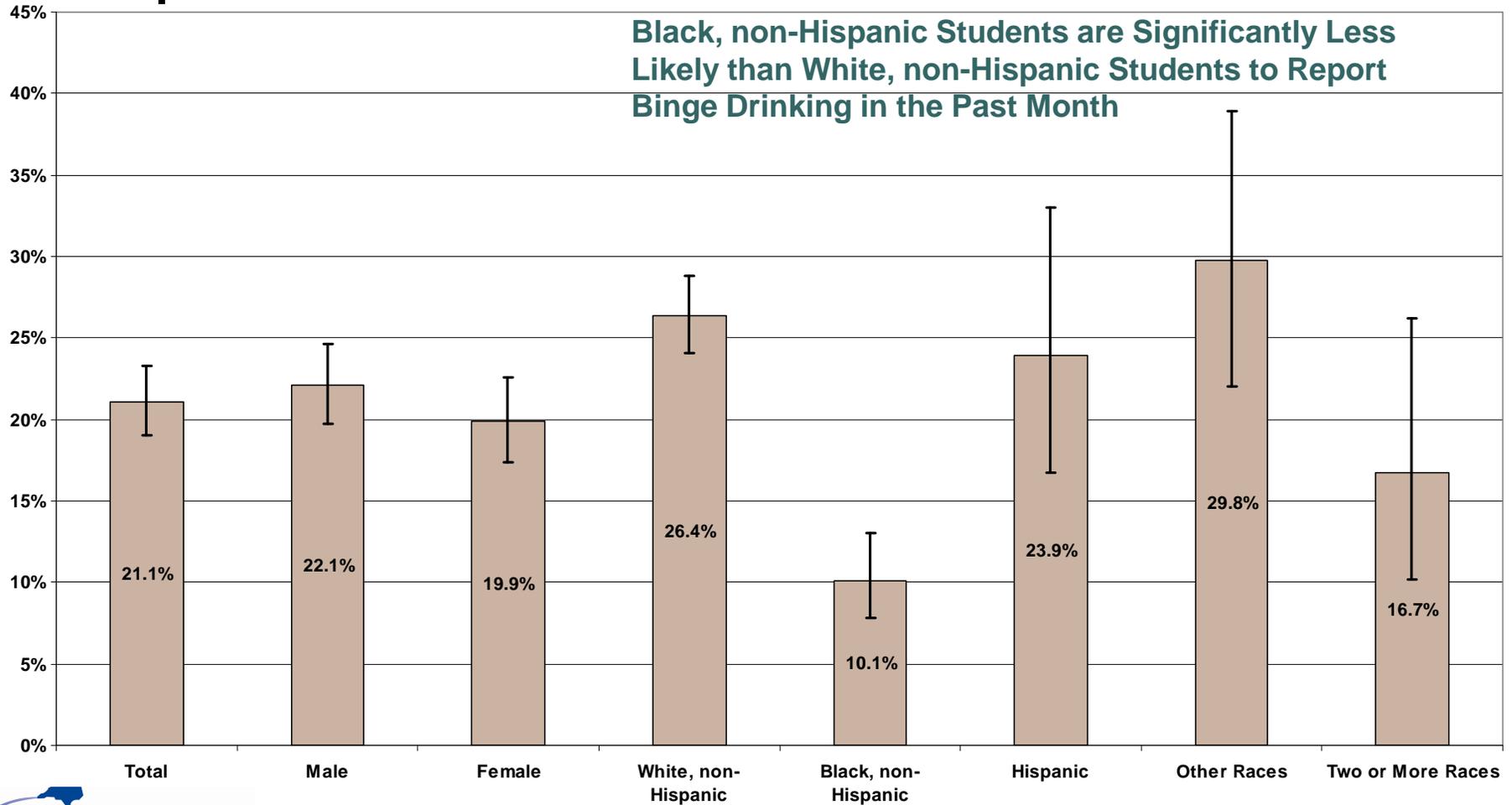


# 40% of NC High School Students Report Alcohol Use in the Past Month





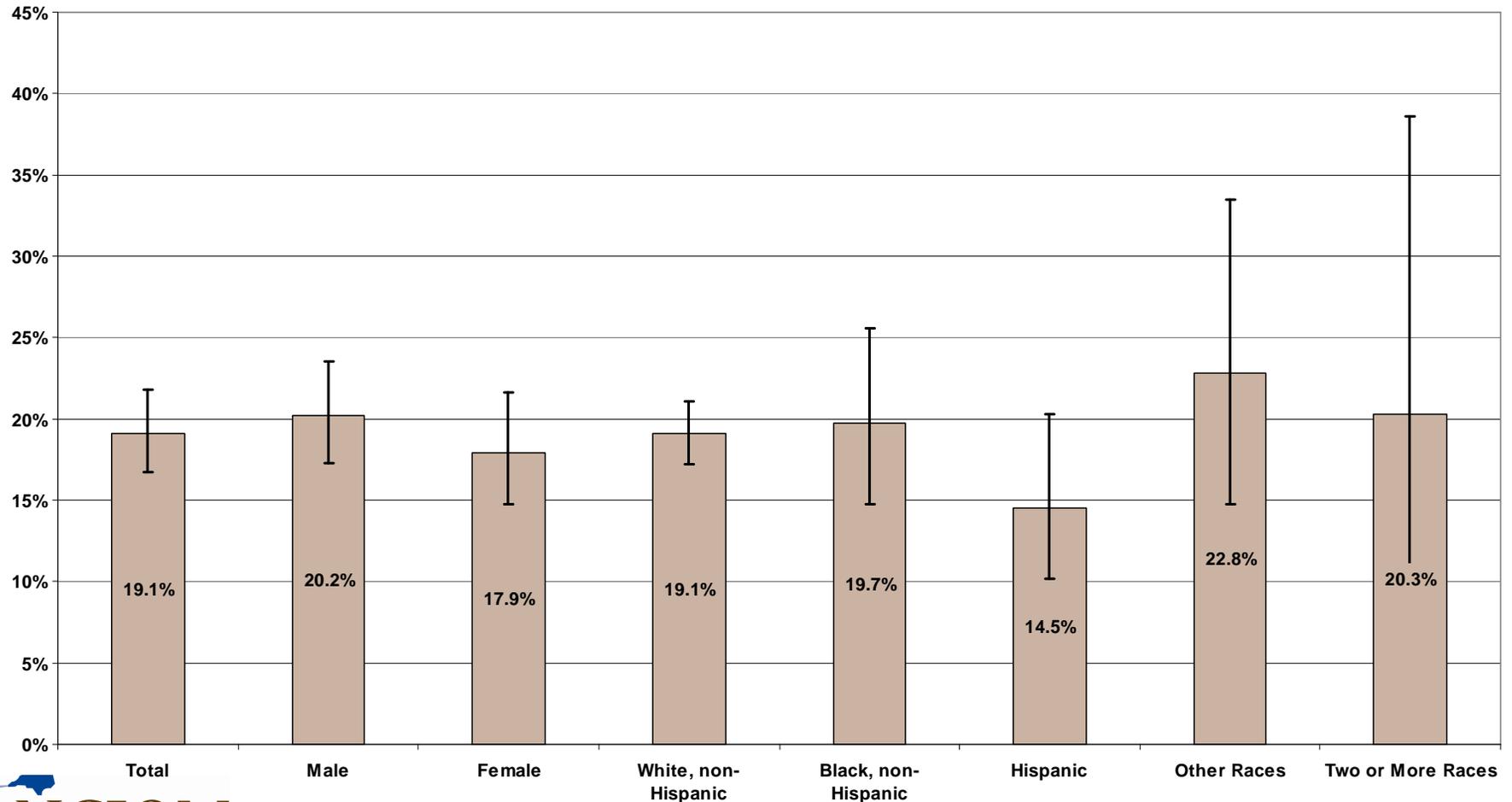
# 1-in-5 NC High School Students Report Binge Drinking\* in the Past Month



North Carolina Youth Risk Behavior Survey (2007)

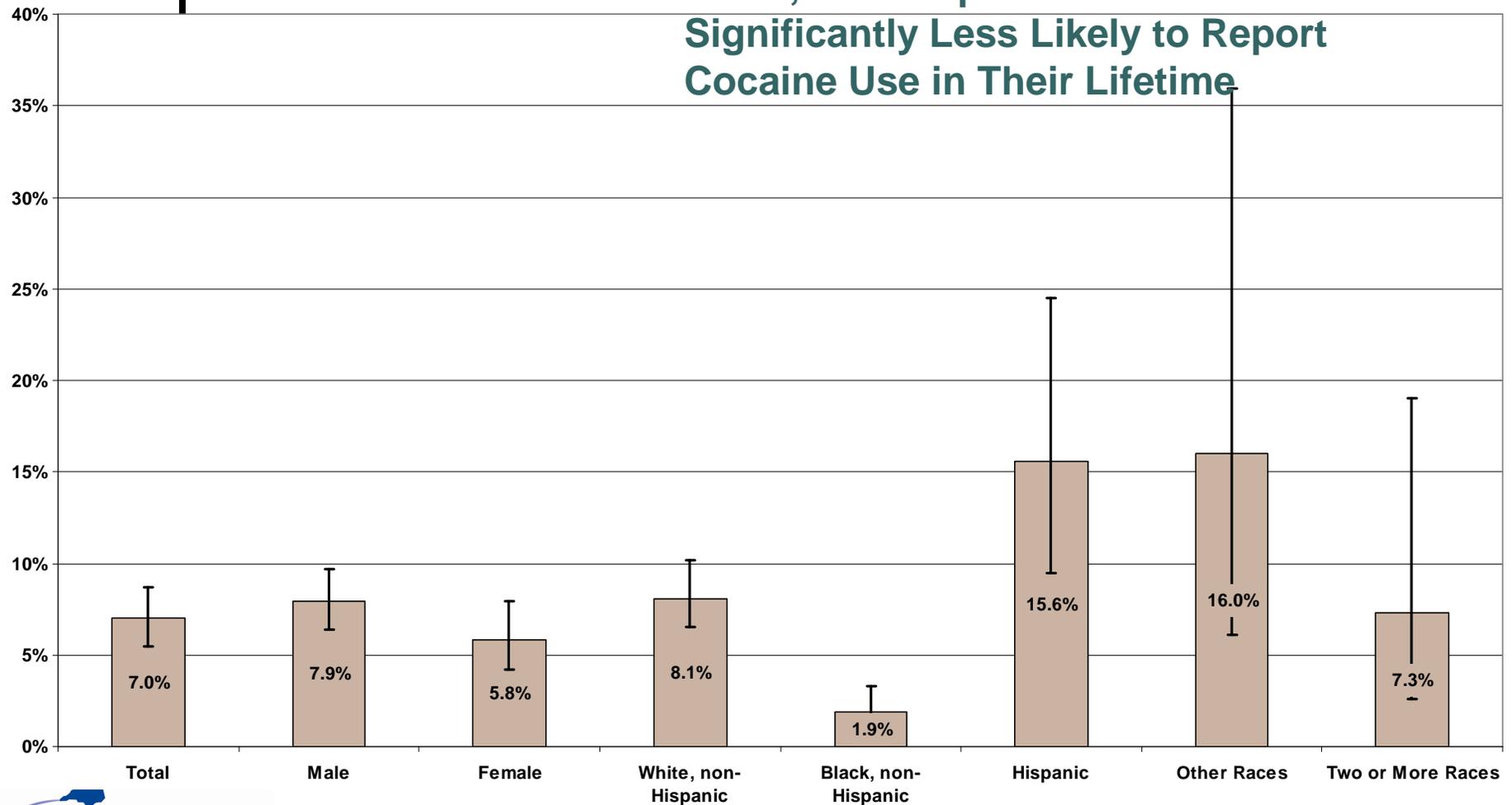
\*Binge Drinking: five or more drinks of alcohol in a row, that is, within a couple of hours

# 1-in-5 NC High School Students Report Using Marijuana in the Past Month



# 1-in-14 NC High School Students Has Used Cocaine in Their Lifetime

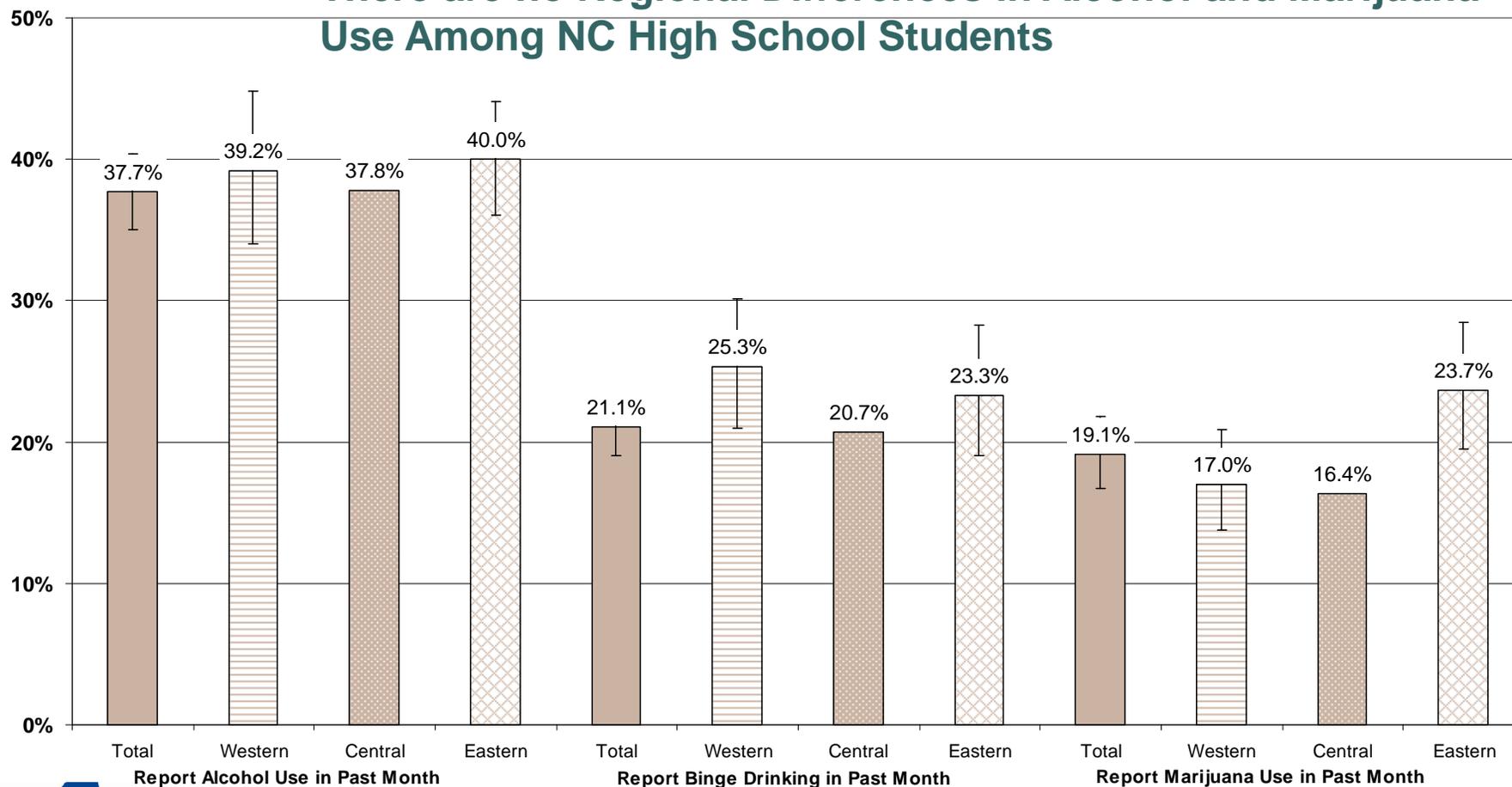
Black, non-Hispanic Youth are Significantly Less Likely to Report Cocaine Use in Their Lifetime





# Substance Use by Region

There are no Regional Differences in Alcohol and Marijuana Use Among NC High School Students



Note: Data for Central North Carolina are unweighted. Confidence intervals for this region are not available



# Substance Abuse Has Large Costs to Society

- North Carolina spent \$138 million in 2006 to fund the public substance abuse services system
- In addition to direct treatment costs, there are significant indirect costs
  - 5% of traffic accidents are alcohol related (27% of traffic related deaths)
  - Nationally, half of all state prison inmates under the influence of drugs or alcohol at the time of their offense
  - 42% of youth seen in juvenile courts had evidence of substance abuse requiring further assessment or treatment
- ***Alcohol and drug abuse estimated to cost the North Carolina economy over \$12.4 billion in direct and indirect costs in 2004***



# Substance Abuse Has Large Costs to Youth

- Use of alcohol and drugs is associated with other harmful behaviors:
  - Risky sexual behaviors
  - Delinquency and violence
  - Use of increasingly dangerous drugs
- Alcohol use during adolescence is related to an increased risk of alcohol dependence in adulthood.
- In 2007, nearly 1/3 of all traffic related deaths of youth ages 16-20 were alcohol-related.
- Students using drugs often:
  - Have problems in school (poor attendance and academic performance)
  - Are more likely to drop out or be expelled
- Additionally there are many health problems associated with alcohol and drug use.



## Healthy People 2010 Critical Health Objectives for Adolescents and Young Adults: Substance Use

- Reduce the proportion of 12- to 17-year-olds engaging in binge drinking of alcoholic beverages.
- Reduce past-month use of illicit substances (marijuana) among 12- to 17-year-olds.



# Prevention, Diagnosis and Treatment is Difficult

- Large percentage of individuals with substance abuse problems do not recognize they have a problem
- Many who know they have a problem do not seek treatment
  - Stigma attached to the condition
  - The substance abuse service system is not always accessible, or may not offer services the clients want or need
  - Substance abuse services are not readily available in a primary care setting
  - As a result, only about 10% of the people in North Carolina with addiction problems obtain services

› **Most North Carolinians Who Need Treatment Do Not Receive It**



# Adolescents 12-17 Face Problems Receiving Treatment

Estimates of North Carolina Population (12 -17) with substance abuse problems:	<u>NC</u>	<u>US</u>
Dependence on or abuse of illicit drugs or alcohol in past year	7.8% (57,000)	8.0%
Alcohol dependence or abuse in past year	4.9% (35,000)	5.5%
<i>Needing but not receiving treatment</i>	97% (34,000)	95%
<i>Needing and receiving treatment</i>	3% (1,000)	5%
Illicit drug dependence or abuse in past year	4.8% (35,000)	4.7%
<i>Needing but not receiving treatment</i>	94% (33,000)	91%
<i>Needing and receiving treatment</i>	4% (2,000)	9%



# Young Adults 18-25 Also Face Problems Receiving Treatment

Estimates of North Carolina Population (18-25) with substance abuse problems:	<u>NC</u>	<u>US</u>
Dependence on or abuse of illicit drugs or alcohol in past year	18.9% (170,000)	21.6%
Alcohol dependence or abuse in past year	14.4% (130,000)	17.6%
<i>Needing but not receiving treatment</i>	96% (125,000)	97%
<i>Needing and receiving treatment</i>	4% (5,000)	3%
Illicit drug dependence or abuse in past year	8.9% (80,000)	8.1%
<i>Needing but not receiving treatment</i>	88% (70,000)	93%
<i>Needing and receiving treatment</i>	12% (10,000)	7%



# Addiction is a Chronic Illness

- Historically, society has viewed addiction as an acute illness
  - We expect people to go into treatment and be “cured”
  - If a person relapses, we consider this relapse a moral failure
- However, addiction is really a chronic illness that affects the brain
  - Has similar adherence and relapse rates to other chronic illnesses
- ***We need to change the current treatment paradigm from an acute-care “curative” model to a long-term management of chronic illness***

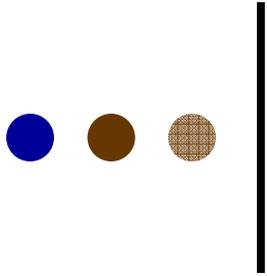


# Addiction is a Chronic Illness

<b>Chronic Disease</b>	<b>Substance Abuse</b>	<b>Asthma</b>	<b>Diabetes</b>	<b>Hypertension</b>
<b>Adherence</b>	<b>~60%</b>	<b>60%</b>	<b>&lt;40%</b>	<b>&lt;40%</b>
<b>Relapse/Recurrence</b>	<b>40%-60%</b>	<b>50%-70%</b>	<b>30%-50%</b>	<b>50%-70%</b>
<b>Genetic Inheritability</b>	<b>.34-.61</b>	<b>.36-.70</b>	<b>.30-.55</b>	<b>.25-.50</b>
<b>Cure?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Research-based Treatment Guidelines and Protocols?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Parity With Other Medical Conditions?</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

Sources: McLellan 2000 JAMA, except SA adherence: Gilmore, Lash, Foster, Blosser. Adherence to Substance Abuse Treatment: Clinical Utility of Two MMPI-2 Scales. Journal Of Personality Assessment, 77(3), 524-540. Bottom seven rows from "Comparisons Among Alcohol-Related Problems, Including Alcoholism, and Other Chronic Diseases." Ensuring Solutions to Alcohol Problems, George Washington University Medical Center. Available on line at: [http://www.ensuringsolutions.org/usr\\_doc/Chronic\\_Disease\\_Comparison\\_Chart.pdf](http://www.ensuringsolutions.org/usr_doc/Chronic_Disease_Comparison_Chart.pdf)





# Task Force on Substance Abuse



# Comprehensive System of Substance Abuse Services

- To effectively address this problem, North Carolina needs to create a comprehensive substance abuse service system:
  - *Prevention*—start with prevention to delay initiation or prevent people from using alcohol, drugs or tobacco
  - *Early intervention*—screen, counsel and refer people when they first start using/abusing alcohol, drugs or tobacco
  - *Specialized services*—provide more intensive services for people with addiction or dependence problems
  - *Recovery support*—provide long-term recovery supports to help support people in recovery

# Comprehensive Substance Abuse Services System



**Specialized  
Substance Abuse  
System**

**Outpatient  
Rx &  
Counseling**

**Recovery Support**

**Residential  
Svcs**

**Hospitalization**

**Early Intervention:  
Outpatient & Primary  
Care Setting**

Screening,  
Counseling

Brief  
Treatment

Referral into more  
intensive treatment

**Detox**

**Linkages  
to primary  
care**

## Prevention Strategies

**Universal**

**Selective**

**Indicated**

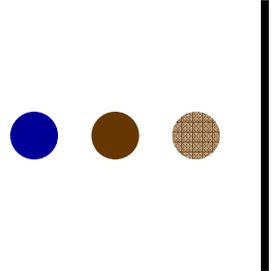
No  
Problem

Risk  
Factors

Occasional  
Problem

Dependence  
/ Abuse





# Prevention

- Addiction is a disease that begins in childhood or adolescence
  - ~40% of high school students had at least one drink in last 30 days, almost 20% used marijuana, and more than 22% smoked cigarettes.
- In 2007, there were 731,632 children aged 12-17 years old in North Carolina
  - All would benefit from universal prevention programs
  - 275,826 were in need of selective or indicated prevention programs (targeting children at higher risk or who have started using substances)
  - DMHDDSAS estimated that only 10,000 were served through Substance Abuse Block Grants and Safe and Drug Free Schools and Community Act funding

- ● ● | **Use of Alcohol and Drugs  
Highest Among Young  
Adults and Adolescents**

- Use of alcohol highest among young adults (ages 21-29)
- Use of drugs highest among older teens and young adults (ages 18-25)

- ● ● | **Adolescents are Particularly Vulnerable to Effects of Alcohol and Drugs**

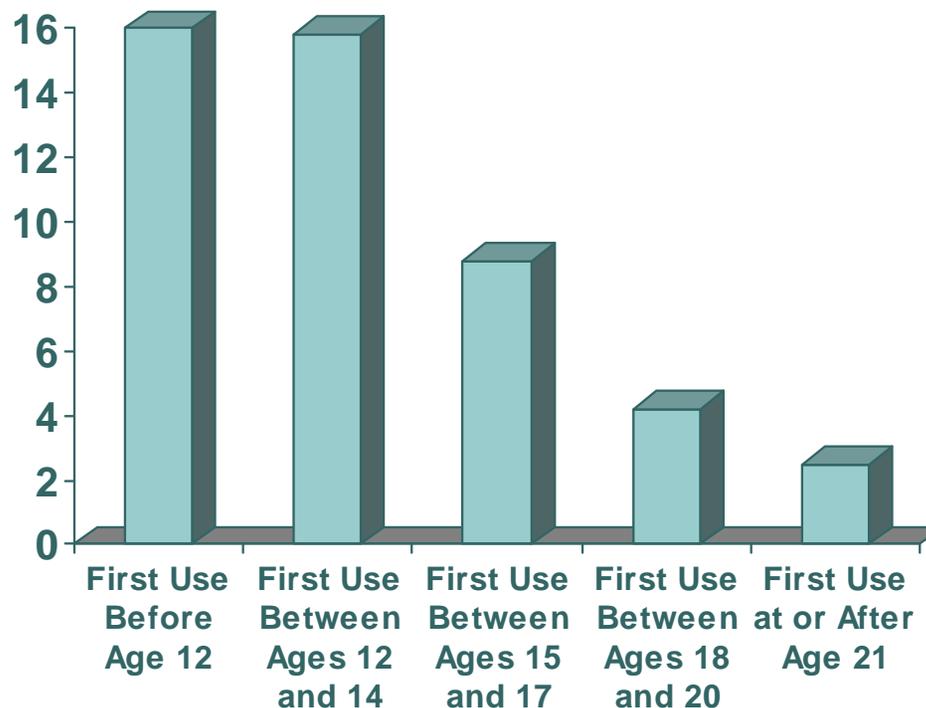
- Pre-frontal cortex controls decision making that involves longer-term trade-offs
  - But, pre-frontal cortex is not fully developed until approximately age 25
  - As a consequence, adolescents less focused on longer-term consequences of drug use
- Substance use or abuse can alter the normal maturation of the brain



## Prevention (cont'd)

- Prevention activities should be targeted to youth
  - People who start using alcohol, tobacco or other drugs when they are youth have a higher risk of later abuse or neglect

Percentages of Past Year Alcohol Dependence or Abuse among Adults Aged 21 or Older, by Age at First Use: 2003



## ● ● ● | Prevention (cont'd)

- Prevention activities need to target alcohol, tobacco and other drugs
  - Tobacco is considered a gateway drug and is often one of the first substances that children use
  - Alcohol is the most commonly used substance among youth
    - Use of alcohol is associated with death from injury, risky sexual behavior and increased risk of sexual and physical assault
- Need to offer universal, selective, and indicated prevention interventions
  - SAMHSA has a registry of evidence-based prevention programs and practices: [www.nrepp.samhsa.gov](http://www.nrepp.samhsa.gov)

# Prevention Recommendations

- **Rec. 4.1 (PRIORITY). NCGA appropriate \$1,945,000 in SFY 2009, \$3,722,000 in SFY 2010 to develop comprehensive state and local substance abuse prevention plans.**
  - **\$1,770,000/\$3,547,000 would be used to fund six comprehensive prevention pilot projects at local level.**
    - **Should include at least 3 rural and 3 urban communities**
    - **Should incorporate evidence-based programs, policies and practices, that include a mix of strategies including universal, selective and indicated populations**



# Prevention Recommendations

- **Rec. 4.1 (cont'd)**
  - **\$250,000 should be allocated from Mental Health Trust fund to evaluate these pilots, and, if successful, to recommend roll-out to other parts of the state**
- **Rec. 4.2. NCGA should direct State Board of Education, NC Community College system and University of North Carolina system to review existing prevention, early intervention, treatment and referral plans and report on these plans to the General Assembly**



# Prevention Recommendations

- Rec. 4.3. DMHDDSAS, DPH, Div. Alcohol Law Enforcement, and DPI develop plan to further reduce tobacco and alcohol sales to minors
- Rec. 4.4. (PRIORITY) NCGA should further increase the tobacco tax per pack to the national average, with funds used to support prevention and treatment efforts
  - *Note: Already included in Adolescent Health chronic illness recommendation*
- Rec. 4.5. NCGA should appropriate \$1.5 million to support Quitline NC



# Prevention Recommendations

- Rec. 4.6. **PRIORITY** NCGA should ban smoking in all public buildings, including but not limited to restaurants, bars and worksites
- **Rec. 4.7. PRIORITY NCGA should increase the excise tax on beer, and index taxes on beer and wine to CPI. Increased fees should be used for prevention, treatment, and comprehensive alcohol awareness education and prevention campaign.**



# Other Prevention Recommendations

- Rec. 4.8. DMHDDSAS, DPH, DSS and other providers should develop prevention plan to prevent alcohol spectrum disorders and report plan to LOC no later than July 1, 2009.
- Rec. 4.9. AHEC, health professional schools, Governors Institute on Alcohol and Substance Abuse and other organizations should expand SA training for health professionals

# ● ● ● | **Early Intervention**

- Goal of prevention efforts is to reduce the number of people who use, abuse or become dependent on alcohol, tobacco or other drugs
- There are people who will use drugs despite prevention activities
  - Important to intervene before the person is already addicted
  - Primary care providers ideally situated to screen individuals to identify people who currently use alcohol, tobacco and other drugs

# ● ● ● | **Early Intervention**

- SAMHSA has developed evidence-based screening and brief intervention program for individuals who are at risk for substance abuse problems
  - Screening, Brief Intervention, and Referral to Treatment (SBIRT) has been tested in primary care providers, emergency departments, hospitals, and other outpatient settings
  - Helps individuals who are at risk, but not yet addicted, reduce the use of these substance
  - Helps link those with more serious addiction problems into treatment

## ● ● ● | **SBIRT Effective**

- Research has shown that people are more likely to quit smoking if advised by physician, particularly if combined with other treatment and intervention
- Counseling also important as part of intervention for alcohol or drug use
  - Has been shown to be successful in reducing consumption of illegal drugs or binge drinking



# Early Intervention Recommendations

- **Rec. 4.10 PRIORITY.** NCGA should appropriate \$1.5 million to DMHDDSAS to work with Office of Rural Health, Governors Institute and AHEC to expand use of SBIRT in CCNC networks and other primary care and outpatient settings.
- Rec. 4.11. NCGA should direct NC Division of Medical Assistance and NC Health Choice to pay for annual wellness visit for children and adolescents.
  - *Note: Already recommended by Adolescent Health Task Force as part of the chronic illness discussion*

# Early Intervention Recommendations

- Rec. 4.12. NCGA should appropriate \$750,000 to Office of Rural Health and Community Care to support co-location of trained substance abuse specialists in primary care settings (building on current initiative for mental health workers).
- Rec. 4.13 PRIORITY. NCGA should mandate that insurers offer same coverage for treatment of addiction diseases as other physical illnesses, including covering certain CPT codes or services provided by different qualified health professionals in outpatient settings

# ● ● ● | Specialized SA Services

- Individuals who have addiction problems need more intensive services
- Need range of services to match the individual's needs and choices
  - Comprehensive system should offer screening, assessment, brief intervention, outpatient services, medication management, intensive outpatient and partial hospitalization, clinically managed low-intensity residential services, clinically managed medium intensity residential treatment, inpatient services, crisis services, detoxification
  - Also need access to recovery support to help people live without alcohol, tobacco and other drugs



# LMEs Are the Gateway for Specialized Services

- LMEs serve as the gateway for most people who seek specialized substance abuse services
- However, LMEs not serving most in need
  - LMEs serving between 8.6% and 3.5% of estimated need for children
  - LMEs serving between 10.9% and 4.4% of estimated need for adults



# Specialized SA Services: Priority Recommendations

- **Rec. 4.14. PRIORITY DMHDDSAS should develop plan for recovery oriented system of care for adults and adolescents and ensure that services are available and accessible across the state**
  - **Should develop performance based contracts to ensure timely engagement, active participation in treatment, retention, program completion, and participation in recovery supports**
  - **Identify barriers and strategies to increase quality and quantity of substance abuse providers in the state**
  - **Immediately begin expanding capacity of adolescent treatment services**



## Other Specialized Services Recommendations

- Rec. 4.15. NCGA should appropriate \$17.2 million in SFY 2009, \$34.4 million in SFY 2010 to support six pilot programs
  - Should appropriate \$750,000 of Mental Health Trust Funds to independently evaluate these projects and if successful, build a plan to expand systems across the state.



# Specialized SA Services: Recs

- Rec. 4.16. Additional state funding to increase state staff to support these recommendations
  - Funding in the Divisions of Mental Health, Developmental Disability and Substance Abuse Services, Medical Assistance, Office of Rural Health, and the Department of Public Instruction

# ● ● ● | Data Needs

- Policy makers need good data to make informed policy choices
- We know that many North Carolinians have addiction problems, but few people are receiving treatment for these problems
  - Local LMEs have been unable to spend all of their substance abuse funds, despite the large number of people who need, but are not receiving services
- We need better data to profile populations most at risk; the types of services needed; availability and accessibility of services; service use, intensity and completion rates; and recidivism rates.

# ● ● ● | **Data Recommendations**

- Rec. 5.1. NCGA should appropriate \$1.2 million to enhance and expand current data system
  - DMHDDSAS should develop IT plan, including adoption of electronic health records
  - DMHDDSAS should develop additional analytic capacity and should undertake studies to understand any systemic patterns and barriers to identification, referral and engagement of consumers in treatment

# ● ● ● | **Data Recommendations**

- Rec. 5.2. DMHDDSAS should work with other agencies, including Dept. of Juvenile Justice and Delinquency Prevention, Corrections, and other DHHS agencies to collect comprehensive data on substance abuse prevention and treatment services and people served
  - NCGA should adopt an equalization formula to ensure that LMEs receive comparable funding to achieve equity in access to care and services

# ● ● ● | Next Steps

- Task Force continuing to meet and examining:
  - Substance abuse services in other agencies (Corrections, Juvenile Justice, Social Services)
  - Performance based contracts to provide incentives to providers to make services more accessible and help actively engage consumers in treatment
  - Ways to expand the substance abuse workforce
  - Specific services to meet the needs of our returning Veterans, Reservists and National Guard
- Final report due to the legislature in the 2009 session



# Questions?





## For More Information

- Pam Silberman, JD, DrPH  
President & CEO  
North Carolina Institute of Medicine  
919-401-6599 Ext. 23  
[pam\\_silberman@nciom.org](mailto:pam_silberman@nciom.org)
- Interim report available at:  
[http://www.nciom.org/docs/SA\\_Interim.pdf](http://www.nciom.org/docs/SA_Interim.pdf)

