



# The SBIRT Residency Training Program in Pediatrics

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# SBIRT:

Screening,

Brief

Intervention,

Referral to

Treatment

For Alcohol and Illicit  
Substance Use



# Scope of Substance Abuse


- ◆ Major preventable and treatable public health problem
  - Total annual economic costs to U.S estimated at >\$414 billion.
  - Consequences to individual, workplace, society, healthcare system
- ◆ Situation in CT
  - Top 20% for past year alcohol and illicit drug dependence in 12yrs + (8.5%), and 18-25 yrs (23.1%)
  - Top 20% for binge drinking among 12-17 yrs (11.9%)
  - Top 20% for marijuana, cocaine, and Rx pain drugs among 18-25 yrs (15.2%)

CDC data, Behavioral Risk Factor Surveillance System, 2006

# Substance Use Trends Among Adolescents

- ◆ After increase in early 1990s, adolescent SA has decreased steadily
  - “Record lows” for 12 graders - alcohol (45% past month use) and cigarettes (22%)
- ◆ One in four 12<sup>th</sup> graders report binge drinking in past month, 40% college age
- ◆ Marijuana most commonly used illicit substance among teens and young adults
- ◆ Rates of alcohol and cigarette use more than triple in 18-25 yrs versus 12-17 yrs






# National Prevalence Data – High school seniors, 2005

◆ Alcohol	76.8%
◆ Cigarettes	52.8%
◆ Any illicit substance	51.1%
◆ Marijuana	45.7%
◆ Amphetamines	7.5%
◆ Methamphetamines	6.2%
◆ Inhalants	10.9%
◆ Tranquilizers	10.6%
◆ Hallucinogens	9.7%
◆ Cocaine	8.1%
◆ MDMA	7.5%
◆ Steroids	3.4%
◆ Heroin	1.5%
◆ Narcotics (other than heroin)	13.5%



# Young Adults

- ◆ Highest prevalence of alcohol consumption
- ◆ Major concern for college campuses
- ◆ Drivers between the ages of 16-25 account for 30% of alcohol-related fatalities



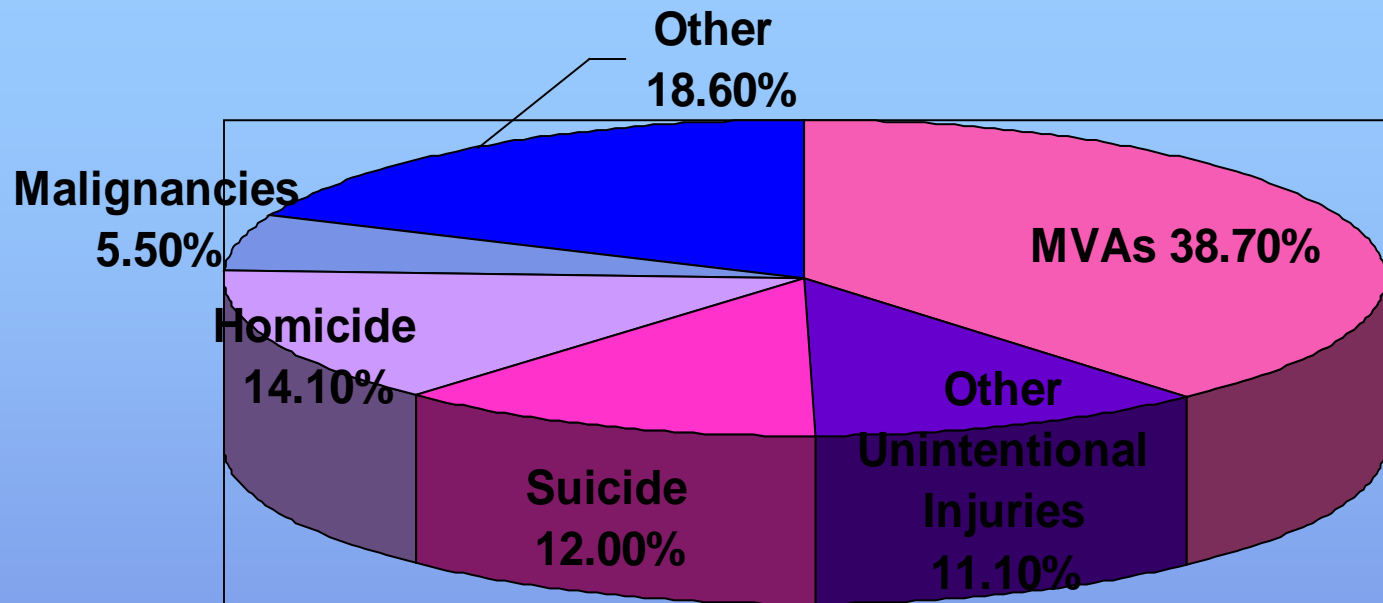
# Consequences of Drug and Alcohol Use

## ◆ Morbidity

- Impairment of judgment
  - Effect on brain development; hippocampus?
- Direct medical effects
- Association with other high risk behaviors
  - STIs, HIV, pregnancy
  - Violence and aggression
  - Risky recreational vehicle use; injuries

## ◆ Mortality - injuries

# Leading Causes of Mortality, Ages 15-19 years, National 2005 data







# Drug and Alcohol Dependence

- ◆ Pediatric rates lower than subclinical use/problem use
- ◆ National Rates of Abuse/Dependence on Alcohol or Illicit Drugs\*
  - 12-17 year olds - 8% M=F
  - 18-25 year olds - 17% F, 26% M
- ◆ Knight - clinical sample in Boston, MA
  - 16.3% of 14-18 yo had substance-related diagnosis of abuse or dependence, defined by DSM-IV.\*\*

\*SAMSHA, 2006 National Survey on Drug Use; \*\* Knight J. Arch Ped Adol Med 2002; 156:607-614.



# Definitions - based on DSM IV, NIAAA

## ◆ Low risk use/experimental use

- Not affecting health
- Use <NIAAA guidelines for ETOH

## ◆ Hazardous use/Regular use

- At risk for injury/medical or social problems
- Use > NIAAA guidelines

## ◆ Harmful Use

- Problem use - Currently experiencing problems
- Abuse - using despite harm
- Use >>NIAAA guidelines

## ◆ Dependence/Addiction

- Out-of-control use, experiencing withdrawal symptoms



# Physician Behaviors

- ◆ Despite AMA and AAP recommendations:
  - Less than 50% pediatricians report screening all teens for substance use/abuse
  - Less than 25% report screening for drinking and driving in teens\*
  - Barriers reported:
    - “not a problem in my practice population
    - Inadequate training
    - Lack of effective treatment programs or referral sites
- ◆ Physicians often fail to detect/refer
  - Nationally, 11% of 23.6 million estimated to need SA treatment actually received care\*\*

\*Halpern-Felser B et. al. Arch Ped Adol Med 200;154:173-179; \*\* SAMHSA data, National Survey of Drug Use and Health, 2005-2006..

# BI as a Response Option



**Primary  
Prevention**

**Brief  
Intervention**

**AODA  
Treatment**

**Abstinence**   **Infrequent use**

**Subclinical use**

**Abuse**

**Dependence**

# Nation's Public Health Agenda: Healthy People 2010

- ◆ Increase the proportion of persons who are referred for follow-up care for alcohol problems, drug problems, or suicide attempts after diagnosis or treatment for one of these problems in the emergency department



# Alcohol Screening and the **Brief Negotiated Intervention** (BNI).

## What is it & Does it Work?



# Several Truths

- ◆ Treatment does work
- ◆ The ED/Primary care visit is an opportunity for intervention
- ◆ Timely referral is effective
- ◆ Practitioners are reluctant to screen and intervene
- ◆ There are multiple barriers to the SBI

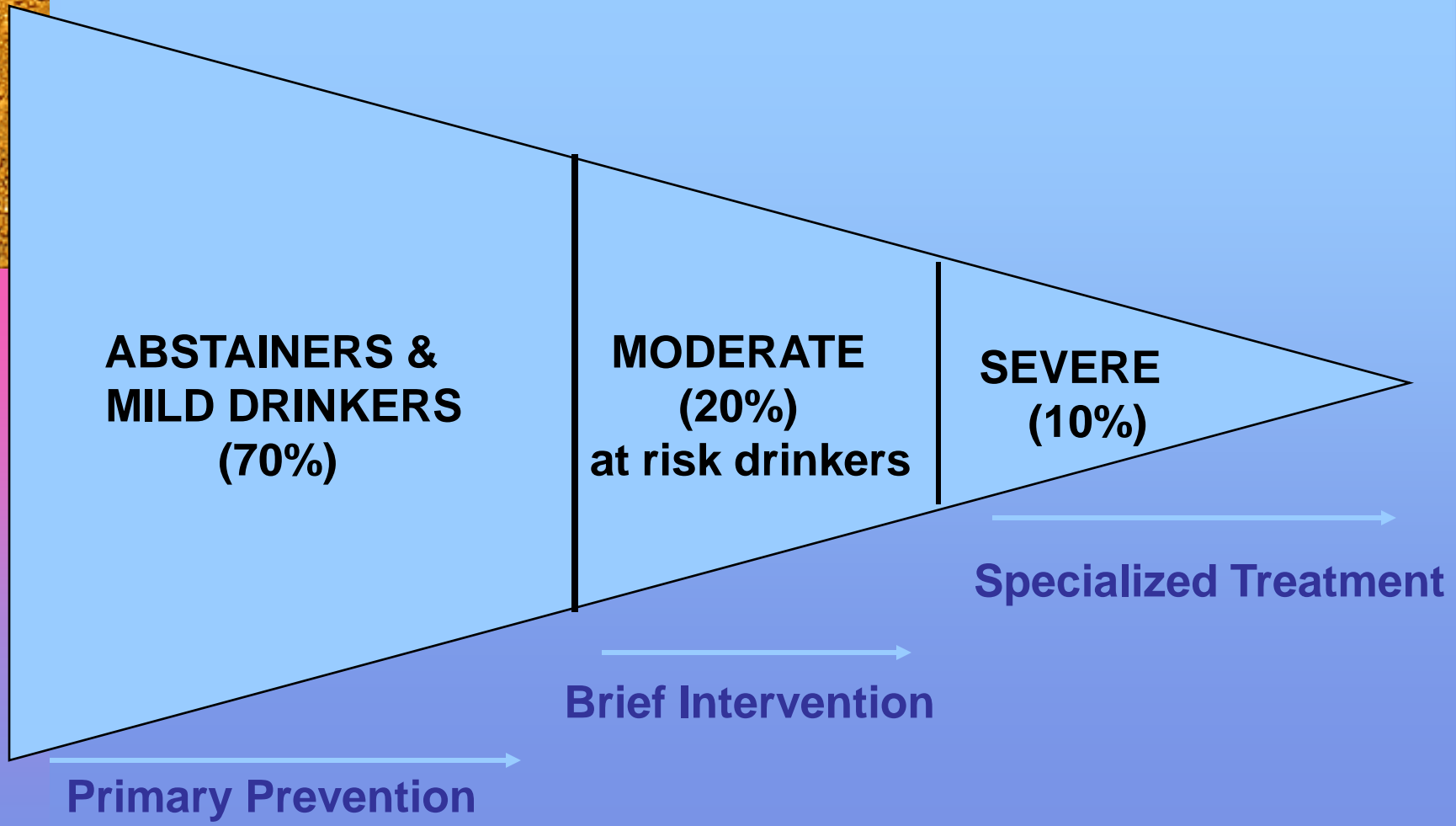


# Why **Early** intervention?

- ◆ Screening and referral increases treatment contact
- ◆ \$ saved
- ◆ Improved prognosis
- ◆ Medical opportunity is ‘Teachable Moment’



# UNIVERSAL SCREENING WIDENS THE NET





# Detection and Referral

Does it matter?????



# Brief Negotiation Interventions

- ◆ Extensive experience by Yale Adult ED faculty - nationally and at Yale
  - BNI taught in context of comprehensive program can improve ED resident knowledge and practice\*
  - Feasibility studies of BNI (7.5') in ED settings for harmful ETOH use - D'Onofrio\*\*
  - Developed Project ASSERT - using BNI to facilitate linkages to community referrals for substance abuse
- \* D'Onofrio G et.al., Annals Emerg Medi 2002; 40:50-62; \*\*D.Onofrio et.al. Acad Emerg Med 2005;12:249-256.



# Brief Negotiation Interventions

- ◆ Data on efficacy of BNI in various settings
  - Bernstein - Project ASSERT in Walk-in clinics - found reduced rates of cocaine, heroin use at 6 months\*
  - Data in ED settings mixed-
    - D'Onofrio - no difference between BNI and Discharge instructions on ETOH use at 12 months\*\*

\*Bernstein J et al. Drug Alc Dep 2004; 77:49-59; \*\*D'Onofrio G et.al. Annals Emerg Med 2008; 51:742-750;

# COST-BENEFIT ANALYSIS OF BRIEF MOTIVATION

- ◆ RCT (n=774)
- ◆ primary care practice, managed care setting
- ◆ problem drinkers
- ◆ economic cost of intervention = \$80,210 (\$205 each)
- ◆ economic benefit of intervention = \$423,519
  - \$193,448 in ED and hospital use
  - \$228,071 avoided costs in motor vehicle crashes and crime
  - 5.6 to 1 benefit to cost ratio
  - \$6 savings for every \$ invested

# World Health Organization

*(Am J Pub Health 1996)*

“A cross-national trial of brief interventions with heavy drinkers”

- Multinational study in 10 countries (n=1,260)
- Interventions included simple advice, brief & extended counseling compared to control group
- Results: Consumption decreased:
  - 21% with 5 minutes advice, 27% with 15 minutes compared to 7% controls
  - **Significant effect for all interventions**



# Why SBIRT/BNI with adolescents?

- A large population of “subclinical” AOD users exists
- Only 1 in 20 with clinical AOD involvement get services
- Primary care offers an “opportunistic” setting
- Expands service options, typically limited
- MI techniques congruent with aspects of adolescent development
  - Respect for autonomy, emerging independence
- It seems to work





# Effectiveness of BNI in Teens

- Small, but growing literature
- Many “brief” programs extensive, not brief
- Outcomes: decreased AOD use, consequences, increased self-efficacy
  - D’Amico - RCT, 15’ intervention with 12-18 year olds in primary care clinic
  - Decreased MJ use at 3 month f/u\*
- High satisfaction overall

\*\*\*D’Amico EJ et.al. J Sub Abuse Treat 2008; 35:53-61.





Ok, What is the Brief  
Negotiated Interview & How  
do I perform this technique?



# BNI: Brief Negotiated Intervention

- ◆ Short (5-7 min) counseling sessions
- ◆ Based on motivational interviewing techniques - patient-centered, assist in changing specific drinking/drug-using habits, use of reflective listening
- ◆ 4 Major Steps
  - Raise the subject
  - Provide feedback
  - Enhance motivation/develop discrepancy
  - Negotiate and advise
- ◆ Scripted
  - Manual developed for explanation of each step



# Components of the BNI

1. Raise the Subject
2. Provide Feedback
3. Enhance Motivation
4. Negotiate and Advise



# Step 1: Raise The Subject

- ◆ Establish Rapport
- ◆ Raise the subject of alcohol use

“Hello, I am..... Would you mind taking a few minutes to talk with me about your alcohol use?”



# Establish Rapport

- ◆ To understand the patient's concerns and circumstances
- ◆ To explain the providers concern/role
- ◆ To avoid a judgmental stance



# Raise the subject

- ◆ Get the patient's agreement to talk about the alcohol or drug use
- ◆ Talk about the pros and cons of their use/abuse
- ◆ Re-state what they have said regarding the pros and cons

What if the patient does not want to talk about their use/abuse ?



“ Okay, I see you aren’t ready to talk about this today. Remember that we are here 24 / 7 if you change your mind”



# ASK Current Drinkers

- On average, how many days per week do you drink alcohol?
- On a typical day when you drink, how many drinks do you have?
- What's the maximum number of drinks you had on a given occasion in the last month?



# Screen Positive

	<b>Drinks per week</b>	<b>Drinks per occasion</b>
<b>Men</b>	$> 14$	$> 4$
<b>Women</b>	$> 7$	$> 3$
<b>All Age <math>&gt;65</math></b>	$> 7$	$> 3$





# Drinking Patterns

	<b>% of US adults aged 18+</b>	<b>Abuse without dependence</b>	<b>Dependence with or without abuse</b>
<b>Exceeds <i>daily</i> limit &lt; once a week</b>	16%	1 in 8 (12%)	1 in 20 (5%)
<b>Exceeds <i>daily</i> limit once a week or more</b>	3%	1 in 5 (19%)	1 in 8 (12%)
<b>Exceeds both weekly &amp; daily limits</b>	9%	1 in 5 (19)	1 in 4 (28)

Source: NIAAA National Epidemiologic Survey on Alcohol and Related Conditions, 2003



# Screening Questions - CRAFFT

- ◆ *CRAFFT Screening*

Have you ever ridden in a **CAR** by someone (including yourself) who was high or was using alcohol or drugs?

Do you ever use alcohol or drugs to **RELAX**, feel better about yourself or fit in?

Do you ever use alcohol or drugs while you are by yourself? (**ALONE**)

Do your family or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?

Do you ever **FORGET** things that you did while using alcohol or drugs?

Have you gotten in **TROUBLE** while you were using alcohol or drugs?

alpha - .68; sensitivity .80; specificity .86 - to predict any problem; PP+ .83; PP- .91

Knight, J. et.al. 2002.

# ASK Current Drinkers



## **CAGE**

**C** → Cut Down

**A** → Annoyed

**G** → Guilty

**E** → Eye Opener



## Step 2: Provide Feedback

- ◆ Review patient's drinking patterns
- ◆ Make connection to ED visit or other aspects of if possible
- ◆ Compare to National Norms and offer NIAAA guidelines



## Step 2: Provide Feedback

**“From what I understand you are drinking...”**

**“What connection (if any) do you see between your drinking and this ED visit?”**

**“These are what we consider to be the upper limits of low-risk drinking for your age and sex. By low-risk we mean that you would be less likely to experience illness or injury.”**



# Express Empathy and Rapport

- ◆ Attitude : Acceptance by provider
- ◆ Technique: Skillful reflective listening
- ◆ Basis of change: Patient ambivalence



# Assess Readiness To Change

“On a scale of 1-10 (1 being not ready and 10 being very ready) how ready are you to change any aspect your drinking patterns?”

1

2

3

4

5

6

7

8

9

10





## Step 3: Enhance Motivation

On a scale from 1-10, how ready are you to change any aspect of your drinking?

If patient indicates:

$\geq 2$  : “Why did you choose that number and not a lower one? What are some reasons that you are thinking about changing.”

$\leq 1$ : “Have you ever done anything that you wish you hadn’t while drinking: What would make this a problem for you.” Discuss pros and cons



# Not Ready for Change

## ◆ Don't

- Use shame or blame
- Preach
- Label
- Stereotype
- Confront



# Avoid Argumentation

- ◆ Counter productive
- ◆ Defending breeds defensiveness
- ◆ Perceptions can be shifted
- ◆ Labeling is unnecessary
- ◆ Resistance is a signal to change strategies
  - Rolling with resistance



# Not Ready for change

## ◆ Do

- Offer information, support and further contact
- Present feedback and concerns, if permitted
- Negotiate: “What would it take you to consider a change ?”



# Unsure Patients

## ◆ Don't

- Jump ahead
- Give advice
- Expect argument about change

## ◆ Do

- Explore pros & cons
- “help me to understand what alcohol does for you”
- “Are there things you don't like about your alcohol use?”



## Step 4: Negotiate and Advise

- ◆ Elicit response

“How does all this sound to you?”

- ◆ Negotiate a goal

“What would you like to do?”

- ◆ Give advice

“It is never safe to drink and drive, etc...”

- ◆ Summarize

“This is what I heard you say.. Thank you...  
(Provide PCP f/u or treatment referral)

# Develop Discrepancy

## Explore Pros and Cons

- ◆ Patient awareness of situation
- ◆ Discrepancy between present behavior and important goals as change motivator
- ◆ Let the patient name the problem and the pros and cons





# Dangerous Assumptions

- ◆ This person ought to change
- ◆ This person is ready to change
- ◆ This person's health is the prime motivating factor for them
- ◆ If they decide not to change the BNI has failed





# Dangerous Assumptions

- ◆ Patients are either motivated or not
- ◆ Now is the right time to change
- ◆ A tough approach is best
- ◆ I am the expert and they should follow my advice



# The Ready Patient

- ◆ Help the patient to:
  - Name a solution for themselves
  - Choose a course of action
  - Decide how to achieve it
  - Encourage patient choice



# Referral

- ◆ Consult the
  - Social worker
  - Psychiatric services
- ◆ Discharge sheet of possible centers and / or programs and information



# Summary

- ◆ Alcohol problems are common, identifiable and treatable disorders
- ◆ Knowledge and skills for screening and intervention can be learned



# Short-term Components

## ◆ Expanded curriculum

- Topics adapted for each specialty
  - - Substance-induced medical problems, intoxication, withdrawal, treatment of addiction, pain management, psychiatric complications

## ◆ Website

- modules, didactic presentations, video clips, case studies, readings



# Long-term Components

- “Virtual coach”
  - Automated clinical skills testing and training
  - Individualized practice and reinforcement
  - 3-4 Virtual SPs
    - Give personalized feedback, praise, constructive feedback, award points for correct steps
- Integration of curricular elements into residency program
- Sustainability through “train the trainer”
- Dissemination throughout CT



Remember:

Just start the conversation,  
you may save a life!