

Screening for drugs and alcohol use among teens admitted for trauma care



Beth Ebel, MD, MSc, MPH
Dept of Pediatrics, Harborview Medical Center/UW



GETTING HOME SAFELY AFTER TRAUMA CARE

*Happily, as they approach their
homes, they will regard you.*

*Happily may their roads home be on
the trail of pollen.*

Happily may they all get back.

In beauty I walk.



—from The Night Chant, a Navajo returning ceremony

Outline

- Why should we screen for alcohol and drugs in trauma patients?
- Who should we screen?
- Screening tools (biologic, questionnaire)
- Treatment approaches

ALCOHOL AND DRUG USE IN TRAUMA

Binge Use

- More common in trauma
- Easier to intervene
- Brief intervention group

Dependency

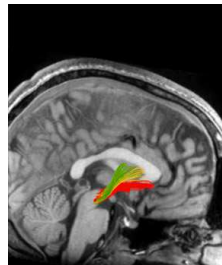
- Dependency is a chronic disease, like diabetes
- Estimated 25 million people in the US with alcohol or drug dependency



5

HOW DOES ADDICTION WORK?

- Mechanisms involved in memory and learning are hijacked by drugs of abuse
- Mimics natural rewards such as food and sex by triggering neural reward circuits
- Alcohol and drugs drive reward circuitry in a way that natural rewards do not
- Circuit run deep in the brain to the nucleus accumbens (pleasure), the prefrontal cortex (decision-making, planning), and deep brain stem areas ("lizard brain")



6

ADDICTION AND DOPAMINE

- When reward exceeds expectations, dopamine circuitry really lights up.
- Conversely, if expectations aren't met, dopamine activity drops off.
- Cocaine, heroin, alcohol and nicotine directly activate the circuit— regardless of how high the expectation was.
- Young people are most susceptible



7

Drug and alcohol screening for teens

- 12-17 years
- All patients admitted for trauma care
- Urine tox and blood alcohol level (when blood draw already required)
- Teen-specific screening tool (CRAFT)

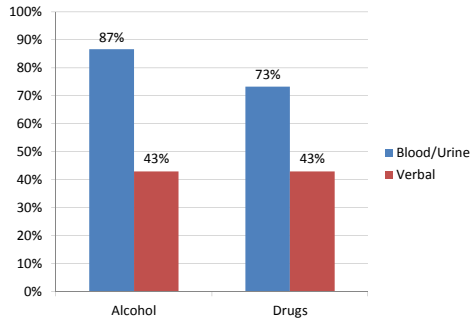


Screening and referral protocol

- Blood drawn in trauma bay
- Urine tested either in ED or on the floor/ICU so as not to delay transfer
- Pediatric resident screen (CRAFT) as part of general adolescent risk assessment
- Positive results lead to consultation with rehabilitation psychology (BI)
- SBIRT team for additional outpatient referrals beyond primary care

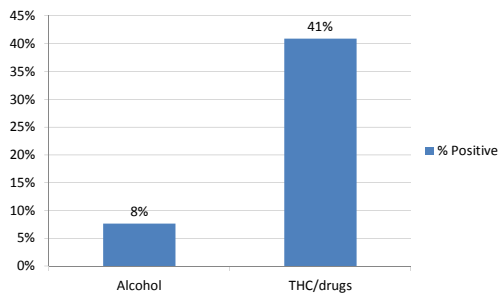
Screening for treatable risk factors among pediatric trauma pts 12-17yr

May-Oct, 2018



Proportion of screened pediatric patients 12-17 yrs positive for alcohol/THC

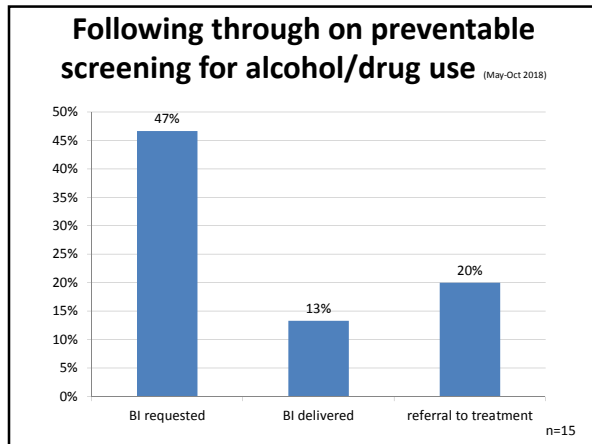
% Positive



Urine toxicology results

- Primarily cannabinoids (2 in every 5)
- Also methamphetamine, cocaine, alcohol







**Age and sex for screened pediatric patients
12-17 years, by alcohol/drug results**

	Mean Age (yrs)	Female (%)
Alcohol Positive	17.0	67%
Alcohol Negative	15.4	20%
THC Positive	17.0	40%
THC Negative	15.0	0%

The CRAFFT Screening Interview

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Part A

During the PAST 12 MONTHS, did you:

No Yes

- | | | |
|---|--------------------------|--------------------------|
| 1. Drink any alcohol (more than a few sips)?
(Do not count sips of alcohol taken during family or religious events.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Smoke any marijuana or hashish? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Use anything else to get high?
("anything else" includes illegal drugs, over the counter and prescription drugs, and things that you sniff or "huff") | <input type="checkbox"/> | <input type="checkbox"/> |

For clinic use only: Did the patient answer "yes" to any questions in Part A?

No ☐

Yes ☐

Ask CAR question only, then stop

Ask all 6 CRAFT questions

Part B

No Yes

- | Part B | NO | YES |
|---|--------------------------|--------------------------|
| 1. Have you ever ridden in a <u>CAR</u> driven by someone (including yourself) who was "high" or had been using alcohol or drugs? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Do you ever use alcohol or drugs to <u>RELAX</u> , feel better about yourself, or fit in? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Do you ever use alcohol or drugs while you are by yourself, or <u>ALONE</u> ? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you ever <u>FORGET</u> things you did while using alcohol or drugs? | <input type="checkbox"/> | <input type="checkbox"/> |

TREATMENT APPROACHES

- *Prevention*

- Policy and legislative options
- Harm reduction and safe ride home

- *Treatment*

- Brief intervention (SBIRT)
- Outpatient treatment
- Inpatient treatment



17

SBIRT



- SBIRT (Screening, brief intervention and referral to treatment) is a highly effective approach to reduce alcohol/drug use and has been demonstrated to reduce repeat emergency and trauma admissions
- SBIRT required for Level I trauma centers
 - Reduce hospital length of stay, ED visits by 50%
 - Save \$3.81 for every \$1 spent on screening
- Unfortunately, for many kids, need for SBIRT is “invisible”. Many kids admitted to trauma centers are missed, because they do not have blood alcohol, urine tox, or do not complete a simple screening tool

Brief Intervention Steps

1. Provide information on results of labs/screening test
2. Understand patient viewpoint; enhance motivation (collaborative, non-confrontational)
3. Advice and negotiation (set goals, negotiate a plan)

Convey respectful concern, without judgment

Referral Options

- Primary care provider (ensure diagnosis added to discharge summary) for binge drinking/THC use
- Outpatient support for other drugs of abuse or higher level of concern for alcohol/THC use
- Inpatient services remains challenging unless there are other psychiatric needs
- New support to assist with pediatric psychiatric needs for providers or families
 - Washington Mental Health Referral Service for Children and Teens
 - Families can call 833-303-5437, Monday through Friday from 8 a.m. to 5 p.m. Pacific time, to connect with a referral specialist

Confidentiality

- Discussion with teen (and guardian)
 - Aim for partnership
 - Typically will need parent support to engage in follow-up care
 - Opportunity to help parents understand and support teen
- Electronic health record confidentiality



UW MEDICINE | INJURY CONTROL

QUESTIONS?



UW Medicine

HARBORVIEW
MEDICAL CENTER



HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER
