



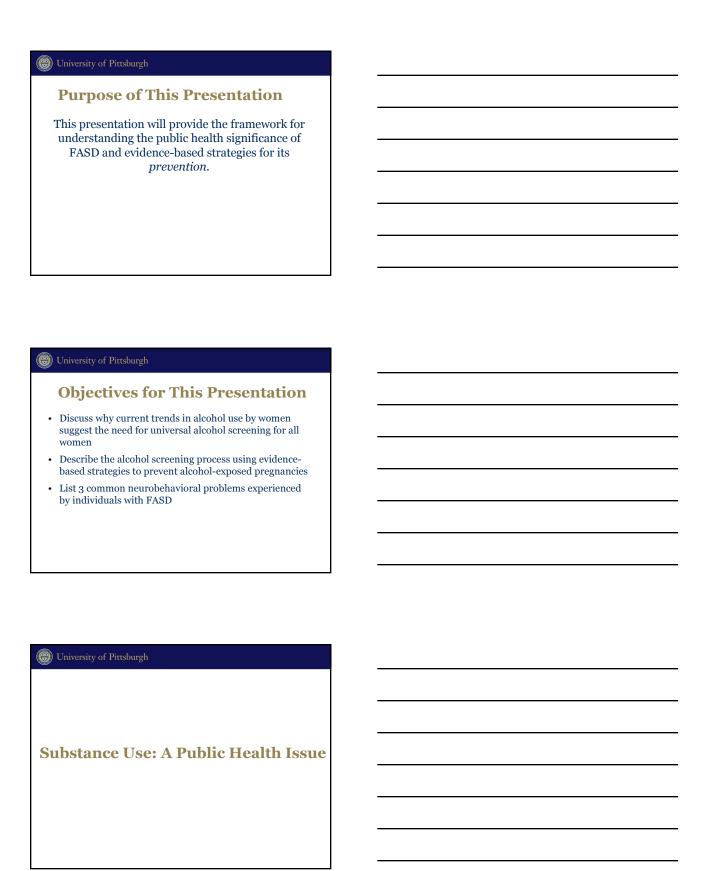
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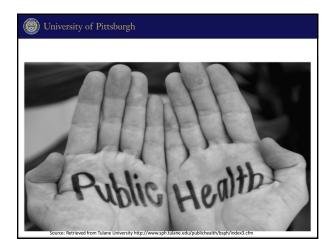
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Declaration of Conflicts of Interest

The author reports no conflict of interest.





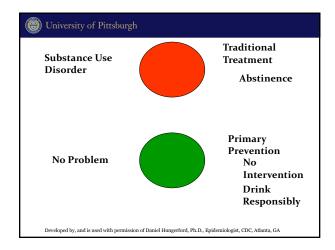
Learning from Public Health

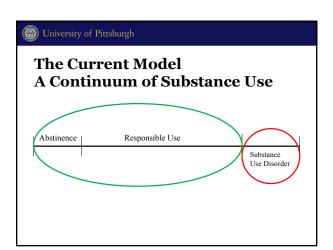
• The public health system of care <u>routinely</u> screens for <u>potential</u> medical problems (cancer, diabetes, hypertension, tuberculosis, vitamin deficiencies, renal function), provides preventative services prior to the onset of acute symptoms, and delays or precludes the development of chronic conditions.

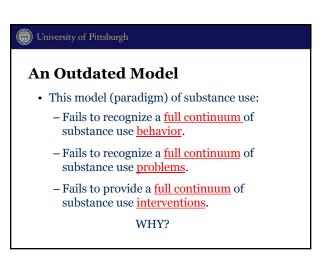
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Historically

- Substance Use Services have been bifurcated, focusing on two areas only:
 - Primary Prevention <u>Precluding</u> or <u>delaying</u> the onset of substance use
 - Tertiary Treatment Providing time, cost, and labor intensive care to patients who are acutely or chronically ill with a substance use disorder









The current model identifies a substance use problem as...





By <u>defining</u> the problem as addiction or dependence this outdated model fails to:

recognize full continuum of substance use *behavior*, a full continuum of substance use *problems*, and does not provide a full continuum of substance use *interventions*.

As a result the outdated model has <u>failed</u> to provide resources in the area of greatest need.

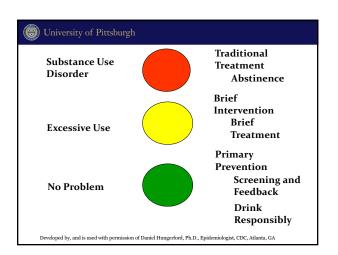


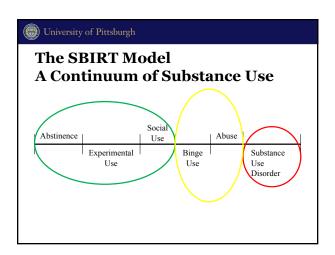


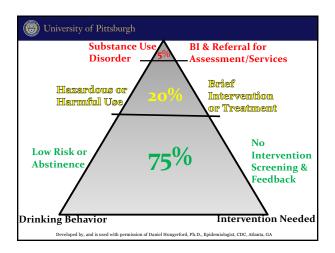
By <u>defining</u> the problem as excessive use the SBIRT model:

recognizes full continuum of substance use *behavior*, a full continuum of substance use *problems*, and provides a full continuum of substance use *interventions*.

As a result the SBIRT model <u>can</u> provide resources in the area of greatest need.







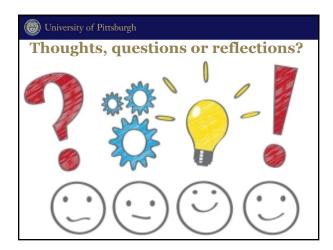
The SBIRT Model A Continuum of Interventions • Primary Prevention – Precluding or delaying the onset of substance use • Secondary Prevention and Intervention – Providing time, cost, and labor sensitive care to patients who are at risk for psycho-social or healthcare problems related to their substance use choices • Tertiary Treatment – Providing time, cost, and labor intensive care to patients who are acutely or chronically ill with a substance use disorder

Primary Goal

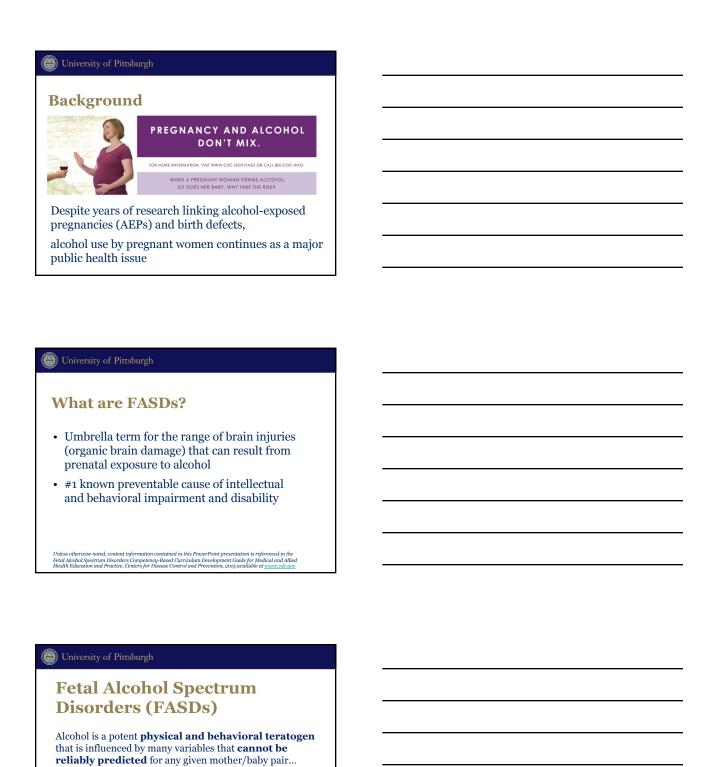
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- The primary goal of SBIRT is not to identify those who are have a substance use disorder and need further assessment
- The primary goal of SBIRT is to identify those who are at moderate or high risk for psycho-social or health care problems related to their substance use choices

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Rankings of Preventive Services for the U.S. Population						
Rank	Clinical Preventive Services	СРВ	CE	Total Score		
1	Discuss daily aspirin use-men 40+, women 50+	5	5			
2	Childhood immunizations	5	5	10		
3	Smoking cessation advice and help to quit—adults	5	5			
4	Alcohol screening and brief counseling-adults	4	5	9		
5	Colorectal cancer screening—adults 50+	4	4			
6	Hypertension screening and treatment—adults 18+	5	3	8		
7	Influenza immunization—adults 50+	4	4	0		
8	Vision screening—adults 65+	3	5			
9	Cervical cancer screening—women	4	3			
10	Cholesterol screening and treatment—men 35+, women 45+	5	2	7		
11	Pneumococcal immunizations—adults 65+	3	4			
12	Breast cancer screening—women 40+	4	2	6		



University of Pittsburgh Fetal Alcohol Spectrum Disorders	
Fetal Alcohol Spectrum Disorders	University of Pittsburgh
	Fetal Alcohol Spectrum Disorders

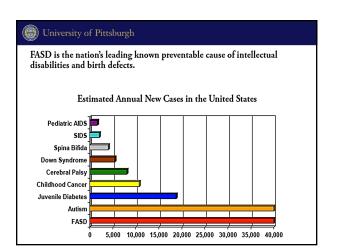


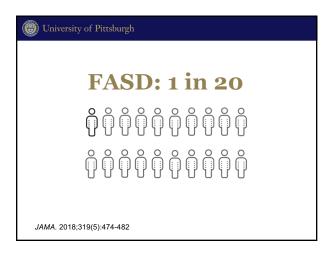


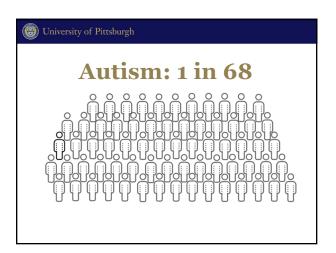
Highest Rates of Alcohol Use Among Pregnant Women

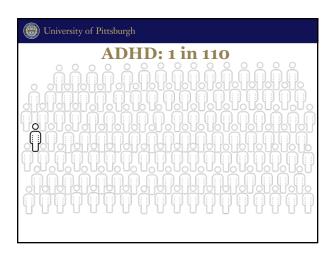
- Aged 35-44 years (14.3%)
- White (8.3%)
- College graduates (10.0%)
- Employed (9.6%)

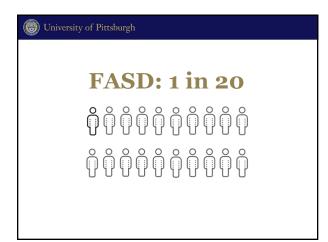




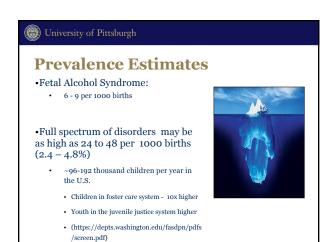














Contributing Factors

- 45% of pregnancies are unplanned
- Unaware of pregnancy until 8 or more weeks
- · Lack of knowledge and misconceptions about alcohol use while pregnant
- · May not think of beer or wine as 'alcohol'.
- May not be aware of or are in denial of the amount they drink
- · Mixed messages

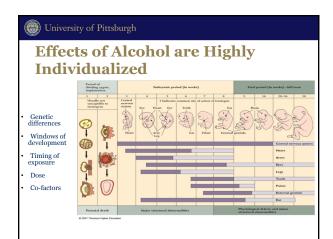
*Clarren SK, Lutke J. Building clinical capacity for fetal alcohol spectrum di: Canada. Can J Clin Pharmacol. 2008 Summer;15(2):e223-37

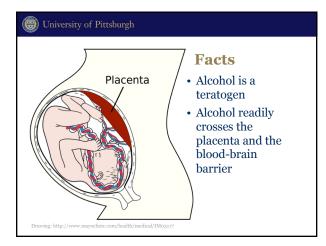


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Reasons Women/Girls May Drink **During Pregnancy**

- Unaware they are pregnant
- In denial because they do not want to be pregnant
- · Uninformed about the risks for an embryo/fetus
- **Underestimate the risk** because they know someone who drank during pregnancy and "their children are fine"
- Alcohol use is the norm in their social group & ${\bf abstaining}$ ${\bf may}$ ${\bf be}$ ${\bf difficult}$
- Using it to cope with violence, depression, poverty, or isolation
- May be struggling with addiction







What is the Evidence that PAE is Harmful?

- Abundant evidence from:
 - · Human clinical studies
 - Animal studies in several species
 - · In vitro studies
- These confirm alcohol's many roles in disrupting embryonic and fetal development of the central nervous system and other organs and structures



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Risk of Adverse Effects

- No predictable correlation exists between the amount of alcohol exposure and the likelihood of development of an FASD
 - a woman cannot predict the likelihood that her level of drinking will not be a problem for her baby. What is light or moderate for one woman may be heavy for another ...



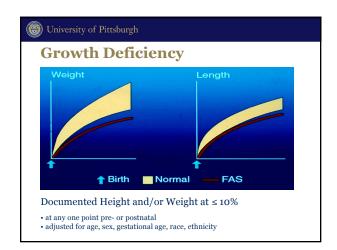
• During pregnancy:

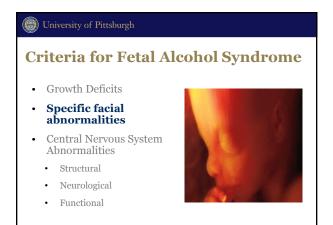
there is no safe time, no safe amount, no safe type of alcohol

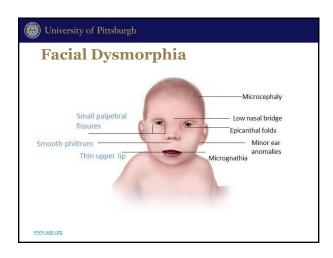


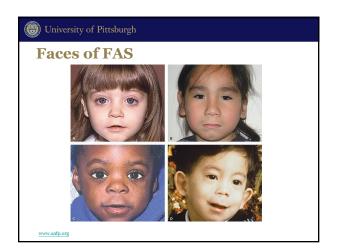
- · Growth deficits
- Specific facial abnormalities
- Central Nervous System Abnormalities
 - Structural
 - Neurological
 - Functional















CNS Structural Abnormalities: Microcephaly

• Head circumference ≤ 10th percentile



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CNS: Neurological abnormalities

- Impaired fine and/or gross motor skills
- Neurosensory hearing loss
- · Speech impairment
- · Poor gait
- Clumsiness
- Poor eye-hand coordination
- Seizure disorder



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Functional Abnormalities:

Neurobehavioral Disability related to **Prenatal Alcohol Exposure (ND-PAE)**

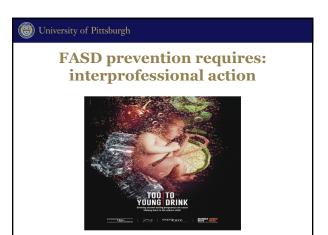
- $\bullet Included$ in the DSM-5 to facilitate identification by health care providers
- •Describes deficits in:
- Neurocognitive function
- · Self regulation
- · Adaptive function health

In the context of confirmed prenatal alcohol exposure, regardless of the $\,$ presence or absence of any physical characteristics or congenital anomalies



Behavioral Effects

- Impairment in neurocognitive functioning
 - · Intellect, executive function, learning, memory
- Impairment in self-regulation
 - Mood, attention, impulse control
- · Impairment in adaptive functioning
 - Communication, social interaction, daily living skills, motor skills



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Alcohol SBI: A Response to Alcohol and Women of Childbearing Age

- 7.6% of pregnant women reported drinking alcohol in the past 30 days.
- 1.4% of pregnant women reported binge drinking in the past 30 days.
- 12% of women continue drinking during pregnancy



Empower any patient to reduce their risk of alcoholrelated harm especially to eliminate FASD

Help manage alcohol-related health problems

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Alcohol SBI - Can Make A Difference

- Effective in primary care, ED, and other settings
- · SBIRT implemented by nurses is effective
- · Results in reductions in mortality, alcohol use, health care costs, criminal justice involvement, and societal costs



Remember Alcohol SBI is a Clinical **Preventive Service**

Like hypertension or tobacco screening, alcohol screening and brief intervention (alcohol SBI) is a clinical preventive service. It identifies drinking misuse to prevent health related issues and involves:

- A validated set of screening questions to identify patients' drinking problems
- A short conversation specific to the patient based upon the screen

The entire service takes only a few minutes, is in expensive, and may be reimbursable. It begins with an evidence-based screen...

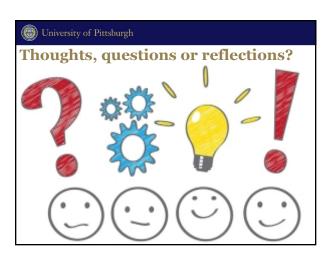
(CDC, 2014)

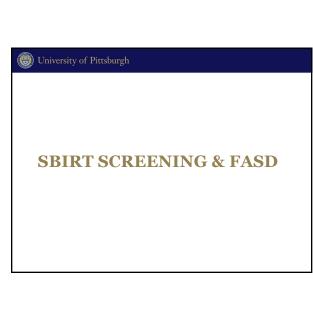


Prevention of Alcohol-Exposed Pregnancies

- 100% preventable if women who are pregnant, trying to get pregnant, or at risk of becoming pregnancy abstain from alcohol
- · Discuss and provide information about FASD
- Provide universal alcohol screening and brief intervention (Alcohol SBI)
- Discuss contraception
- Provide or refer for targeted alcohol treatment and/or promote contraception use for women at highest risk









Alcohol SBI and SBIRT: Key differences

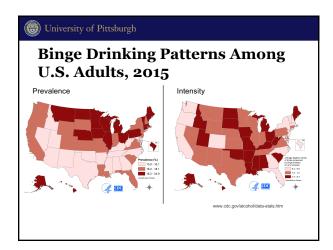
- \bullet SBI originally referred to screening and brief intervention research
- \bullet Recommended by the U.S. Preventative Services Task Force
- \bullet Late 2003: SAMHSA grantees began SBI implementation
- "and referral to treatment" added to program title
- $\bullet\,$ SBIRT acronym emphasized treatment service agency roles
- "RT" can be mistaken as every person who screens positive is referred

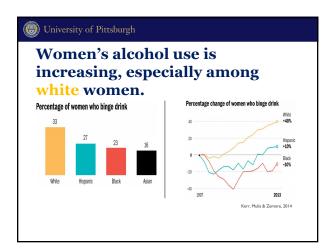


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• Significant role in American history

- It is the 'social glue' we use for:
 - Celebrations
 - Sports & social events
 - Memorials
 - "Nights out" to relax & socialize with our friends
 - Teen 'rites of passage'
 - Self-medication when it is too difficult or expensive to access mental health services









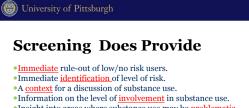
Two Levels of Screening

Universal:

- \bullet Provided to all adult patients
- Serves to rule-out patients who are at <u>low</u> or <u>no-risk</u>
- Can (should) be done <u>at intake</u> or <u>triage</u>
- <u>Positive</u> universal screen = <u>proceed</u> with full screen

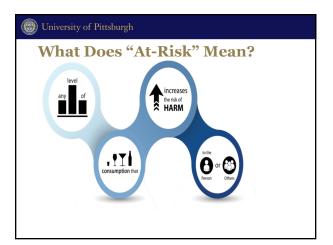
Targeted:

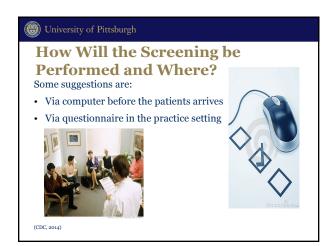
- Provided to <u>specific</u> patients (alcohol on breath, positive BAL, suspected alcohol/drug related health problems)
- Provided to patients who score <u>positive</u> on the universal screen

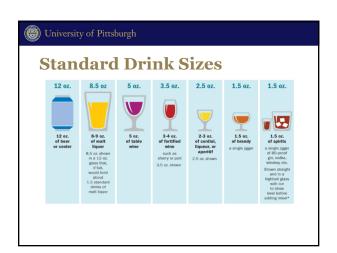


- •Insight into areas where substance use may be problematic.
- •Identification of patients who are most likely to <u>benefit</u> from brief intervention.
- •Identification of patients who are most likely in need of <u>referral</u> for further assessment.

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Suggested Drinking Limits for Women

- 3 or less standard drinks per occasion
- 7 or less standard drinks per week
- O if pregnant, breastfeeding, planning to become pregnant, or if sexually active and not using reliable contraception
- Remember, during pregnancy:

there is no safe time, no safe amount, no safe type of alcohol

Screen	Target Population	# Items	Assessment	Setting (Most Common)	URL
ASSIST (WHO)	-Adults -Validated in many cultures and languages	8	Hazardous, harmful, or dependent drug use (including injection drug use) [interview]	Primary Care	http://www.who.int/substar ce_abuse/activities/assist_te st/en/index.html
AUDIT (WHO)	-Adults and adolescents -Validated in many cultures and languages	10	Identifies alcohol problem use. Can be used as a pre-screen to identify patients in need of full screen/brief intervention [Self-admin, Interview, or computerized]	*Different Settings *AUDIT C- Primary Care (3 questions)	http://whqlibdoc.who.int/ht/ /2001/who_msd_msb_01.6a .pdf
DAST-10	Adults	10	To identify drug-use problems in past year [Self-admin or Interview]	Different Settings	http://www.integration.sam hsa.gov/clinical- practice/screening-tools
CRAFFT	Adolescents	6	To identify alcohol and drug abuse, risky behavior, & consequences of use [Self-admin or Interview]	Different Settings	http://www.ceasar- boston.org/CRAFFT/
CAGE	Adults and Youth >16	4	-Signs of tolerance, not risky use [Self-admin or Interview]	Primary Care	http://www.integration.sam hsa.gov/clinical- practice/sbirt/CAGE_questionaire.pdf
TWEAK	Pregnant Women	5	-Risky drinking during pregnancy. Based on CAGE. -Asks about number of drinks one can tolerate, & related problems [Self-admin, Interview, or computerized]	Primary Care, Women's Organizations, etc.	http://www.sbirttraining.co m/sites/sbirttraining.com/fil es/TWEAK.pdf

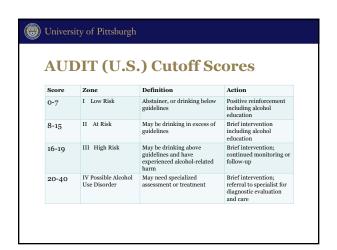


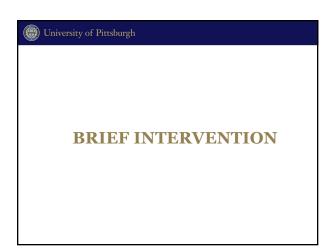
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Validated screening tool: AUDIT (U.S.)

- Global "gold standard" of alcohol screening instruments
- 10 questions (initial screen uses only 3 of them)
 - Items 1-3 measure quantity
 - 4-10 measure alcohol-related harm and dependency symptoms
- 2-3 minute administration
- Sensitive to a broad spectrum of alcohol problems across multiple populations
- Validated for age 12 and above

AUDIT (U.S.	.): Alcohol	Use Disord	ders Identif	ication Te	est			
Instructions: Alcohol can affect your health, medications, and treatments, so a	we ask patients	s the following of	puestions. Your p	answers will re	main confidential.	Place an X in or	ne box to answer	each
Questions	0	1	2	3	4	5	6	Score
. How often do you have a drink containing alcohol?	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-5 times a week	Daily	
How many drinks containing alcohol do you have on a typical day when you are drinking?	1	2	3	4	5-6	7-9	10 or more	
How often do you have X or more drinks on one occasion? (5 for men under age 65; 4 men aged 65 or older and all women)	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-6 times a week	Daily	
							TOTAL (1-3)	_
How often during the last year have you found that you were not able to stop drinking once you started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
5. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year			
LO. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year			
							TOTAL (1-10)	





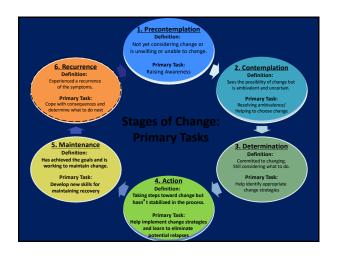
University of Pittsburgh **Four Types of Intervention** · Feedback only • Brief Intervention • Extended Brief Intervention or Brief Treatment · Referral for further assessment University of Pittsburgh Results of Screening Make it Easy to do a Brief Intervention.... Step 1: Raise the Subject Step 2: Provide Feedback Step 3: Enhance Motivation Step 4: Negotiate and Advise University of Pittsburgh **Basics of a Brief Intervention** • Identify a real or potential alcohol use problem and to motivate an individual to do something about it

 Provide education about alcohol use especially related to pregnancy, including potential risks

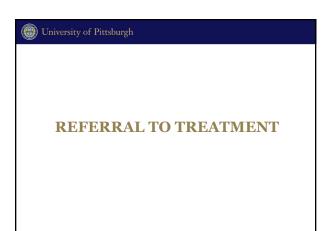
• Match patient's Stage of Change - no arguing,

- health education approach

pushing, or dragging







© University of Pittsburgh Referral to Treatment





Establish Referral Procedures

Three Available Resources:

- 1. The Substance Abuse and Mental Health Services Administration (SAMHSA.gov)
- 2. Your practice's contacts
- 3. Alcoholics Anonymous (AA)/ Narcotics Anonymous
- 4. SMART Recovery
- 5. Faith-based Organizations

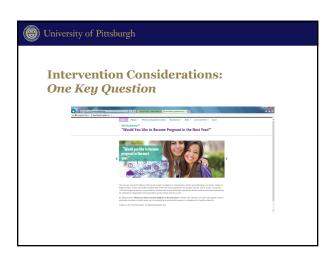


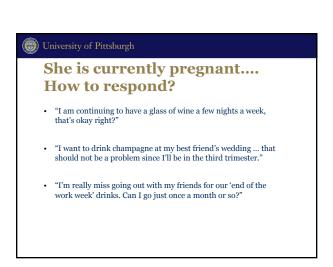
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Treatment Challenges for Women

- Stigma of substance use
- · Fear of loss of child custody
- Few resources for women with children
- Lack of collaboration among social service systems
- Lack of culturally responsive programming
- · Limited options for pregnant women







Remind women who might want to drink during pregnancy...

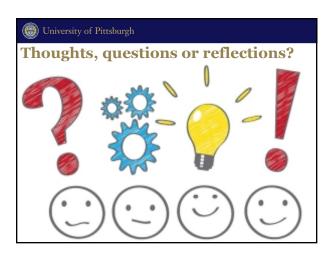
- No type is safe beer, wine, liquor, wine coolers, homebrew, etc.
- No way to predict if she would be the mother/baby pair with more or less impact from the alcohol...
- Fetal brain is the main target for the entire nine months
- Potential for multigenerational impacts due to ${\bf epigenetic}$ ${\bf influence}$

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What can we tell women to do?



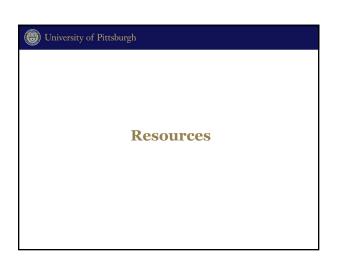
- If she screened 'at-risk':
 explore ideas to reduce volume
 when drinking
- If she is attempting to get pregnant, not using birth control and does not choose to stop drinking: track her cycle & time her alcohol use
- If she is pregnant and wants to drink: suggest alternatives





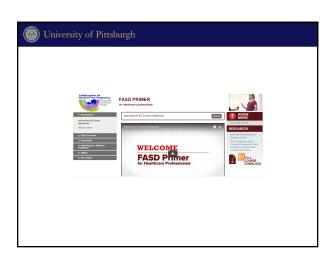


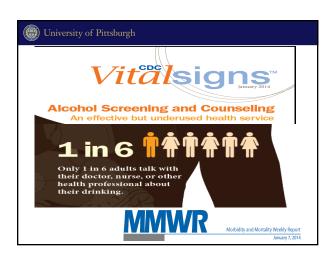
MB, a 26-year-old female with a first-time unplanned but desired pregnancy, presents at the office for her first prenatal visit. MB tells the NP that she drank alcoholic beverages a couple of times during the first 4 weeks of gestation, before she knew she was pregnant. She stopped drinking when she had a positive pregnancy test result. She asks the NP whether her baby could have birth defects caused by drinking. She is now 10 weeks pregnant.

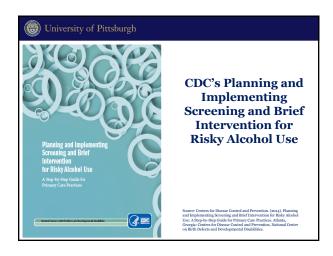


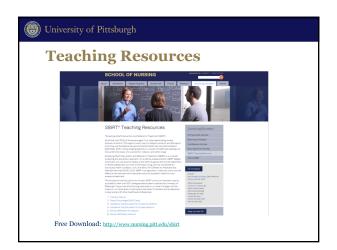


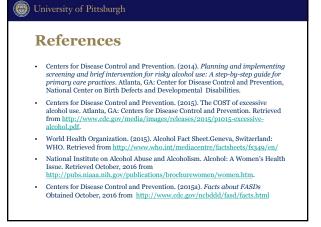














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