

HOW ABOUT A DRINK?

Addressing Prenatal Alcohol Exposure and Fetal Alcohol Syndrome Disorders

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Omar Shah, MD

ASAM Annual Meeting, April 6, 2024, Dallas, TX



Disclosure Information

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April 6, 2024, 4PM

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Learning Objectives

By the end of this presentation, participants will:

- ☀️ Know the different types and current the incidence and prevalence of Fetal Alcohol Spectrum Disorders as well as their social and economic impact.
- ☀️ Be able to use clinical interventions to help prevent FASDs
- ☀️ Examine and discuss advocacy, educational and treatment resources for providers, patients and families

Quick Facts



CDC. "Data & Statistics." Centers for Disease Control and Prevention, 6 Jan. 2022

Nearly 14% (or 1 in 7) pregnant people reported current drinking* and about 5% (or 1 in 20) reported binge drinking† in the past 30 days



“Several initial studies, using active case findings of school-aged children, indicate that 1% to 5% of children in the United States may have an FASD.”

“Fetal Alcohol Spectrum Disorders.” www.aap.org, www.aap.org/en/patient-care/fetal-alcohol-spectrum-disorders. Accessed 12 Feb. 2024.

“While some FASD outcomes are more likely at different times during the pregnancy, brain development in particular occurs throughout gestation, and growth and central nervous system problems can occur from drinking alcohol at any time.”

<https://www.acog.org/programs/fasd/fasd-faqs>

There is no known safe amount of alcohol or time to drink during pregnancy.



The effects of prenatal alcohol exposure can even occur before a woman knows she is pregnant.

WHEN DID WE KNOW?



When was alcohol found to be teratogenic?

- ☀️ “Thou shalt conceive and bear a son. Now therefore, beware, I pray thee, and drink not wine nor strong drink, and eat not any unclean thing.”
 - To the mother of prominent biblical character Samson , Old Testament, Book of Judges 13:3-4
- ☀️ “Foolish, drunken, or haire-brain women most often bring forth children like unto themselves, morose and languid.”
 - Aristotle’s *Problemata*
- ☀️ “It is not right that procreation should be the work of bodies dissolved by excess of wine, but rather that the embryo should be compacted firmly, steadily and quietly in the womb.”
 - Plato’s *Laws*

When was alcohol found to be teratogenic?

- ☀ 1957: Jacqueline Rouquette observes patterns of “facies” of children born to alcoholics and attributes responsibility to the mother (unpublished thesis)
- ☀ 1964: French pediatrician Paul Lemoine credited with first acknowledgment of the symptoms of FASD but received little recognition for his findings

This is what Dr. Lemoine had to say about his work:

Fortunately in 1973, Smith in Seattle, after reading the abstract of my work in the French Pediatric Archives, published 8 cases with the same conclusions. He wrote to me asking for my complete text. This is an amusing fact: the 127 cases of a modest pediatrician from Brittany did not create any interest, whereas 8 American cases became immediately convincing and the syndrome became rapidly known in France and in the world. Thanks go to Smith for being able to impose the existence of this reality and its dramatic consequences.

<https://oursacredbreath.com/2017/06/01/day-1-99-days-to-fasday-dr-paul-lemoine/>



A Brief History

☀️ 1973: Kenneth Jones and David Smith coin the phrase “fetal alcohol syndrome”

☀️ Paper presented 8 unrelated cases: 3 Black, 3 Native American, 2 White

☀️ “The similarity in pattern of malformation noted among these 8 children suggests a singular mode of etiology related to an as yet unknown effect of maternal alcoholism. **Direct ethanol toxicity is the most likely possibility.**”

> Lancet. 1973 Jun 9;1(7815):1267-71. doi: 10.1016/s0140-6736(73)91291-9.

Pattern of malformation in offspring of chronic alcoholic mothers

K L Jones, D W Smith, C N Liljeland, P Streissguth

PMID: 4126070 DOI: 10.1016/s0140-6736(73)91291-9

Abstract

PIP: Case histories are presented of 8 unrelated children born to mothers who were chronic alcoholics. These children showed a similar pattern of craniofacial, limb, and cardiovascular defects associated with prenatal-onset growth deficiency and developmental delay. This is the 1st report to document an association between maternal alcoholism and aberrant morphogenesis in the offspring. The mean duration of maternal alcoholism was 9.4 years. 3 of the cases were black, 3 were Native American, and 2 were white. The mean gestational age was 38 weeks. The degree of linear growth deficiency was more severe than the deficit of weight at birth, suggesting that a factor other than maternal undernutrition alone affected prenatal growth. Developmental delay, prenatal and postnatal growth deficiency, and short palbebral fissures were observed in all 8 children. 7 of the 8 children also demonstrated microcephaly and maxillary hypoplasia with relative prognathism. 6 had an altered palmar crease pattern, 5 showed cardiac and joint anomalies, and 4 had epicanthal folds. Although adequate nutrition was provided to the children during hospital admission and/or foster care placement, no catch-up growth was observed. After 1 year, the average linear growth rate was 65% of normal and the average rate of weight gain was only 38% of normal. By 1 year, head circumference fell below the 3rd percentile for height and chronological age in 5 of the 6 children in whom measurements were taken. Fine motor dysfunction was present in 5 of the 6 children tested, and most were delayed in gross motor performance as well. The similarity in pattern of malformation noted among these 8 children suggests a singular mode of etiology related to an as yet unknown effect of maternal alcoholism. Direct ethanol toxicity is the most likely possibility.

When was alcohol found to be teratogenic?

★ Alcoholic Beverage Labeling Act of 1988

- ★ Requires that a health warning statement appear on the labels of all containers alcoholic beverages manufactured, imported or bottled for sale or distribution in the United States



When was alcohol found to be teratogenic?


February 2005

“U.S. Surgeon General Richard H. Carmona today warned pregnant women and women who may become pregnant to abstain from alcohol consumption in order to eliminate the chance of giving birth to a baby with any of the harmful effects of the Fetal Alcohol Spectrum Disorders (FASD).

This updates a 1981 Surgeon General's Advisory that suggested that pregnant women limit the amount of alcohol they drink.”
<http://come-over.to/FAS/SurGenAdvisory.htm>

A 2005 Message to Women
from the U.S. Surgeon General:
Advisory on Alcohol Use in Pregnancy

Thirty-two years ago, United States researchers first recognized fetal alcohol syndrome (FAS). FAS is characterized by growth deficiencies (or, decreased growth), abnormal facial features (specific facial features), and central nervous system (or, brain) abnormalities. FAS falls under the spectrum of adverse outcomes caused by prenatal alcohol exposure called Fetal Alcohol Spectrum Disorders (FASD). The discovery of FAS led to considerable public education and prevention initiatives informing women to limit the amount of alcohol they consume while pregnant. But since that time, more has been learned about the effects of alcohol on a fetus. It is now clear that no amount of alcohol can be considered safe. I now wish to emphasize to prospective parents, healthcare practitioners, and all childbearing-aged women, especially those who are pregnant, the importance of not drinking alcohol if a woman is pregnant or considering becoming pregnant.



Based on the current, best science available we now know the following:

- Alcohol consumed during pregnancy increases the risk of alcohol related birth defects, including growth deficiencies, facial abnormalities, central nervous system impairment, behavioral disorders, and impaired intellectual development.
- No amount of alcohol consumption can be considered safe during pregnancy.
- Alcohol can damage a fetus at any stage of pregnancy. Damage can occur in the earliest weeks of pregnancy, even before a woman knows that she is pregnant.
- The cognitive deficits and behavioral problems resulting from prenatal alcohol exposure are lifelong.
- Alcohol related birth defects are completely preventable.

For these reasons:

1. A pregnant woman should not drink alcohol during pregnancy.
2. A pregnant woman who has already consumed alcohol during her pregnancy should stop in order to minimize further risk.
3. A woman who is considering becoming pregnant should abstain from alcohol.
4. Recognizing that nearly half of all births in the United States are unplanned, women of childbearing age should consult their physician and take steps to reduce the possibility of prenatal alcohol exposure.
5. Health professionals should inquire routinely about alcohol consumption by women of childbearing age, inform them of the risks of alcohol consumption during pregnancy, and advise them not to drink alcoholic beverages during pregnancy.

U.S. Surgeon General
Via: Admiral Richard H. Carmona, MD, MPH, FRCG

<https://www.cdc.gov/ncbddd/fasd/documents/surgeongenbookmark.pdf>

For additional information on alcohol use and pregnancy, please visit...

Centers for Disease Control and Prevention (CDC)
www.cdc.gov/ncbddd/fas

National Institute for Alcohol Abuse and Alcoholism (NIAAA)
www.niaaa.nih.gov

Substance Abuse and Mental Health Services Administration (SAMHSA)
Substance Abuse Treatment Facility Locator
www.findtreatment.samhsa.gov

SAMHSA FASD Center for Excellence
www.fascenter.samhsa.gov

National Organization on Fetal Alcohol Syndrome (NOFAS)
www.nofas.org

The Arc of the United States
www.thearc.org


FAS Community Resource Center
www.come-over.to/FASCRC

Fetal Alcohol Syndrome Family Resource Institute (FAS*FRI)
www.fetalalcoholysyndrome.org

FAS Diagnostic & Prevention Network (FAS DPN)
www.depts.washington.edu/fasdpn

Fetal Alcohol and Drug Unit (FADU)
www.depts.washington.edu/fadu

March of Dimes
www.marchofdimes.com



PREVALENCE, COST AND IMPACT



PREVALENCE, COST AND IMPACT

- ☀ Approximately 630,000 FASD babies are born globally each year (approx. 1,700/day)
- ☀ “Recent prevalence studies of FASD utilizing active case ascertainment have estimated the prevalence rate in school aged students ranged from 3.1-9.9%. In the United States, this suggests that **every day we have several hundred new cases of FASD.**”



Sokol, Robert J. “A Current Evaluation of the Economic Costs for Fetal Alcohol Spectrum Disorder (FASD).” *Journal of Addiction Medicine*, vol. 12, no. 6, 2018, pp. 426–427

Ali, Mir M., et al. *Estimating Costs of Health Care for Children with Fetal Alcohol Spectrum Disorder in a Large Health Insurance Claims Database*. 23 Aug. 2022

PREVALENCE, COST AND IMPACT

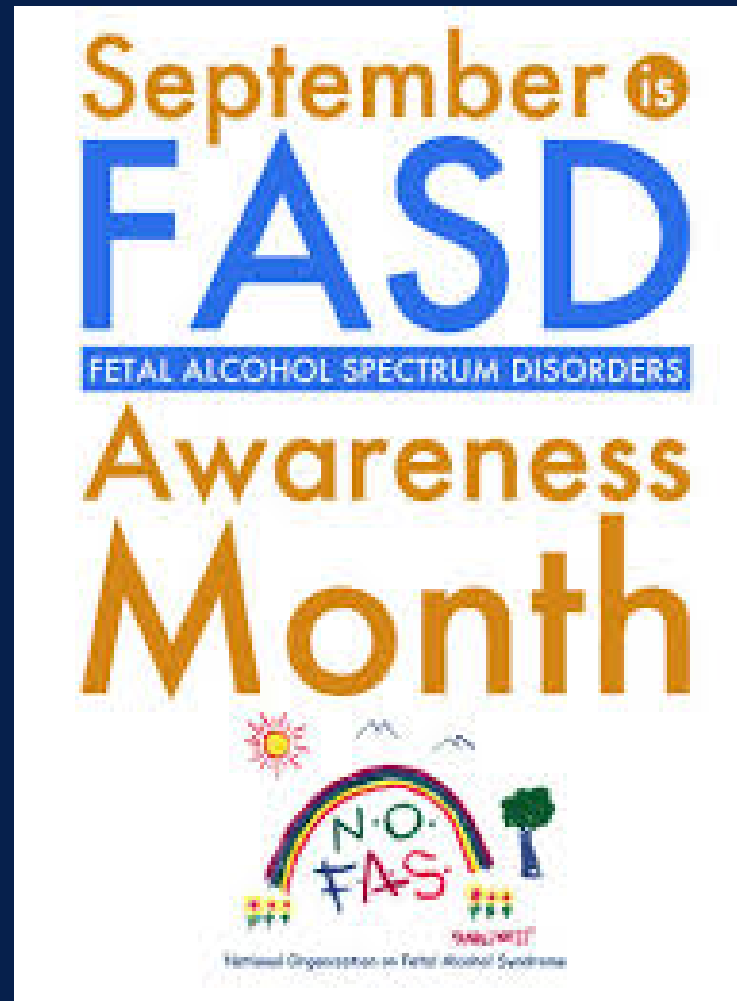
- ☀ FASD carries average costs of more than \$23,000 per person per year
 - ☀ Estimated costs for children with FASD exceed those for autism
 - ☀ \$23,000 versus \$17,000
 - ☀ Estimated costs of FASD in adults are greater than those for diabetes
 - ☀ \$24,000 versus \$21,000

Drinking while pregnant costs the US **\$5.5 billion** (2010). 

SOURCES: CDC Vital Signs, February 2016. American Journal of Preventive Medicine, November 2015.

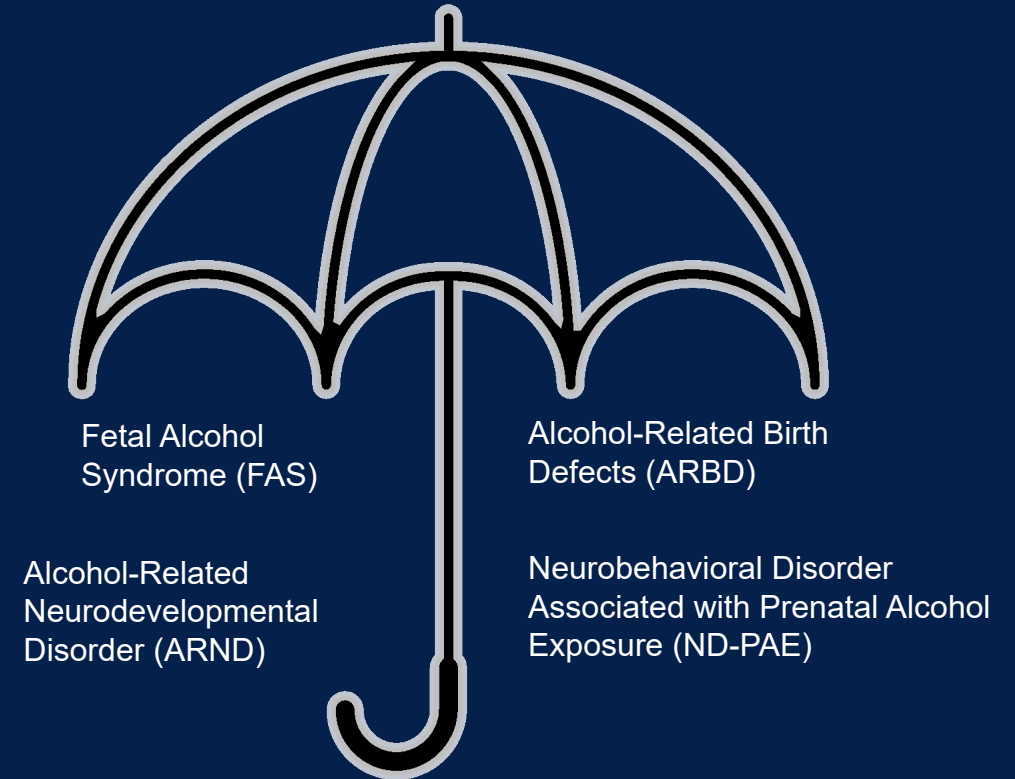
Sokol, Robert J. "A Current Evaluation of the Economic Costs for Fetal Alcohol Spectrum Disorder (FASD)." *Journal of Addiction Medicine*, vol. 12, no. 6, 2018, pp. 426–427

UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

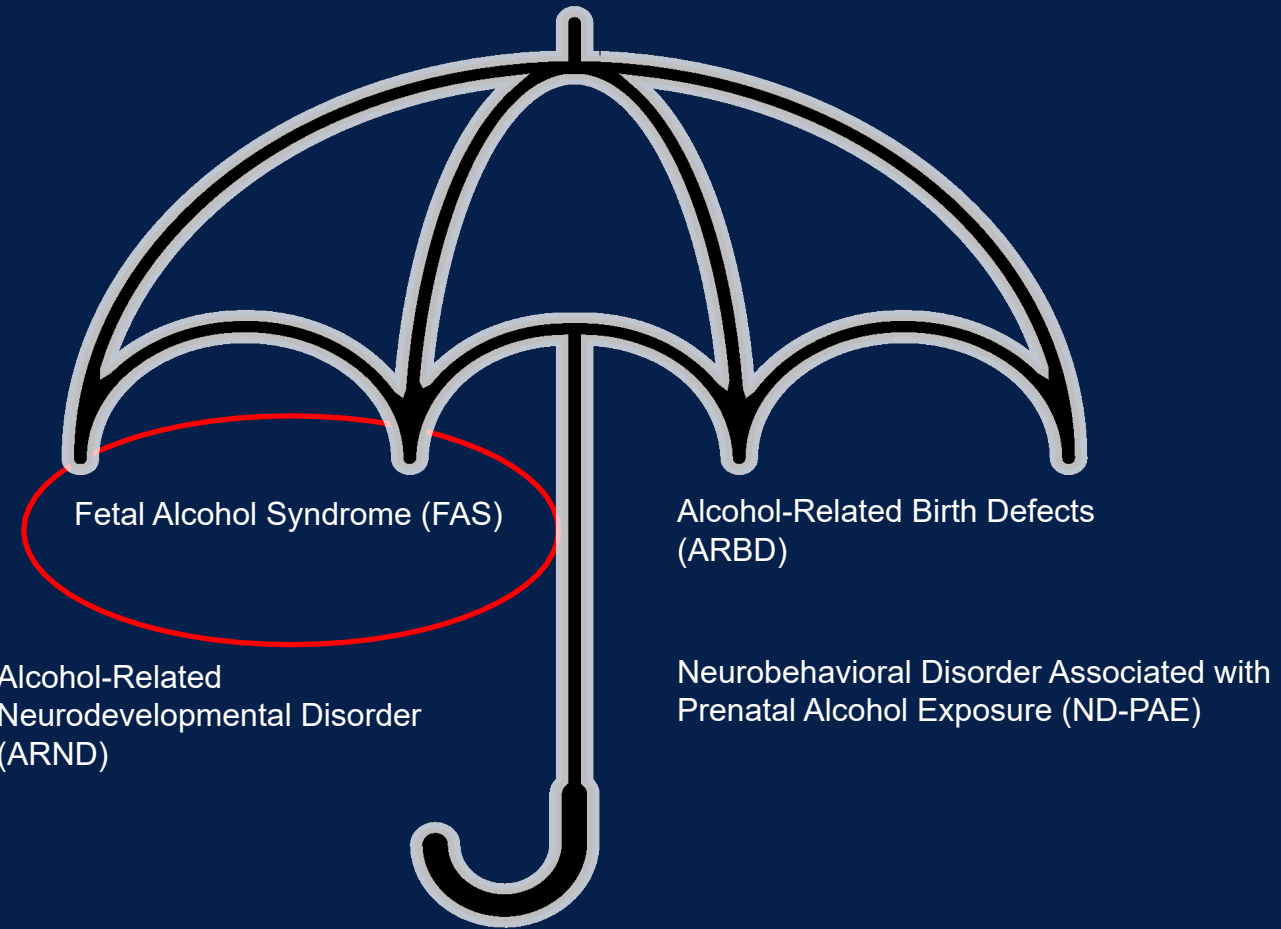


UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

- ☀ Fetal Alcohol Spectrum Disorders (FASD)
- ☀ An umbrella term describing the range of effects that can occur in individuals exposed to alcohol in utero
- ☀ All require evidence of prenatal alcohol exposure



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS



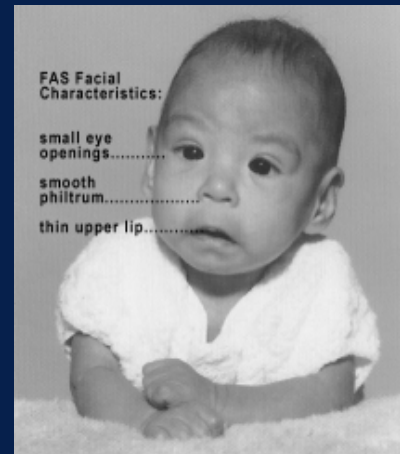
UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

☀ Fetal Alcohol Syndrome (FAS)

The most common preventable cause of intellectual disability worldwide



<https://depts.washington.edu/fasdpn/htmls/fas-face.htm>



https://en.wikipedia.org/wiki/Fetal_alcohol_spectrum_disorder



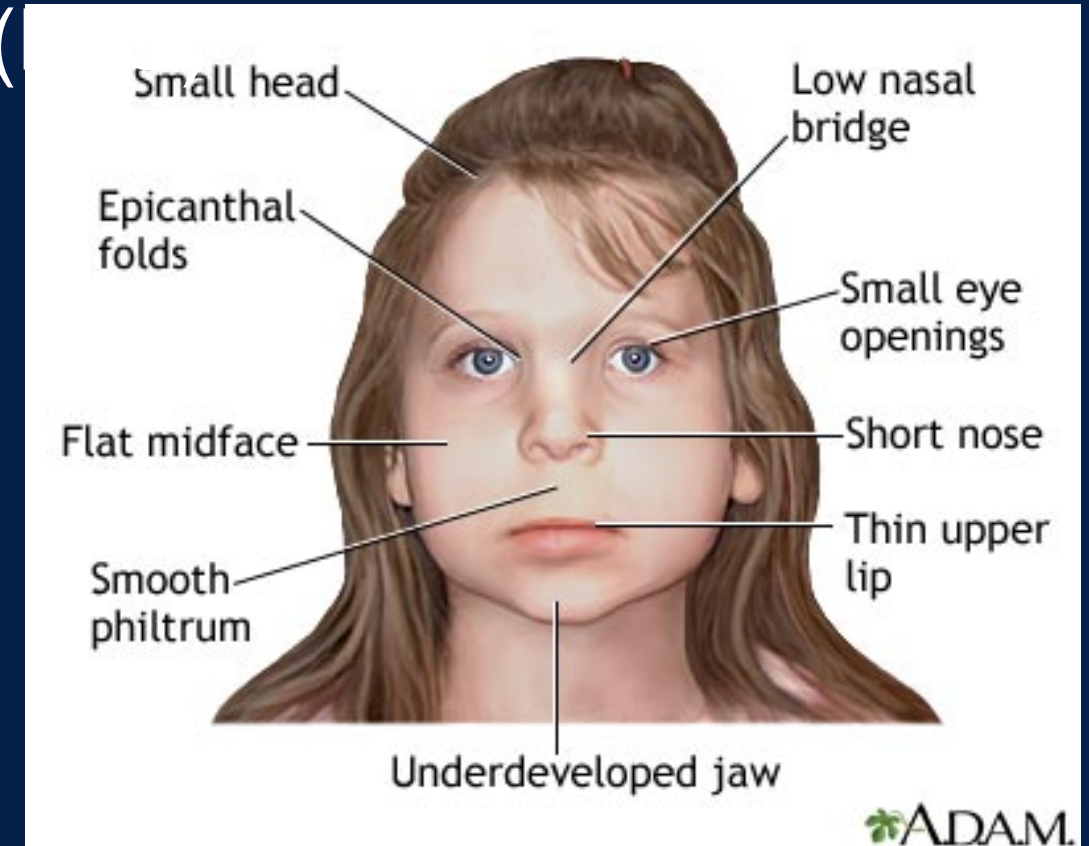
pediatrics.aappublications.org

UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

☀ Requires evidence of:

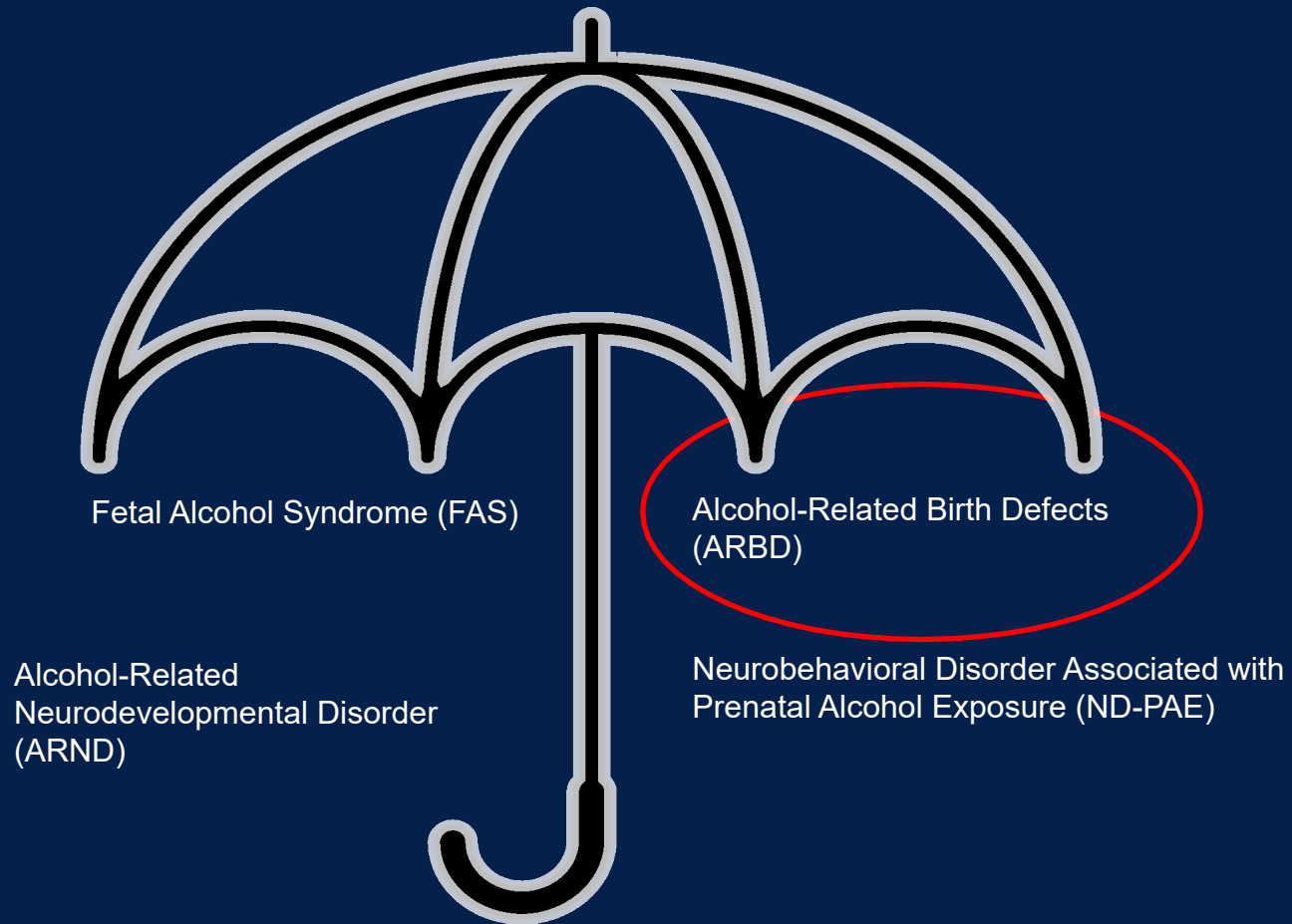
- Prenatal alcohol exposure
- Central nervous system (CNS) abnormalities (structural or functional)
- A specific pattern of three facial abnormalities:
 - narrow eye openings,
 - a smooth area between the lip and the nose (vs. the normal ridge)
 - a thin upper lip
- Growth deficits either prenatally, after birth, or both

Fetal Alcohol Syndrome



<https://medlineplus.gov/ency/imagepages/19842.htm>

UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

☀ Alcohol-Related Birth Defects (ARBD)

- Includes medical conditions linked to prenatal alcohol exposure such as:
 - heart, kidney, and bone problems and other malformations
 - difficulty seeing and hearing
 - reduced immune function
- Rarely seen alone but rather as a secondary disorder accompanying other FASD conditions

UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

Alcohol-Related Neurodevelopmental Disorders (ARND)

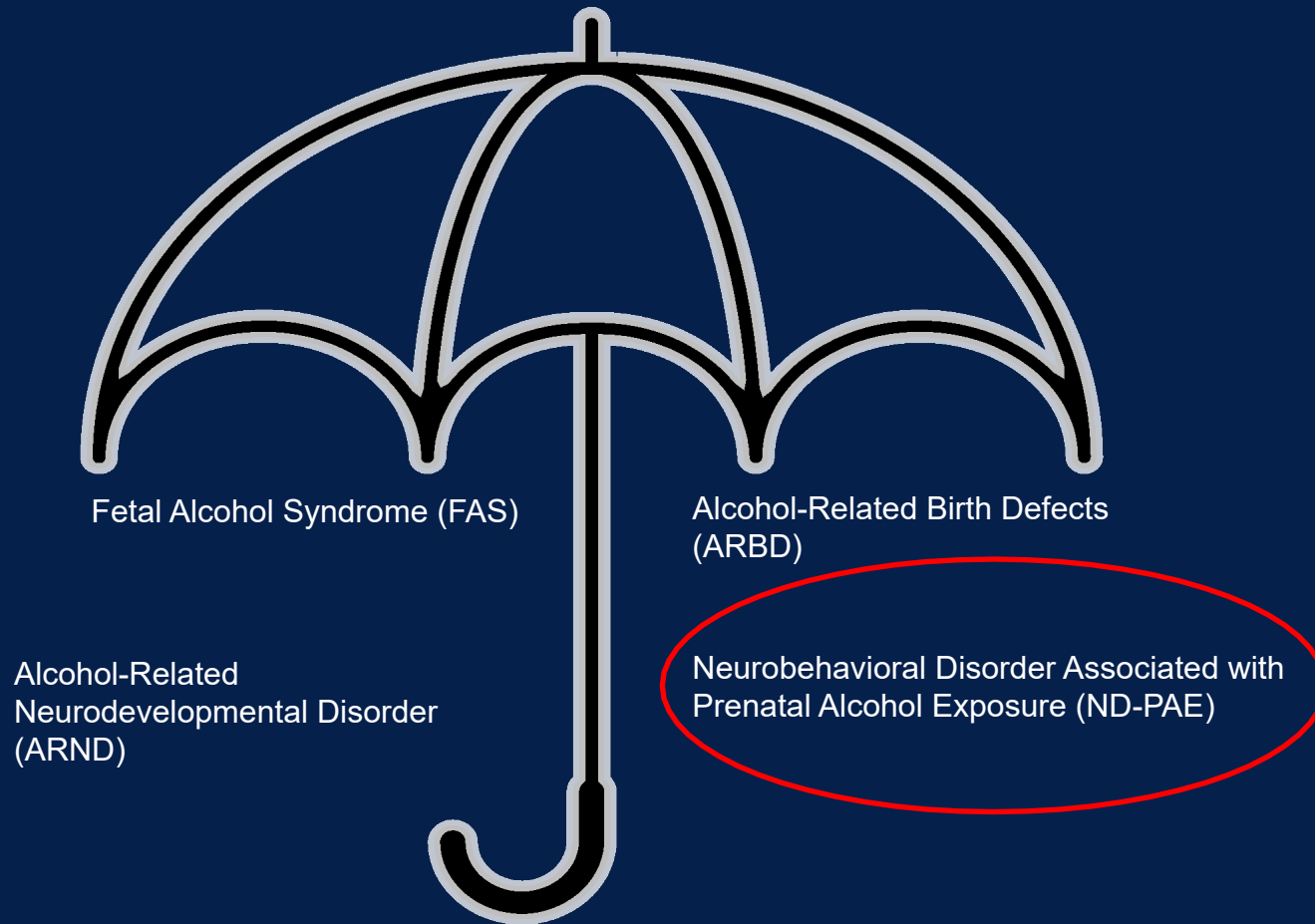
☀ Requires evidence of:

- Prenatal alcohol exposure
- CNS abnormalities, which may be structural or functional

☀ Facial abnormalities and growth retardation need not be present



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE)

- ☀ New diagnosis in the DSM V
- ☀ Requires evidence of CNS involvement, as indicated by impairments in three areas:
 - Cognition
 - Self-regulation
 - Adaptive functioning



UNDERSTANDING FETAL ALCOHOL SPECTRUM DISORDERS

Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE)

☀ Requires evidence of prenatal alcohol exposure:

- “More than minimal levels of alcohol before the child’s birth” which the APA defines as more than 13 alcoholic drinks per month of pregnancy (that is, any 30-day period of pregnancy) or more than 2 alcoholic drinks in one sitting.”

IDENTIFYING EVIDENCE OF PRENATAL ALCOHOL EXPOSURE

Barriers to identifying pregnant women using alcohol during pregnancy

☀ Personal factors

- ☀ shame and guilt
- ☀ stigma associated with mothers misusing substances

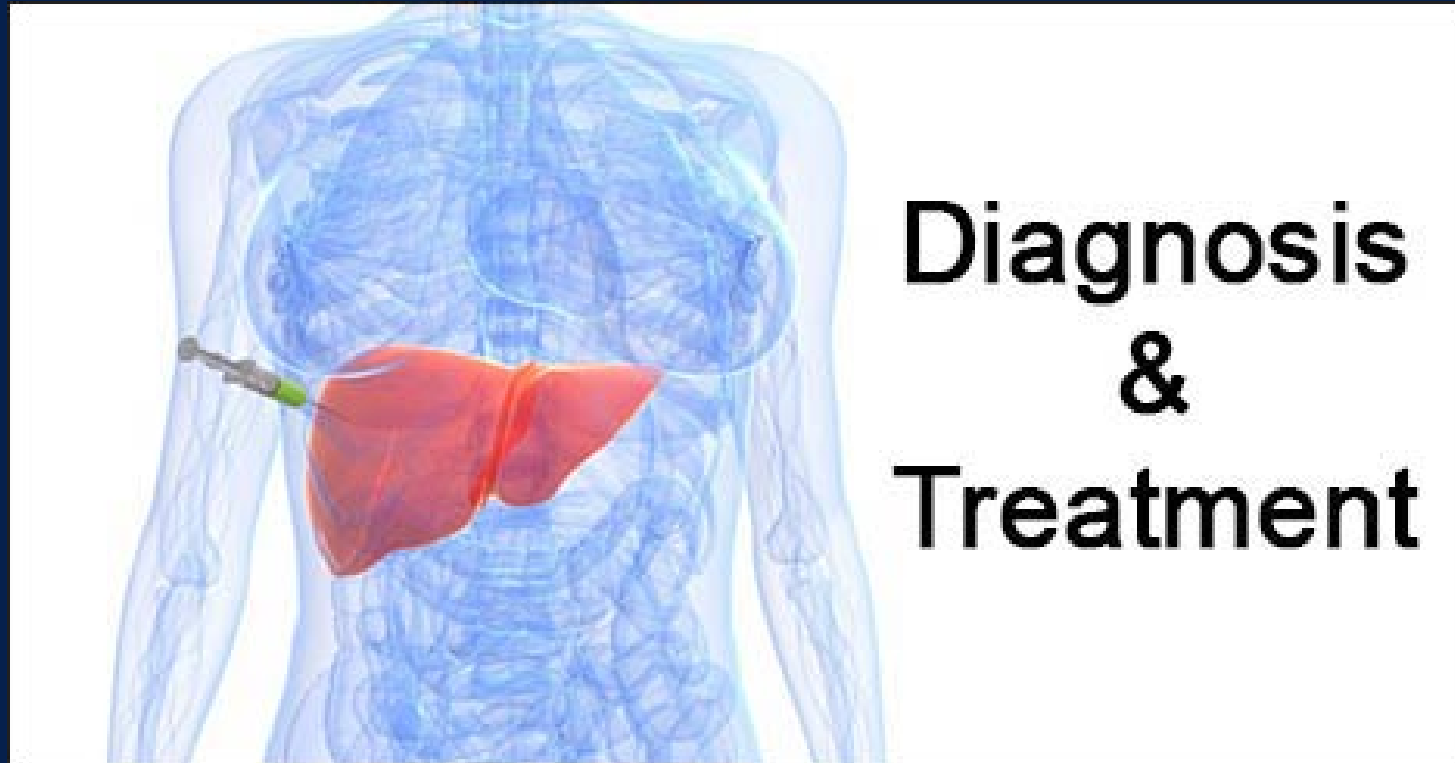
☀ Interpersonal factors

- ☀ fear of losing children to partner or child welfare
- ☀ lack of family support

☀ Systemic/societal factors

- ☀ lack of appropriate services for pregnant women
- ☀ lack of reliable childcare
- ☀ systemic racism





DIAGNOSIS AND TREATMENT

- ☀ The term “fetal alcohol spectrum disorders” is NOT meant for use as a clinical diagnosis
- ☀ There are three major factors that must be addressed in the diagnosis on the FASD continuum:
 - Physical growth, development, and structural defects
 - Cognitive function and neurobehavior
 - Maternal exposure and risk



DIAGNOSIS AND TREATMENT

- ☀️ There is no currently universal approach to diagnosis
 - ☀️ Five diagnostic systems for FAS/FASD are currently in use in North America
 - ☀️ All 5 include an assessment of the unique FAS facial characteristics
 - ☀️ Short palpebral fissure (width of the eye opening)
 - ☀️ Thin vermilion border of the upper lip
 - ☀️ Smooth philtrum (the vertical groove between the nose and upper lip)

DIAGNOSIS AND TREATMENT

☀ Common cognitive function and neurobehavioral issues include:

- Hyperactive behavior
- Difficulty with memory, attention, organizing and planning
- Poor understanding of abstract concepts like time and money
- Learning disabilities and difficulty in school (especially with math)
- Speech and language delays
- Intellectual disability or low IQ
- Poor reasoning and judgment skills

DIAGNOSIS AND TREATMENT

☀️ Secondary conditions are those that may develop because of having a FASD and include:

- Increased risk for cognitive disorders, mental illness or psychological disorders, most frequently:
 - Attention problems including ADHD
 - Conduct disorder
 - Substance Use Disorders (occurs in up to 85% with an earlier age of onset at 12 years old)
 - Depression and anxiety

DIAGNOSIS AND TREATMENT

☀ Is it ADHD?

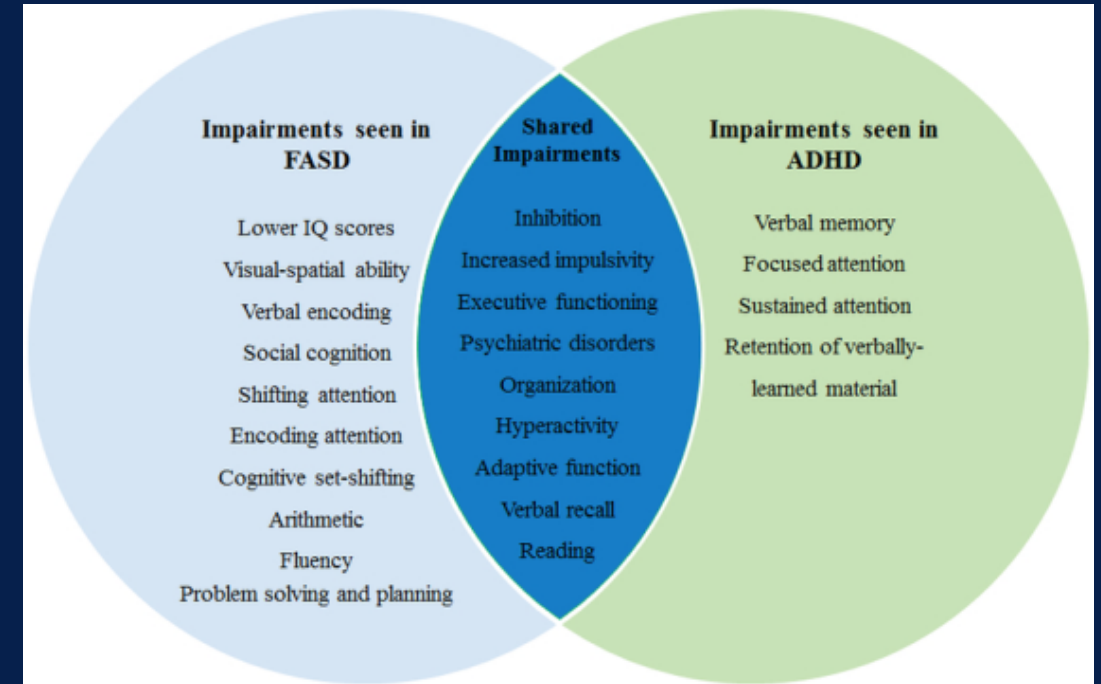
☀ Adults with ADHD have a higher prevalence of SUD (15.2%) compared to those without ADHD (5.6%).

☀ In adults with SUD, the prevalence of ADHD is about 20%

☀ Could it be FASD?

☀ FASD= Increased rates of ADHD

☀ FASD= Increased rates of SUD



Barbuti, Margherita, et al. "Challenges of Treating ADHD with Comorbid Substance Use Disorder: Considerations for the Clinician." *Journal of Clinical Medicine*, vol. 12, no. 9, 24 Apr. 2023, pp. 3096–3096, www.ncbi.nlm.nih.gov/pmc/articles/PMC10179386/, <https://doi.org/10.3390/jcm12093096>. Accessed 21 Mar. 2024.

Mattson, Sarah N., et al. "Fetal Alcohol Spectrum Disorders: A Review of the Neurobehavioral Deficits Associated with Prenatal Alcohol Exposure." *Alcoholism: Clinical and Experimental Research*, vol. 43, no. 6, 2 May 2019.

Kambeitz, C., Klug, M.G., Greenmyer, J. et al. Association of adverse childhood experiences and neurodevelopmental disorders in people with fetal alcohol spectrum disorders (FASD) and non-FASD controls. *BMC Pediatr.* 2019;19:498

DIAGNOSIS AND TREATMENT

- ✦ There is no cure or specific treatment for fetal alcohol spectrum disorders
- ✦ Early intervention may help reduce some of the effects and prevent secondary disabilities.
- ✦ Being aware of the possibility of an FASD diagnosis in adult SUD patients may improve treatment outcomes

prevention

PREVENTION

- ☀ Fetal Alcohol Spectrum Disorders are the leading cause of preventable birth defects in the United States
- ☀ The best time to target FASD prevention is prior to conception.
- ☀ Guidelines recommend no alcohol from the time conception is *planned*.
- ☀ Interventions should address both drinking behaviors and contraception use.

PREVENTION

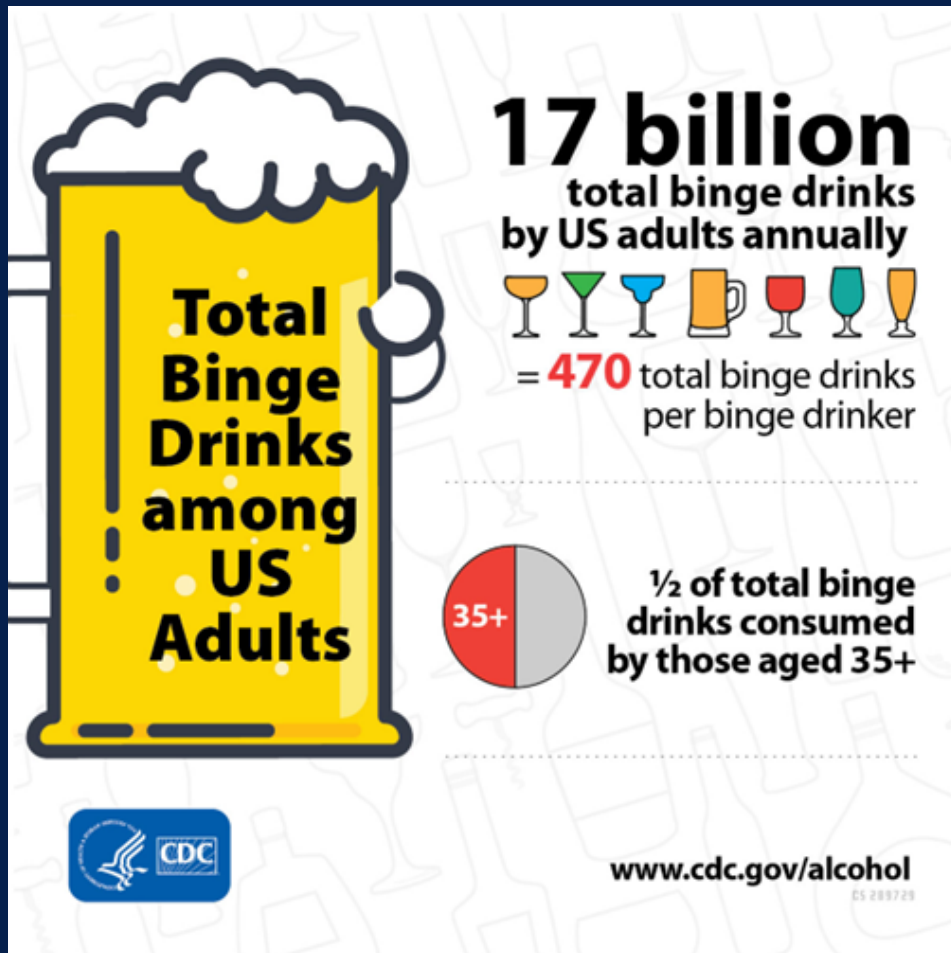
- ✦ Quantity of alcohol consumed, particularly over a short time (as happens with binge drinking) is the major factor in producing babies with FASD
- ✦ Populations with the highest rates of frequent binge drinking have been found to have the greatest number of babies born with FASD

Binge Drinking in the United States



SOURCE: CDC Vital Signs. January 2014. www.cdc.gov/vitalsigns.
American Journal of Preventive Medicine, 2011; Volume 41.

Binge Drinking in the United States



Binge Drinking

A Serious, Under-Recognized Problem among Women and Girls



1 in 8

Nearly 14 million US women binge drink about 3 times a month.



1 in 5

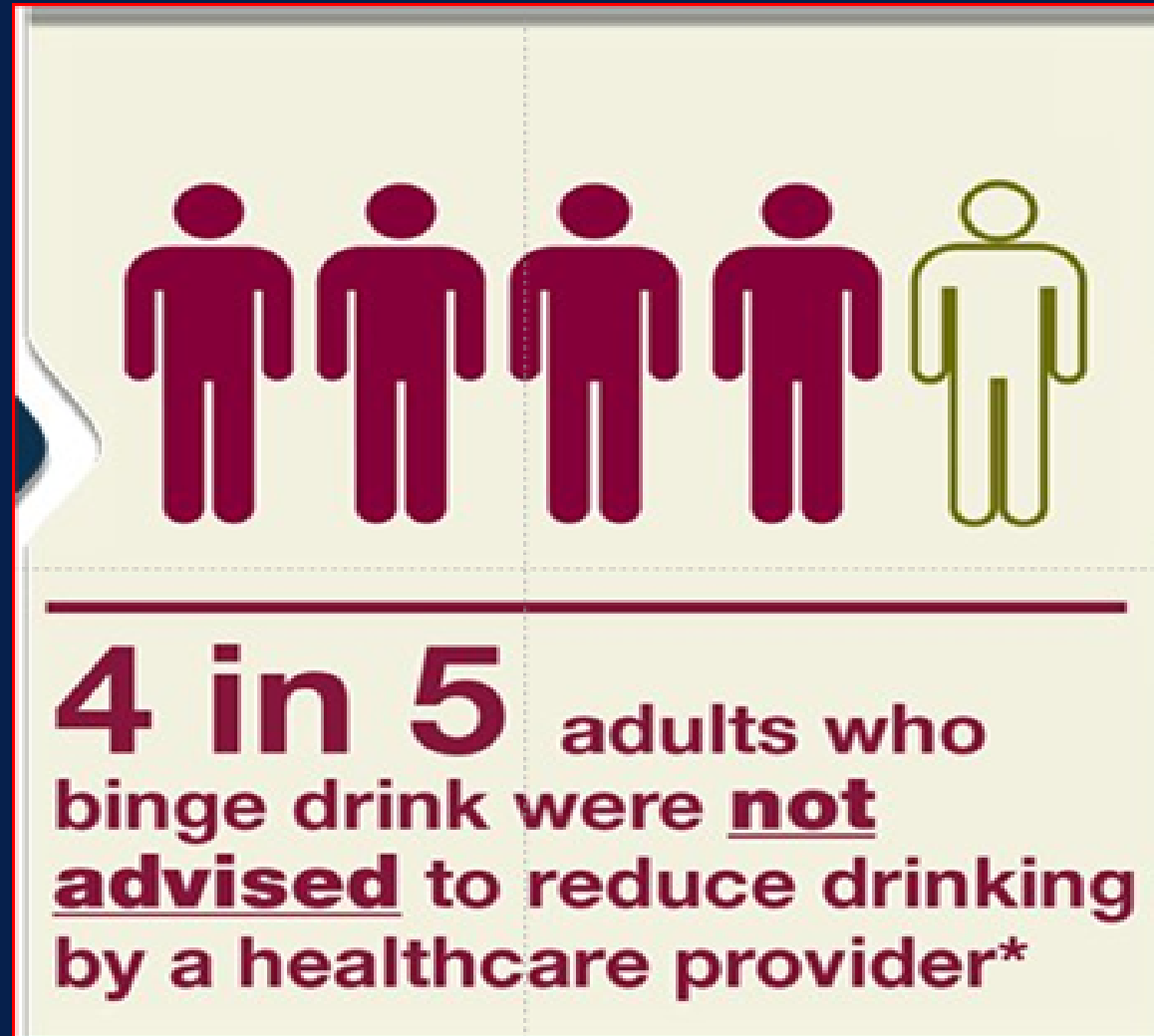
1 in 5 high school girls binge drink.

6 YYYYYY

Women average 6 drinks per binge.

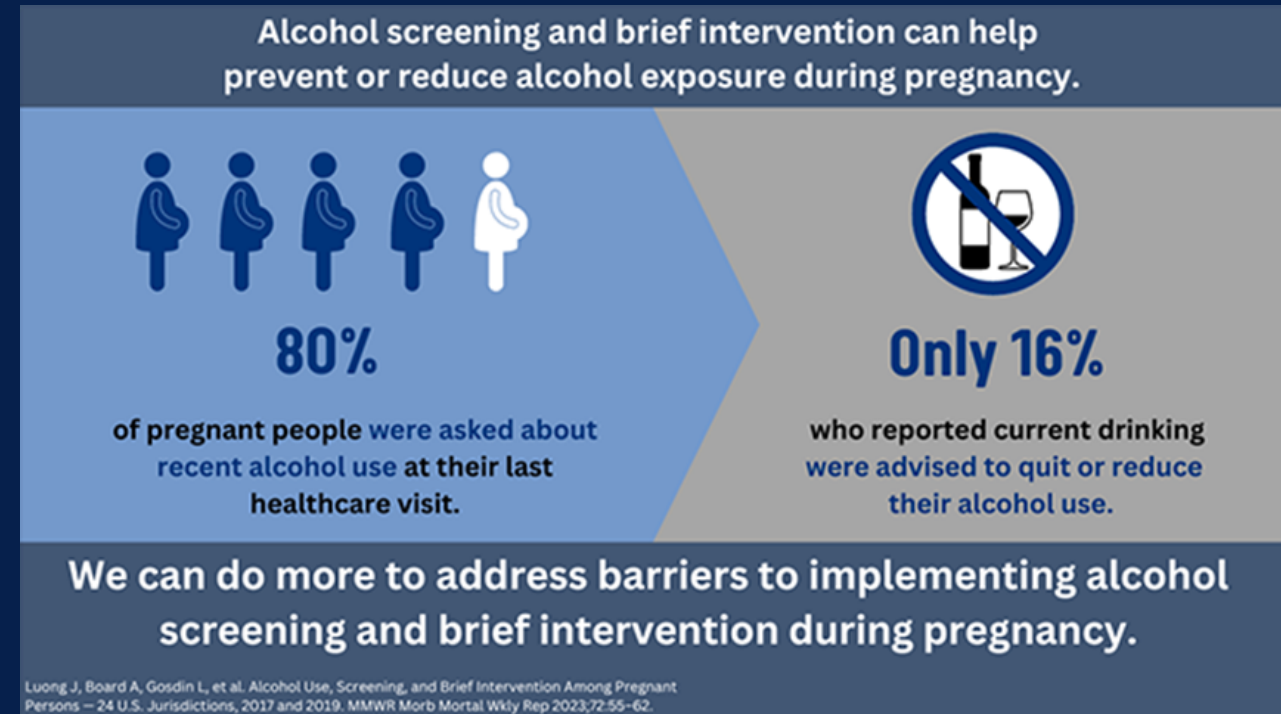
Source: CDC Vital Signs, January 2013

PREVENTION: Talking about use

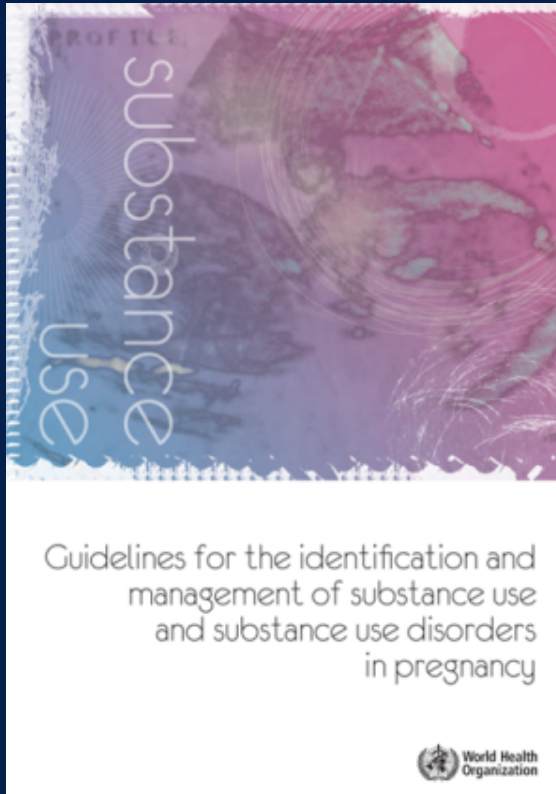


PREVENTION: Talking about use

☀️ “In a 2023 Morbidity and Mortality Weekly Report (MMWR), CDC researchers found that 80% of people who were pregnant were asked about alcohol use; however, only 16% of those who self-reported drinking within the past 30 days were advised to quit or reduce their use.”



PREVENTION: Talking about use



IDENTIFICATION AND MANAGEMENT OF SUBSTANCE USE AND SUBSTANCE USE DISORDERS IN PREGNANCY			
No.	Recommendation	Strength of recommendation	Quality of evidence
Screening and brief interventions for hazardous and harmful substance use during pregnancy			
1	Health-care providers should ask all pregnant women about their use of alcohol and other substances (past and present) as early as possible in the pregnancy and at every antenatal visit.	Strong	Low
2	Health-care providers should offer a brief intervention to all pregnant women using alcohol or drugs.	Strong	Low

- ☀ Pre-pregnancy alcohol use patterns can significantly predict alcohol use during pregnancy and must be considered when screening for prenatal alcohol exposure (PAE)

<https://www.who.int/publications/i/item/9789241548731>

PREVENTION- Screening for use

☀️ Assess using an evidenced-based screening tool

AUDIT-C

Alcohol Use Disorders Identification Test-Consumption

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?					SCORE
Never (0)	Monthly or less (1)	Two to four times a month (2)	Two to three times per week (3)	Four or more times a week (4)	_____
2. How many drinks containing alcohol do you have on a typical day when you are drinking?					SCORE
1 or 2 (0)	3 or 4 (1)	5 or 6 (2)	7 to 9 (3)	10 or more (4)	_____
3. How often do you have six or more drinks on one occasion?					SCORE
Never (0)	Less than Monthly (1)	Monthly (2)	Two to three times per week (3)	Four or more times a week (4)	_____
TOTAL SCORE					SCORE
Add the number for each question to get your total score.					_____

Maximum score is 12. A score of ≥ 4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking or alcohol use disorders.

Single Alcohol Screening Question (SASQ)

Questions	Scoring system					Your score
	0	1	2	3	4	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last 6 months?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	

Scoring:

A total of 0 - 1 indicates low risk drinkers.

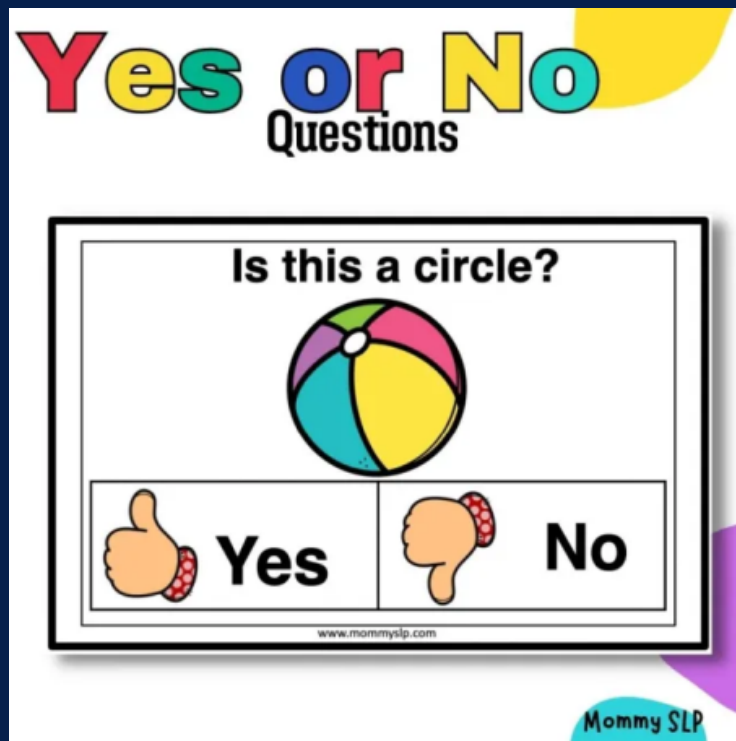
A total of 2 - 4 indicates increased or high risk drinkers.

An overall total score of 2 or above is SASQ positive.



PREVENTION: Screening for Use

☀ DON'T USE



CAGE

(EVER)

- Have you ever tried to Cut down on your drinking?
- Do you get Annoyed when people talk about your drinking?
- Do you feel Guilty about your drinking?
- Have you ever had an Eye-opener? (A drink first thing in the morning)

Scoring: Two positive responses are considered a positive screen for ever dependent or potential alcohol problem and indicates further assessment is needed.

<https://www.mommyslp.com/?p=9114>

https://www.researchgate.net/figure/CAGE-Alcoholism-screening-tool_fig1_360654788

PREVENTION: Further Assess

☀ Assess

☀ Use evidence-based screening tools

☀ If the answers suggest at-risk drinking...

☀ Further assess

☀ Follow-up with more comprehensive screening tools like the full AUDIT (10 questions) or the DSM-V criteria

<p>Impaired control</p> <ul style="list-style-type: none">☐ Substance is often taken in larger amounts or over a longer period than was intended☐ There is a persistent desire or unsuccessful efforts to cut down or control substance use☐ A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.☐ Craving, or a strong desire or urge to use the substance.	<p>Social impairment</p> <ul style="list-style-type: none">☐ Recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home.☐ Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.☐ Important social, occupational, or recreational activities are given up or reduced because of substance use.
<p>Risky use of substance</p> <ul style="list-style-type: none">☐ Recurrent substance use in situations in which it is physically hazardous.☐ Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance	<p>Pharmacological criteria</p> <ul style="list-style-type: none">☐ Tolerance, as defined by either: a need for markedly increased amounts of the substance to achieve intoxication or desired effect OR markedly diminished effect with continued use of the same amount of the substance.☐ Withdrawal, as manifested by either: the characteristic withdrawal syndrome for the substance OR the substance (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.

2-3 mild * 4-5 moderate * ≥6 severe

PREVENTION: Further Assess

Table 1. Evidence-Based Screening Tools for Women at Risk (validated for women at risk; not for women with an FASD). See Appendix B of Part 1 of the TIP for Full Screening Tool.

Tool	Description	Source
T-ACE	Brief (< 2min) Designed for use in prenatal settings Easy to score No training required	Sokol, Martier and Age, 1989; additional info from Savage et al., 2003; Sarkar et al., 2009
	<ul style="list-style-type: none"> • Validity varies across ethnic populations • Identifies primarily heavy and late-stage drinkers 	
TWEAK	<ul style="list-style-type: none"> • Brief (< 2min) • Designed for use in prenatal settings • Easy to score • Optimal for racially diverse groups • Validity varies across ethnic populations • Identifies primarily heavy and late-stage drinkers 	Russell, 1994; additional info from Savage et al., 2003; Sarkar et al., 2009; Anthony, Austin, and Cormier, 2010
CRAFFT	<ul style="list-style-type: none"> • Designed and validated for detecting a range of alcohol problems with adolescents 	Knight et al., 1999; additional information from Knight, Sherrit, Harris, Shrier, and Chang, 2002.

Table 2. Additional Tools for Screening Women at Risk

Tool	Description	Source
4P's Plus	<ul style="list-style-type: none"> • Brief • Modifies 4P's screening tool • Designed to identify light to heavy prenatal use of alcohol, illicit drugs, and tobacco in obstetric settings • Demonstrated high validity in urban settings, reliably and effectively screens women including women usually missed by other perinatal screening methods 	Chasnoff et al., 2005; additional information from Chasnoff, Wells, and Bailey, 2007
5P's (Modified)	<ul style="list-style-type: none"> • Brief • Modifies 4P's to discuss drinking during pregnancy • Inclusion of peer question makes it suitable for screening pregnant teenagers • Lack of validation through study 	Kennedy, Finkelstein, Hutchins, and Mahoney, 2004; additional info from Anthony et al., 2010
Quick Drinking Screen (QDS)	<ul style="list-style-type: none"> • Brief • Use when daily drinking data is not available • Lack of validation through study 	Sobell and Sobell, 2003; additional info from Dum et al., 2009
Ten Question Drinking History (TQDH)	<ul style="list-style-type: none"> • Designed for use in prenatal settings • A longer screening tool • Lack of validation through study • May miss binge and heavy drinking 	Weiner, Rosett, and Edlin, 1982; additional info from Savage et al., 2003
Timeline Followback (TLFB)	<ul style="list-style-type: none"> • Validated across broad age range • A longer screening tool • Not specifically validated for pregnant women 	Sobell and Sobell, 1995; additional info from Dum et al., 2009



PREVENTION: Discuss

☀ Further assess

☀ If the answers suggest high-risk drinking or an alcohol use disorder...

☀ Discuss

☀ If the screening detects a potential problem, talk about it!

THE WORDS WE USE MATTER

Instead of
Dirty

Use

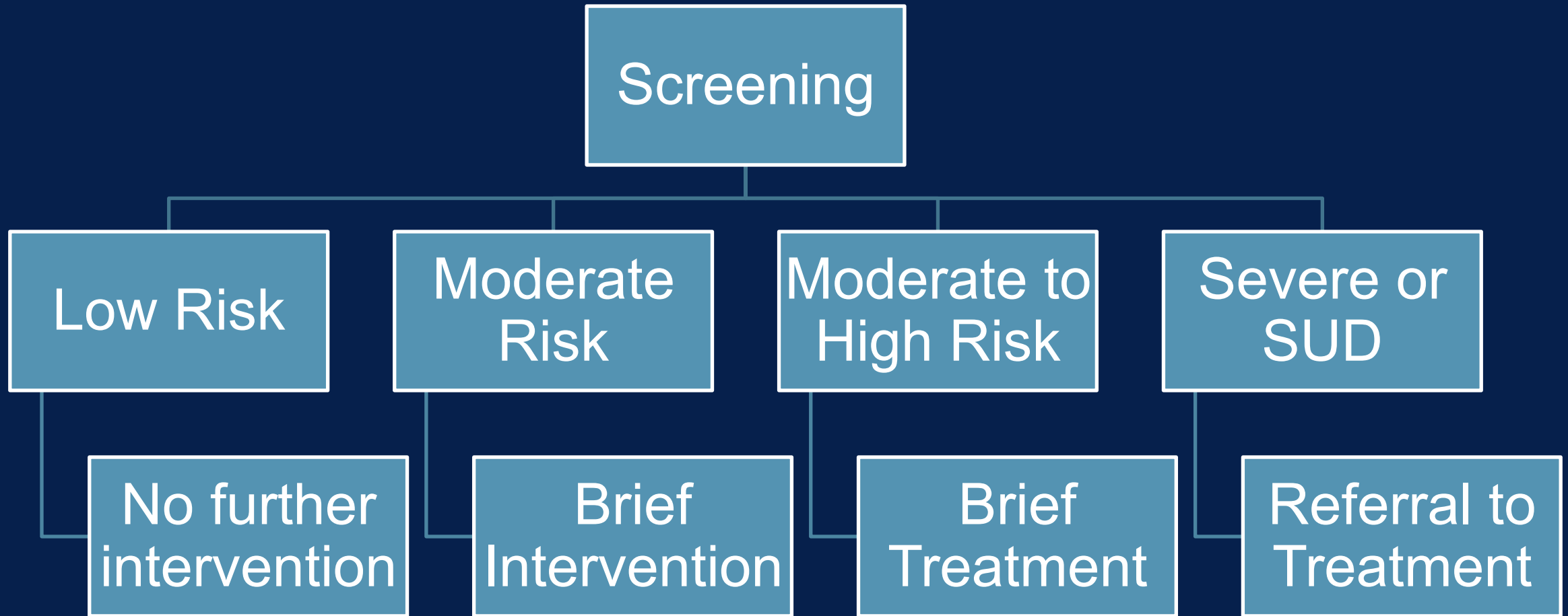
For toxicology screen results: Testing positive	For non-toxicology purposes: Individual who uses drugs
--	---

Because
It's important to use clinically accurate, non-stigmatizing language.

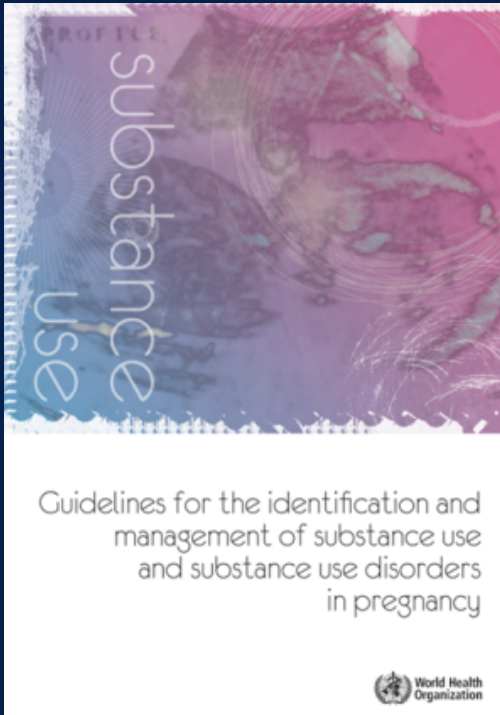
Learn more: www.penn.gov/health

pennsylvania
DEPARTMENT OF HEALTH AND SENIOR SERVICES
ALCOHOL PROGRAMS

SBIRT: Screening, Brief Intervention & Referral to Treatment



SBIRT



IDENTIFICATION AND MANAGEMENT OF SUBSTANCE USE AND SUBSTANCE USE DISORDERS IN PREGNANCY			
No.	Recommendation	Strength of recommendation	Quality of evidence
Screening and brief interventions for hazardous and harmful substance use during pregnancy			
1	Health-care providers should ask all pregnant women about their use of alcohol and other substances (past and present) as early as possible in the pregnancy and at every antenatal visit.	Strong	Low
2	Health-care providers should offer a brief intervention to all pregnant women using alcohol or drugs.	Strong	Low

- ☀ Brief interventions are effective in reducing alcohol intake and increasing rates of abstinence from alcohol during pregnancy.

PREVENTION: Brief Interventions

☀️ FRAMES:

- ☀️ **F**eedback – review screening scores, discuss the adverse effects of substance use, risks of continued use and benefits of reducing use
- ☀️ **R**esponsibility to change – the individual is responsible
- ☀️ **A**dvice – on how one can reduce or stop use
- ☀️ **M**enu of treatment options – therapies, medications, mutual support groups
- ☀️ **E**mpathy – this is central to the success of the intervention
- ☀️ **S**upporting of self-efficacy – Boost confidence without cheerleading using motivational enhancement “you can change.”
- ☀️ **D**evelop a plan to reduce use and for follow-up



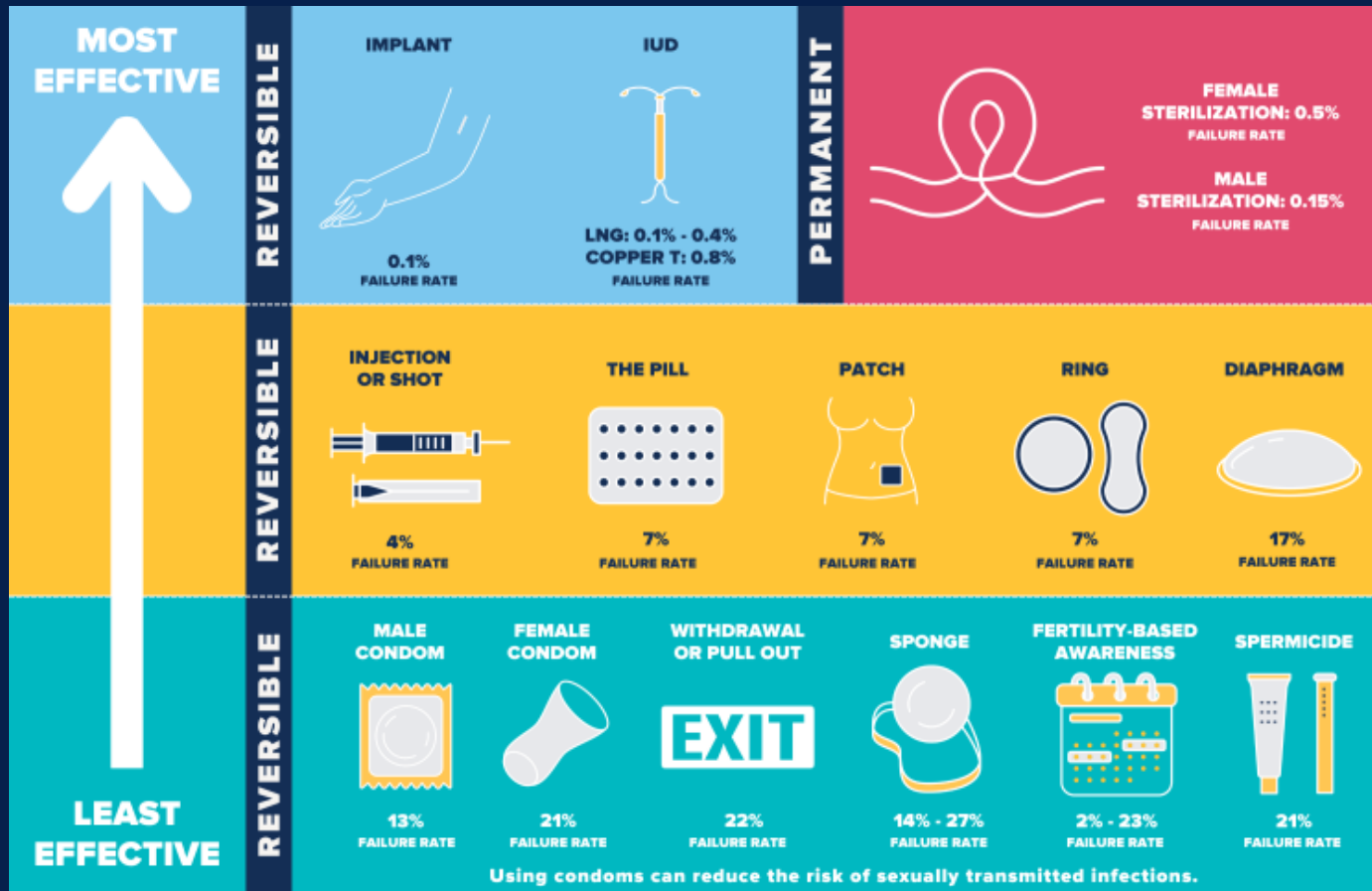
PREVENTION: Brief Treatment

- ☀ Used when screening indicates moderate to high risk:
 - ☀ Like a brief intervention as it includes FRAMES, motivational interventions and techniques to enhance patient empowerment
 - ☀ Is more comprehensive and can include:
 - ☀ Education
 - ☀ Problem solving
 - ☀ Discussions about coping mechanisms and building a supportive social environment

PREVENTION: Referral to Treatment

- ☀ Used when screening indicates severe use or extremely high risk:
 - ☀ Proactive process for those needing more than SBIRT can provide
 - ☀ Helps to ensure access to the appropriate level of care for all those who are screened
 - ☀ Be prepared with access to available resources
 - ☀ Consider having relationships with programs or treatment centers providing higher levels of care
 - ☀ Know what is available in your community and how to access treatment

PREVENTION: Addressing Contraception



https://osg.ca.gov/wp-content/uploads/sites/266/2023/01/CONTRACEPTION_chart.png

PREVENTION: Addressing Contraception

- ☀ It is important to discuss the effects of alcohol consumption on fetal development with men



PREVENTION: Addressing Contraception

- ☀ Paternal drinking habits prior to conception can have a negative impact on fetal development
- ☀ Semen from men who regularly consume alcohol impacts placental development and FAS-associated brain and facial defects.
- ☀ Changes in semen were present for at least a month after alcohol consumption stopped



<https://whenwasiconceived.info/wp-content/webp-express/webp-images/uploads/2023/06/25.-how-to-stop-sperm-from-reaching-the-egg-1024x576.png.webp>

PREVENTION: Addressing Contraception

- ☀ Male condoms are 98% effective at preventing pregnancy
 - ☀ A common reason for failure is not using a condom every time you have sex.
- ☀ Hormonal inhibitors are not widely used (decrease libido)
 - ☀ At least two non-hormonal oral contraceptive for men are currently being studied

♂ Current Male Contraceptive Options

Male condoms



Pros:
• Effective

Cons:
• Prone to failure
• Relies on individual to use it correctly
• Single-use

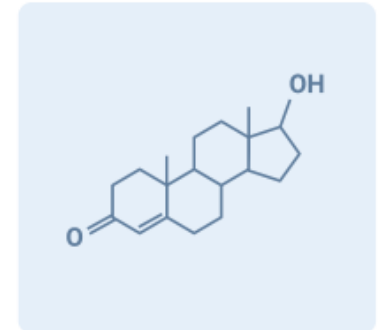
Vasectomy



Pros:
• Effective
• Permanent, though can be reversed

Cons:
• Reversal not always successful
• Invasive

Hormonal inhibitors



Pros:
• May be a flexible, convenient birth control option

Cons:
• Efficacy not proven
• May have multiple side effects

<https://www.biorender.com/blog/the-new-male-contraceptive-pill-downloadable-infographic>

PREVENTION: Addressing Contraception

- ☀️ **A woman's plan for pregnancy is the biggest predictor of risk**
- ☀️ 45% of all pregnancies in the US are unintended
 - ☀️ 40% of these pregnancies are voluntarily terminated
 - ☀️ 1/3 of all pregnancies that lead to birth are unintended



PREVENTION: Addressing Contraception

- ☀ Among all non-pregnant women, alcohol exposed pregnancy risk is:
 - ☀ 2.3 % for those not intending to get pregnant
 - ☀ 33.7 % for those intending to get pregnant
 - ☀ Women intending a pregnancy have especially high risk as they often continue to drink until they find out they are pregnant, thus exposing the developing fetus to alcohol for several weeks or even months

PREVENTION: Addressing Contraception

- ★ A woman's plan for pregnancy is the biggest predictor of risk
- ★ Among women *not intending* pregnancy 20 % reported not or inconsistently using contraception when having sex with a male partner



PREVENTION: Addressing Contraception

How Well Does Birth Control Work?

<p>Most Effective</p> <p>Less Effective</p>	<p>Sterilization</p>	<p>Implant</p>	<p>IUD</p>	<p>99% effective</p>	
	<p>Shot</p>	<p>Pill</p>	<p>Ring</p>	<p>Patch</p>	<p>92–97% effective depending on the method</p>
	<p>Diaphragm</p>	<p>Condoms (Internal/External)</p>	<p>Sponge</p>	<p>Cervical Cap</p>	<p>78–82% effective depending on the method</p>
	<p>Spermicide</p>	<p>Fertility Awareness</p>	<p>Withdrawal</p>		<p>71–76% effective depending on the method</p>

PREVENTION: Addressing Contraception

Español



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Birth Control

Birth control is how you prevent pregnancy. There are lots of different birth control options out there. We're here to help you figure it all out.

Pick what's important to you to find your best birth control method:



Doctor or Nurse
Required



Best At Preventing
Pregnancy



Easiest to Use



Helps with Periods





Less or No
Hormones



Helps Prevent STDs

PREVENTION: Addressing Contraception

What's the Best Emergency Contraception for You?			
	 Copper-T (ParaGard® IUD)	 ella®	 Plan B One-Step® Next Choice One Dose™ and others
Effectiveness	Best	Very good	Good
When to Use	Up to 5 days after unprotected sex.	Up to 5 days after unprotected sex.	Up to 3 days after unprotected sex. Less effective on days 4 and 5, but you can still use it.
Who Can Use	All women.	All women (unless breastfeeding). Less effective for women with a BMI over 35.	All women. Less effective for women with a BMI over 25. May not work for women with a BMI over 30.
How to Get	Inserted by a doctor or nurse at a health center.	By prescription from a doctor or nurse.	Most brands are available to anyone over the counter without prescription.
Extra Information	Provides very effective ongoing birth control for up to 12 years.	After using, use back up birth control (like a condom) for 14 days.	Do not use if you've already used ella since your last period.



8 Things to Know About

Plan B vs. Ella

	PLAN B	ELLA
1 What's the active ingredient?	LEVONORGESTREL	ULIPRISTAL
2 What forms does it come in?	ONE TABLET	ONE TABLET
3 When can you take it after unprotected sex?	ASAP, MAX 3 DAYS AFTER	ASAP, MAX 5 DAYS AFTER
4 How effective is it?	89%	95%
5 Do you need a prescription?	NO	YES
6 At what body weight may it become less effective?	165 lbs*	195 lbs*
7 How often can you take it?	NO LIMIT	ONCE PER MENSTRUAL CYCLE
8 When can you start hormonal birth control?	IMMEDIATELY	WAIT 5 DAYS

* People of any body weight can take Plan B and Ella. But they're slightly less effective for people with larger bodies.



PREVENTION: Addressing Contraception

- ✦ During SUD treatment intake and subsequent visits:
 - ✦ Educate all patients about the dangers of prenatal alcohol use
 - ✦ Ask about contraception use
 - ✦ Use open-ended questions and support autonomy in decision-making
 - ✦ Refer to appropriate provider if patient is interested in contraception and be sure to follow-up
 - ✦ Consider making condoms available in all treatment settings

PREVENTION: Addressing Contraception

☀ Resources for providers and patients:

☀ <https://www.plannedparenthood.org/>

☀ <https://caiglobal.org/>






☀ <https://www.nichd.nih.gov/health/topics/contraception>

☀ <https://www.cdc.gov/reproductivehealth/contraception/>

PREVENTION: Contraceptive Counseling

 CONTRACEPTIVE COUNSELING MODEL A 5-Step <i>client-centered</i> Approach		
1 Identify the client's pregnancy intentions	<ul style="list-style-type: none"> Do you want to be pregnant in the next 3 months or have a baby in the next year? 	K E Y Q U E S T I O N S & A C T I O N S
2 Explore pregnancy intentions & birth control experiences and preferences	<ul style="list-style-type: none"> How important is it to you to prevent a pregnancy? What would be hard about having a baby now? Why is now a good time for you to have a baby? What experience have you had with birth control? What is important to you in a birth control method? What does your caregiver/partner/friend think about you using birth control? 	
3 Assist with selection of a birth control method	<ul style="list-style-type: none"> If it's okay with you, I'd like to review the birth control methods that are available to make sure you have all the information you need to make a decision that is right for you. 	
4 Review method use and understanding	<ul style="list-style-type: none"> How are you feeling about your decision? What other questions or concerns do you have? Let's develop a follow-up plan in case you experience side effects. Can you repeat back to me how to use the method? 	
5 Provide birth control that same day	<ul style="list-style-type: none"> You will see the clinician next who will take a medical history and make sure the method you chose is a safe option for you. Would you like EC or condoms before you leave today? 	

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CONTRACEPTIVE COUNSELING MODEL Communication Skills		
COMMUNICATION SKILLS	WHAT DOES THIS MEAN?	THINGS YOU CAN SAY
 Open-Ended Question	Open-ended questions encourage the client to direct and focus the conversation on their own needs in relation to the topic being discussed, and encourage them to do most of the talking. They do not invite brief answers and are usually NOT answered with a "yes", "no" or a specific one word answer.	<ul style="list-style-type: none"> What are your thoughts about having a baby in the next year? What have been your experiences with birth control? How does your partner feel about using birth control? What would be good about having a baby now? What would be hard about having a baby now?
 Affirmations	Affirmations are statements that acknowledge and validate a client's strengths, efforts, experiences and involves the counselor noticing, recognizing and acknowledging the positive.	<ul style="list-style-type: none"> Your thoughtfulness is clear in the time you took to think about this. Finding the right method can be hard, and you are so determined, you've really tried to find what is right for you. You are so aware, it's good to know when you are unsure about something.
 Reflective Listening	Reflective listening is when you repeat back to the client what they have said. This includes both the content, and the feeling and meaning expressed by the client. Reflective statements can capture just content, just emotion or a combination of both.	<ul style="list-style-type: none"> You seem very clear that you don't want to be pregnant; your job is going really well and now is not a good time. Sounds like you want to use a birth control method and are unsure about using a method with hormones. I hear you saying that your mom really wants you to use birth control and you're not sure about it.
 Summarizing	Summarizing is when you repeat back to a client the key pieces of your counseling session by linking together highlights from your conversation – that can include your client's goals and priorities, reasons why they are important to them, past experiences, concerns and challenges, and any key actions they would like to take.	<ul style="list-style-type: none"> So let's recap. You came to the health center for a pregnancy test, which was negative, you don't want to be pregnant now and are interested in learning about birth control so you can keep from getting pregnant in the future. Does that sound right?
COMMUNICATION SKILLS	WHAT DOES THIS MEAN?	THINGS YOU CAN LISTEN FOR
 Recognizing & Responding to Change Talk	Clients will make statements that reveal their desire, ability, reason, need and readiness to use birth control. Recognizing and responding to these statements will support you in staying focused on the client and their goals.	Desire: I want, I would like, I wish, I hope... Ability: I can, I am able to, I could, I would... Reason: I would probably, I might, it would help me, it's important... Need: I need to, I have to, I must, I've got to... Readiness: I want, I am willing, I'm here to...



ADVOCACY AND EDUCATION

to be best in any
point of view.
Advocacy ['æd
support of an i
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ADVOCACY AND EDUCATION



A Vision of Hope

An FASD-informed world where people living with FASD and prenatal substance exposure are recognized and supported.

A Mission That Moves Us

FASD United empowers people living with FASD and prenatal substance exposure to educate systems of care and the public, enact policies, and unite communities everywhere.

<https://fasdunited.org/>

ADVOCACY AND EDUCATION



<https://nofasjusticecenter.org/>

The FASD United Justice Center was established to address issues surrounding Fetal Alcohol Spectrum Disorders (FASDs) and the justice system

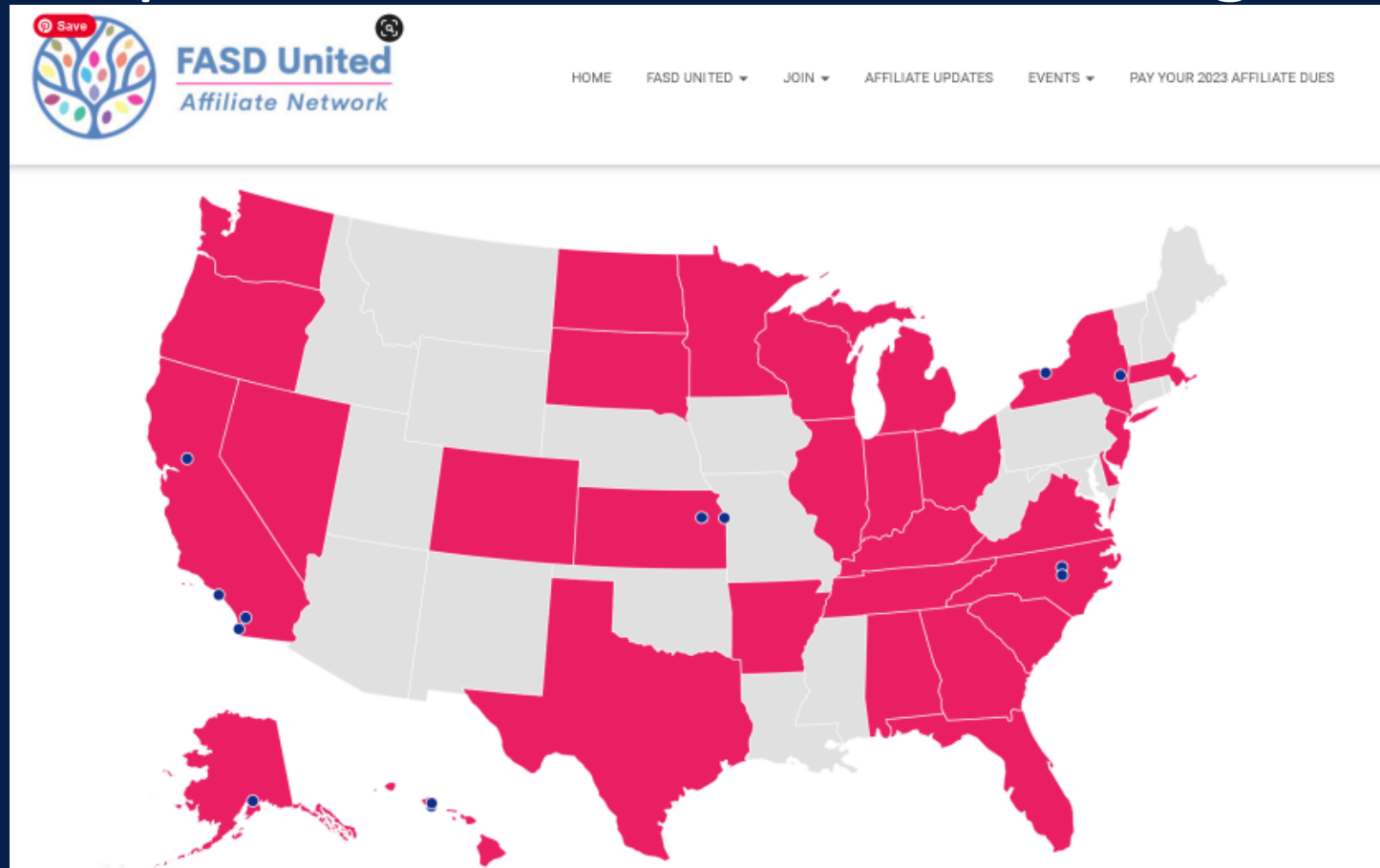


<https://nofaspolicycenter.org/>

The FASD United Policy and Training Center was established in 2020 to achieve public policy outcomes on behalf of individuals living with FASD and to train stakeholders to participate effectively in the pursuit of policy objectives.

ADVOCACY AND EDUCATION

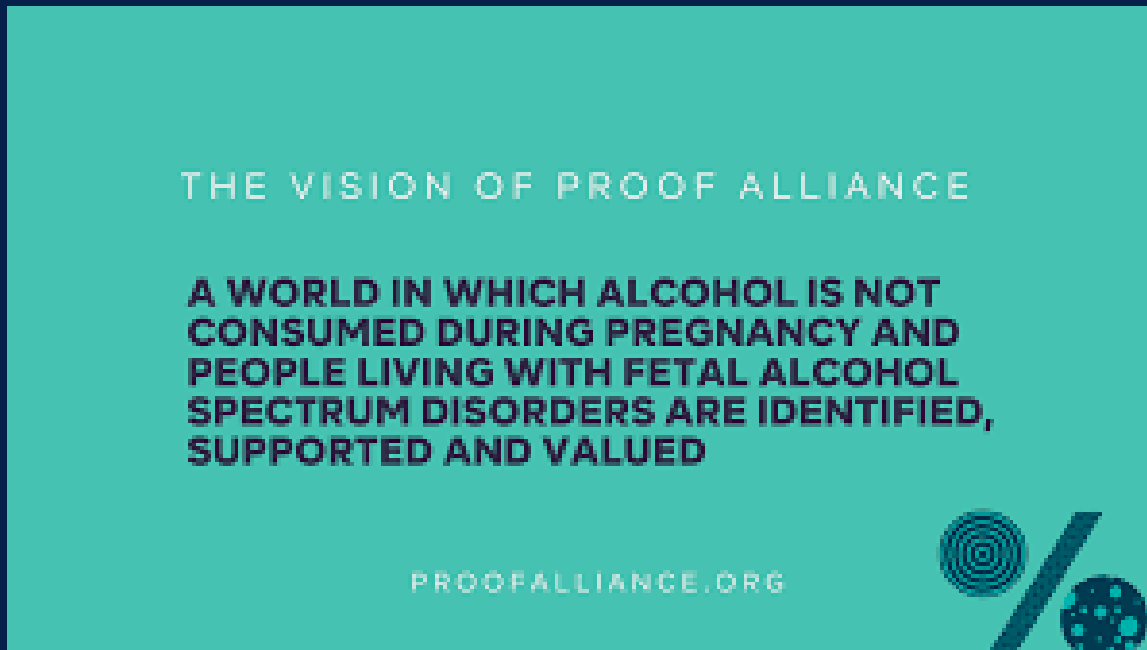
<https://nofasaffiliatenetwork.org/>



ADVOCACY AND EDUCATION

<https://www.proofalliance.org/>

<https://fasdcenter.org/>

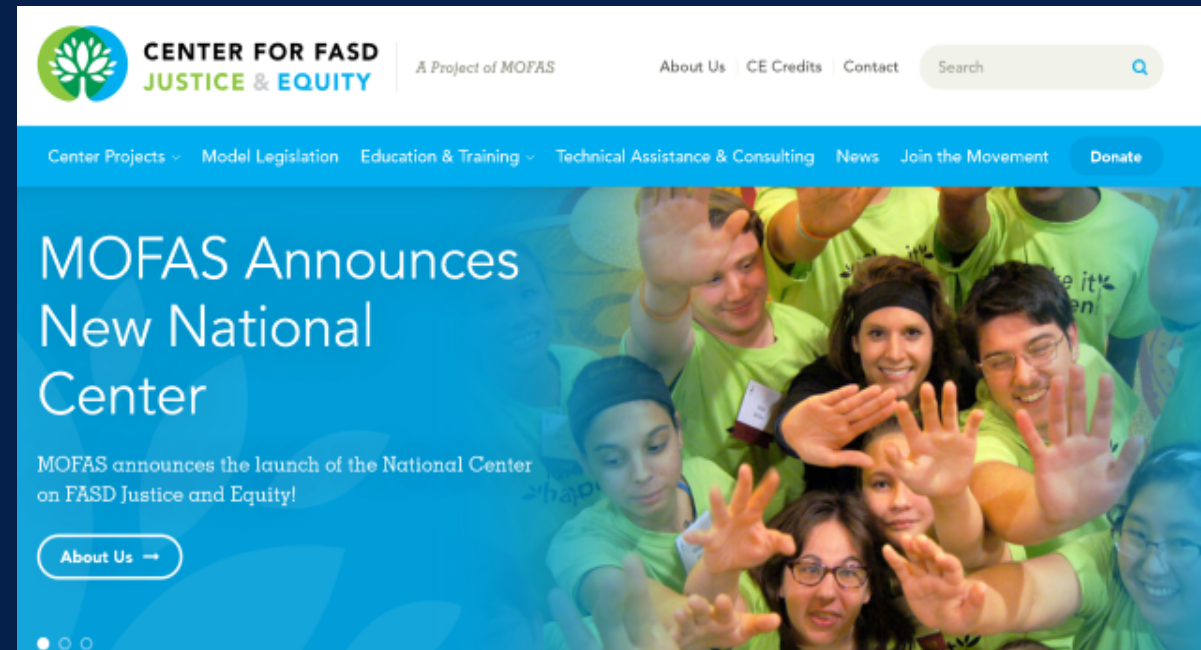


THE VISION OF PROOF ALLIANCE

A WORLD IN WHICH ALCOHOL IS NOT CONSUMED DURING PREGNANCY AND PEOPLE LIVING WITH FETAL ALCOHOL SPECTRUM DISORDERS ARE IDENTIFIED, SUPPORTED AND VALUED

PROOFALLIANCE.ORG

The banner features a teal background with white and black text. In the bottom right corner, there are three circular icons: a spiral, a percentage sign, and a cluster of dots.



CENTER FOR FASD JUSTICE & EQUITY A Project of MOFAS

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MOFAS Announces New National Center

MOFAS announces the launch of the National Center on FASD Justice and Equity!

About Us →

The banner features a blue background with a group of diverse people in green shirts making hand gestures. The text is white and blue.

FINAL TAKEAWAYS

- ☀ FASDs are extremely common and 100% preventable
- ☀ Screening, education and treatment are vital to prevention
- ☀ Advocating for funding of FASD research, treatment and services is key

QUESTIONS



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