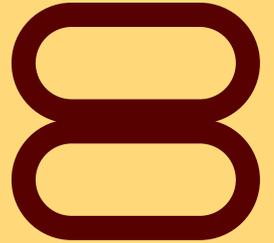
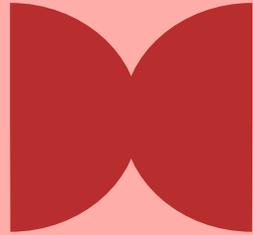


# Fetal Alcohol Spectrum Disorders: *Signs, strengths, & support*



Natalie Welcher, MS, CCC-SLP  
March 20th, 2026

# Welcome to the presentation!

I have no financial interests to disclose.

- ASHA Member
- Board Secretary of Arkansas Speech-Language-Hearing Association (ArkSHA)
- Committee Member of ArkSHA





## Natalie Welcher, MS, CCC-SLP

Speech Language Pathologist

- University of Central Arkansas - Conway, AR
- Diagnostic + treatment for FASD
- FASD Special Interest Groups
- Trainee in SAFEST Choice FASD ECHO Program
  
- Brody, Beau, and Barrett
- Venturing to excellent restaurants, traveling with friends, and "country life" things

Why did you sign up for  
this presentation?

Are you familiar with  
FASD?

Ready to make a change?



# Objectives

1

Identify common symptoms of fetal alcohol spectrum disorders.

2

Explain barriers to diagnostic testing or receiving a diagnosis of one of the fetal alcohol spectrum disorders diagnoses.

3

Describe the basic concept of the neurobehavioral approach for intervention in multiple environments.

# Fetal Alcohol Spectrum Disorders (FASD)



“Umbrella term” for a group of diagnoses that can occur as a result of prenatal alcohol exposure (PAE).

*Spectrum - different symptoms and severity*

# Specific FASD Diagnoses

FAS

Fetal alcohol syndrome

pFAS

Partial fetal alcohol syndrome

ARND

Alcohol-related neurodevelopmental disorder

ARBD

Alcohol-related birth defects

ND-PAE

Neurobehavioral disorder associated with prenatal alcohol exposure

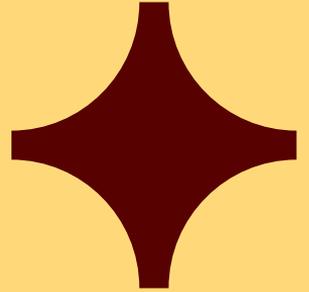
# FAS Facial Features



FAS:  
10%

Other FASD: 90%

# Prenatal Alcohol Exposure



**How much alcohol exposure is needed for a pregnancy to be at risk for FASD?**

**More than 13 standard drinks per month**

**More than 2 standard drinks at one time**

# “Standard Drink”

## *Beer*

12 fl oz of beer with 5% alcohol

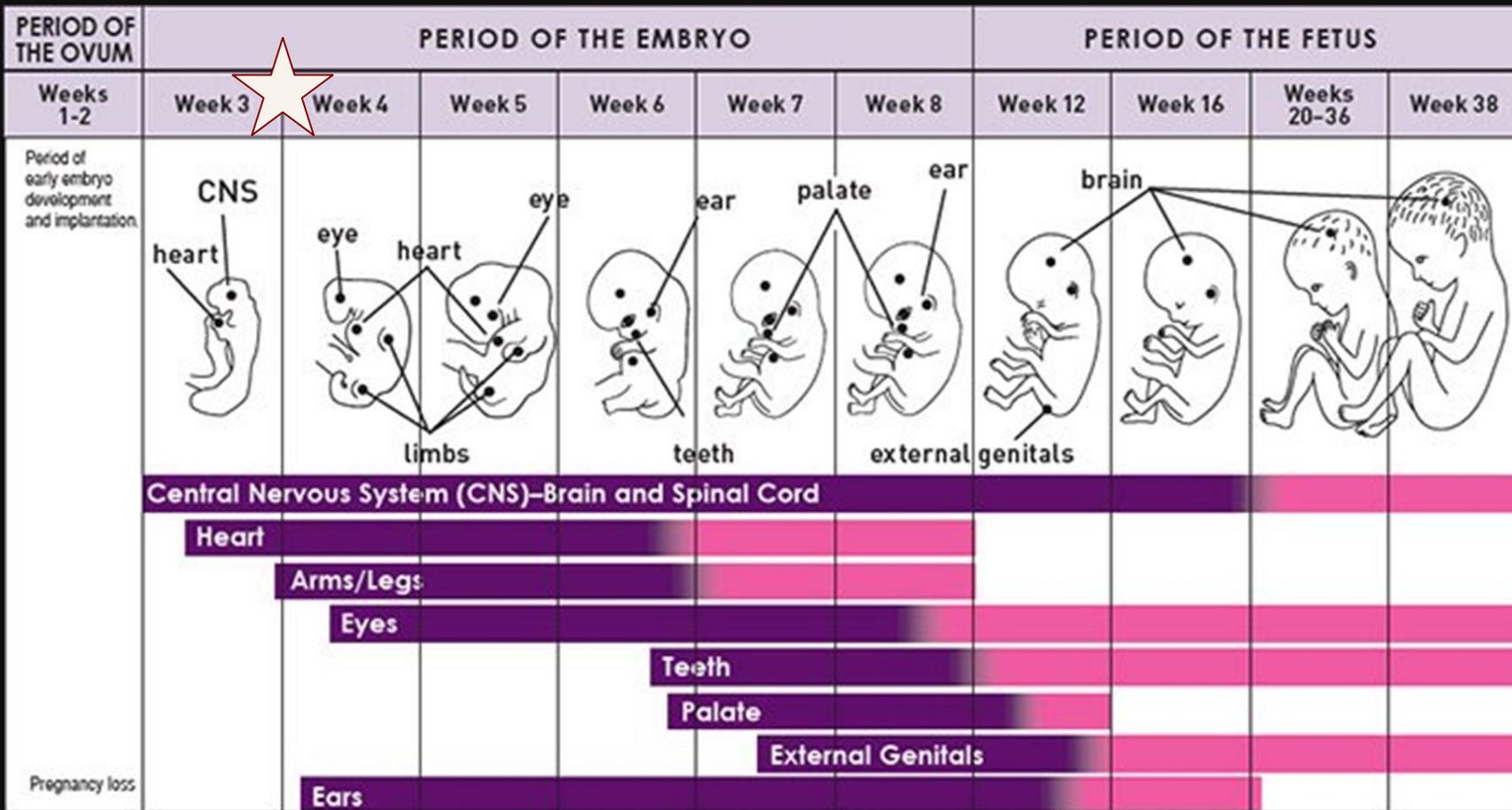
## *Liquor*

1.5 fl oz of liquor with 40% alcohol

## *Wine*

5 fl oz of wine with 12% alcohol





Period of development when major defects in bodily structure can occur.

Period of development when major functional defects and minor structural defects can occur.

Adapted from Moore, 1993 and the National Organization on Fetal Alcohol Syndrome (NOFAS) 2009

\*This fetal chart shows the 38 weeks of pregnancy. Since it is difficult to know exactly when conception occurs, health care providers calculate a woman's due date 40 weeks from the start of her last menstrual cycle.

## ***Prenatal alcohol exposure can impair brain development throughout all stages of gestation.***

- Alcohol rapidly reaches the fetus
- Amniotic sac serves as a reservoir for alcohol, prolonging fetal exposure
- Approximately *1 in every 13* infants prenatally exposed to alcohol will develop an FASD

**“No safe amount** during pregnancy. **No safe time** during pregnancy to drink alcohol. **No safe type** of alcohol to drink during pregnancy, including red or white wine, beer, and liquor.”

# What is the prevalence of FASD in the United States?

**Conservative Estimate: 1 in 20**

**Weighted Estimate: 1 in 10**



# FASD + Foster Care

70% of children identified with FASD are in foster care

Studies indicate rates of FASDs are 17x - 19x higher in child welfare systems than in the general population.

# FASD + Trauma

In a study of 84 children (ages 4–12) with an FASD, almost 88% of individuals experienced three or more subtypes of trauma.

So what is the problem?

# What are the barriers?

Why are less than 1% being diagnosed?

- Stigma
- Misdiagnosis or missed diagnosis
- Diagnostic standards are not uniform
- Lack of screening for prenatal alcohol exposure
- Limited birth history or records

## Stories of FASD Stigma



*“Researchers at the Centre for Addiction and Mental Health (CAMH) have identified 428 distinct disease conditions that co-occur in people with Fetal Alcohol Spectrum Disorders (FASD), in the most comprehensive review of its kind.”*



	FASD	ADHD	ODD
<b>Behavior</b>	Does not complete tasks		
<b>Underlying cause for the behavior</b>	<ul style="list-style-type: none"> <li>▪ May or may not take in the information</li> <li>▪ Cannot recall the information when needed</li> <li>▪ Cannot remember what to do</li> </ul>	<ul style="list-style-type: none"> <li>▪ Takes in the information</li> <li>▪ Can recall the information when needed</li> <li>▪ Gets distracted</li> </ul>	<ul style="list-style-type: none"> <li>▪ Takes in the information</li> <li>▪ Can recall the information when needed</li> <li>▪ Chooses not to do what they are told</li> </ul>
<b>Interventions for the behavior</b>	Provide one direction at a time	Limit stimuli and provide cues	Provide positive sense of control, limits, and consequences

(D Dubovsky 2002)

Co-occurring conditions are common with FASD. It is recommended that interventions shown to work with FASD are used first, then you can also provide other inventions related to ADHD and/or ODD.

## Approaches

1. DSM-5 clinical mental health criteria to recognize Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE)
2. 1996 Institute of Medicine (IOM) framework
3. FASD 4-Digit Diagnostic Code, Third Edition
4. Fetal Alcohol Spectrum Disorder: A Guideline for Diagnosis Across the Lifespan (Cook et al, *CMAJ*, 2015)

Lack of  
screening for  
prenatal alcohol  
exposure



# Solution

## *AAP PAE Screening Guide*

1. "How far along were you before you found out you were pregnant?"
2. "Before you knew you were pregnant, how much alcohol (beer, wine, or liquor) did you drink?"
3. "After you found out you were pregnant, how much alcohol did you drink?"

## Limited birth records or history

Foster/adoptive

Multiple PCPs

Information not  
recorded appropriately

Lack of prenatal care



# Symptoms of FASD

People with FASD may have difficulty in the following areas:

- Learning or academics
- Emotional or behavioral regulation
- Memory
- Language
- Executive functioning
- Social skills
- Daily living skills or adaptive functioning
- Meeting developmental milestones



# Preschool

- Frequent meltdowns difficult to calm
- Hyperactivity and impulsivity
- Delayed language skills
- Impaired motor skills
- Sensory needs
- Dressing, bathing, feeding, etc.



# Elementary

- Attention difficulties (sustained and shifted)
- Physical and/or verbal aggression when upset
- Shuts down or withdraws when frustrated
- Lack of understanding consequences
- Difficulty making and/or keeping friends
- Executive dysfunction



# Middle - High School

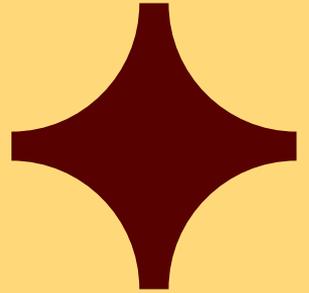
- Barely passing or failing grades
- Poor organization of materials
- Difficulty remembering due dates, test days, homework, etc.
- Social-emotional dysmaturity
- Engaging in risky or unsafe choices
- Poor judgement in friends or influences

How many  
children did you  
think of while  
talking about  
these  
symptoms?

*CONNECTION:*

Pick an individual that came to mind and consider them throughout the rest of the presentation.

# Neurobehavioral Approach



# What is the Neurobehavioral Approach?

“Developed over 25 years ago by Diane Malbin to support individuals prenatally exposed to alcohol. The nonprofit FASCETS was established in 1997 to provide information and training on this brain-based approach, which has now transformed the lives of thousands worldwide.”

# Traditional Thinking



Antecedent



Behavior



Consequence

**Find the perfect consequence for the behavior...no more behavior!**

# Neurobehavioral Approach



Antecedent

**SUPPORT**



Behavior

**Analyze the environment and/or expectations...provide support!**



# Consider...

Social skills

Executive functioning

Sensory processing

Language skills

Academic abilities

Emotional regulation

Provide...

Appropriate expectations

Individualized supports

Modeling

Repetition

Cues or prompts

Co-regulation



## Creative timers and reminders

Alexa  
Google  
Siri



## “200x”

Multiple times  
Different ways  
Routine consistency  
Reteach and reinforce



## Visual supports

Schedules, checklists, etc.  
Less is more  
Readily available



## Sensory support

OT friends  
Sensory diet  
Incorporation  
Supports are accessible

# Strengths

*We all have them!*



Friendly

Helpful

Forgiving

Hands-on

Perseverance

# All Environments



Parents/Caregivers



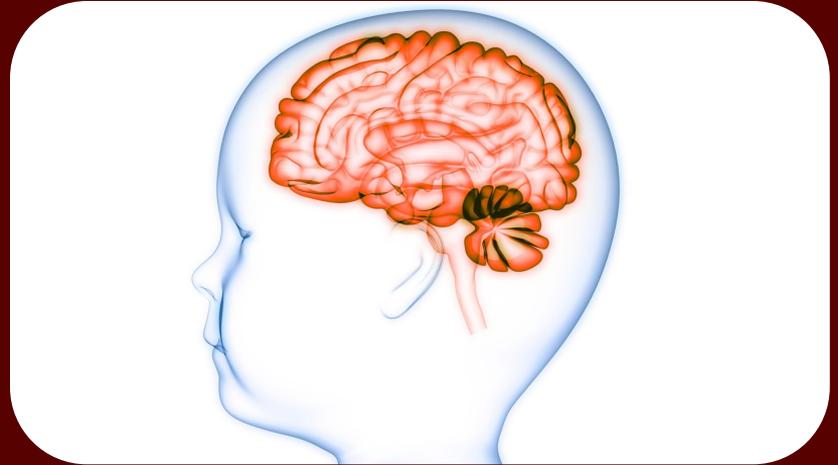
Teachers and School Staff



Therapists and Health Professionals

# Remember...

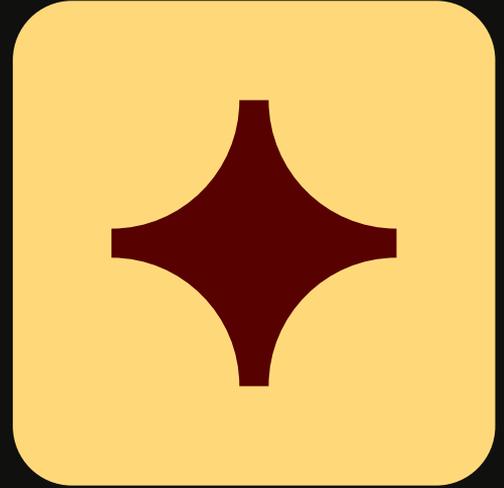
- Brain-based disorder
- Organic brain injury
- Neurodevelopmental disorder
- Brain differences
- Impairment in neurocognition
- Impairment in self-regulation
- Impairment in adaptive function
- Symptoms not behaviors





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Thank you!



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