Minnesota Organization On Fetal Alcohol Syndrome
Our mission is to eliminate disability caused by alcohol consumption during pregnancy and to improve the quality of life for those living with Fetal Alcohol Spectrum Disorders throughout Minnesota.

Our vision is a world in which women do not drink alcohol during pregnancy and people living with Fetal Alcohol Spectrum Disorders are identified, supported, and valued.
Change the Environment, Not the Child: Fetal Alcohol Spectrum Disorders (FASD) & Strategies for School Success
Objectives

1. Define Fetal Alcohol Spectrum Disorders (FASD).
2. Understand the learning and behavioral challenges that children and adolescents with an FASD face.
3. Learn about evidence-based educational and behavioral interventions to support children and adolescents with an FASD in an academic setting.
What are FASDs?

A group of birth defects that can result from prenatal exposure to alcohol

• May include physical, mental, behavioral, and learning disabilities
• Prenatal alcohol exposure affects each person differently
• Lifetime disability that can affect brain structure and functioning
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>FAS</td>
<td>Fetal Alcohol Syndrome</td>
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<tr>
<td>PFAS</td>
<td>Partial Fetal Alcohol Syndrome</td>
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<tr>
<td>ARND</td>
<td>Alcohol Related Neurodevelopmental Disorder</td>
</tr>
<tr>
<td>ARBD</td>
<td>Alcohol-Related Birth Defects</td>
</tr>
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</table>

Stratton et al., 1996
Audience Poll

Have you worked with a child with an FASD or suspected prenatal alcohol exposure?

A. Yes
B. No
C. Not Sure
FASD is Common

• 1 in 100 live births in the US

• Nationally 1 in 13 pregnant women report alcohol use

• More than 8,500 babies are born in Minnesota prenatally exposed to alcohol each year

• FASD occurs in all racial, ethnic and socioeconomic groups
  
  CDC, 2011/SAMHSA, 2006
Impact of Prenatal Exposure

Of all the substances of abuse: including cocaine, heroin, and marijuana, alcohol produces by far the most serious neurobehavioral effects in the fetus resulting in life-long permanent disorders of memory function, impulse control and judgment.

IOM Report to Congress dated 1996
Impact of Alcohol on Learning

• Deficits in **information processing**, leading to learning problems
Impact of Alcohol on Learning

• Difficulty with reading comprehension
• Difficulty with math and visual-spatial abilities
• Executive functioning problems
• Poor self-control:
  • Inattentive
  • Impulsive
  • Explosive
Impact of Alcohol on Social Development

- Difficulty forming and maintaining social relationships
- Difficulty putting themselves in “someone else’s shoes” or perspective taking
- May not connect actions with consequences
Impact of Alcohol on Social Development

Strong need for acceptance + impulsivity + poor decision-making = social vulnerability
Input vs. Output
Myth or Fact?

Children with an FASD have identifiable and specific facial features.
Fetal Alcohol Syndrome (FAS) is characterized by distinctive facial features...

But, the majority of individuals on the spectrum will look like their peers.
Red Flags

- In foster care or raised in adoptive home
- Many mental health diagnoses
- Easily distracted, hyperactive, inattentive, impulsive
- Extreme behavior (aggressive; emotional)
- Poor social skills
• Poor organization and planning
• Difficulty problem-solving
• Difficulty generalizing
• Difficulty completing tasks independently
• Problems with abstract concepts
• May give inconsistent answers to questions
• Difficulty learning. Repeats the same mistakes.
Interventions for School Success

• Keep **expectations** developmentally appropriate and reframe behaviors.

• Make the changes to the **environment** to support learning.
Don’t try harder...try differently

If you’ve told a child a thousand times and he still does not understand, then it is not the child who is the slow learner.

- Walter Barbee
Testimonial
A Parent’s Perspective

Suzanne McArdle
Adoptive Parent
Managing Expectations

Chronic Age 18 with FAS/FAE

<table>
<thead>
<tr>
<th>Skill</th>
<th>Developmental Age Equivalent</th>
</tr>
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<tbody>
<tr>
<td>Emotional maturity</td>
<td>6</td>
</tr>
<tr>
<td>Comprehension</td>
<td>6</td>
</tr>
<tr>
<td>Social Skills</td>
<td>7</td>
</tr>
<tr>
<td>Money, Time Concept</td>
<td>8</td>
</tr>
<tr>
<td>Living Skills</td>
<td>11</td>
</tr>
<tr>
<td>Reading Ability</td>
<td>16</td>
</tr>
<tr>
<td>Physical Maturity</td>
<td>18</td>
</tr>
<tr>
<td>Expressive Language</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age 6</th>
<th>Age 6 going on 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow 3 instructions</td>
<td>Follow 1 instruction</td>
</tr>
<tr>
<td>Listen, pay attention</td>
<td>Pay attention for 10 minutes</td>
</tr>
<tr>
<td>for 1 hr.</td>
<td></td>
</tr>
<tr>
<td>Line up on their own</td>
<td>Need to be shown &amp; reminded</td>
</tr>
<tr>
<td>Remember events</td>
<td>Require reminders about tasks</td>
</tr>
<tr>
<td>&amp; requests</td>
<td></td>
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</tbody>
</table>

Age 10 Going on 6 developmentally
Read books without pictures---Beginning to read, with pictures
Learn from worksheets---------Learn experientially
Answer abstract questions------Mirror and echo words, behaviors
Structure their own recess------Require supervised
& structured play
Get along & solve problems-----Learn from modeled problem solving
Know right from wrong--------Developing sense of fairness
Have physical stamina---------Easily fatigued by mental work

# Reframe Behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Misinterpretation</th>
<th>Reframed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncompliance</td>
<td>Willful Misconduct, Attention-Seeking, Stubborn</td>
<td>Difficulty translating verbal directions into action</td>
</tr>
<tr>
<td>Often Late</td>
<td>Lazy, Slow, Poor Parenting, Willful Misconduct</td>
<td>Can’t understand abstract concept of time</td>
</tr>
<tr>
<td>Lying</td>
<td>Deliberate or sociopathic behavior, Dishonesty</td>
<td>Memory/Sequencing Problems, Trying to Please</td>
</tr>
</tbody>
</table>

Dan Dubovsky, SAMHSA FASD Center for Excellence
"It's a quarter past 12."

"It’s not quarter past 12, the microwave says 12:15. It can’t be quarter past 12 because a quarter is 25 cents and 25 isn’t 15."

(Lasser, 1999)
Stay Off the Rollercoaster...if you can!

“I used to ride the rollercoaster—the highs and lows---with my son. It’s been hard, but I’ve learned to get off of the rollercoaster and stay on the platform.”

Parent of a teen with an FASD
Interventions for School Success: Learning
Eight Essentials for Success

Concrete
Supervision
Structure
Specific
Simplicity
Consistency
Repetition
Routine

From 8 Magic Keys – developed by Deb Evensen and Jan Lutke 1997
Learning: Create “External Brain”

• Establish class routines
• Provide checklists of routines that students can see and use at their desks
  1. Hang up your jacket
  2. Hang up your backpack
  3. Put your notebook in the basket
• Use pictures, charts, and large visual formats
• Divide assignments into short, manageable tasks. Give directions for each task.
Learning

• Provide one instruction at a time
• When giving verbal instructions, write down the main points or provide written information for the student
• Emphasize quality vs. quantity in rote learning tasks
• Introduce day planners and the concept of a “point person”
• Provide extra time to complete work & reduced workload
Learning

• Remember, performance may vary from day to day
• Start where the child is at that day
• Don’t forget the importance of transitions
• One new skill per day
• Repeat as necessary
Accommodations at School

• IEP vs. 504 Plan
• Consider educational diagnostic categories
• EBD vs. OHD
• Self-contained classroom or one-on-one teaching
• Paraprofessional involvement
• Parent involvement
• Behavior management
• Acceptance and advocacy for FASD
Making IEPs Work

"I just want to walk into an IEP meeting on my child one day and have them say, 'Ah, the expert is here. Thank you for coming. Help us learn about your child and what makes him/her so special.' Oh, what a wonderful dream it would be!"

(Author Unknown)
Behavioral Interventions

• Detentions & suspensions are often not effective
• Consequences are necessary, but do not expect them to extinguish a behavior
• Avoid using removal of recess or gym time as consequence
• Help students learn from their mistakes by working to shape desired behaviors
• Use positive reinforcements
Behavioral Interventions

• All staff use the same words for each rule
• Check whether student know & understand what the rules mean
• If a student doesn’t follow a rule, adult corrects the behavior immediately without scolding & encourages the child to try the behavior again, this time following the rule
Social Interventions

• Teach social skills directly.
• Be clear & specific about what is appropriate/inappropriate behavior.
• Teach about personal space using hula hoops or masking tape as visual cues
• Introduce the concept of seeing things from another person’s point of view. Use role-playing to help build understanding.
Emerging Interventions

• Training of friendship skills
• Cognitive ‘habilitation’ (remediation) approaches: attention training, working memory training, executive control training
• Self-regulation interventions
Emerging Interventions

- Families Moving Forward: MOFAS
- Social Skills Training: Lifetrack Resources (St. Paul)
Families Moving Forward

- Behavioral consultation program
- Designed to increase parental self-efficacy and decrease problem behaviors
- Provides guidance and instruction to caregivers on using strategies to change the environment to reduce behavior triggers
- Available through a partnership with MOFAS
Physical Activity Intervention

• Researchers found that exercise improves performance in cognitive tasks and led to functional changes in brain cells - to the point that FASD mice were indistinguishable from normal mice

• Human trials are pending
Nutritional Intervention

- Choline is a component of myelin sheath that surrounds nerve fibers
- Animal studies showed choline supplementation enhances development of brain cells and connections for memory and learning
- U of M choline research study
- Vitamin D?
Interventions for School Success: Transition Planning
A Population At-Risk

As young adults, concerns may include:

- Depression and suicidal thoughts
- Social and sexual exploitation
- Pregnancy or fathering a child
- Unpredictable behavior
- Withdrawal and isolation
- Homelessness
- Substance abuse and mental illness
- Arrest, incarceration, and other legal problems
- Violence and abuse
Co-Occurring Disorders

The following were the most commonly seen co-occurring problems:

- Mental health problems: 90%
- Disrupted school experience: 60%
- Trouble with the law: 60%
- Confinement (includes inpatient treatment or incarceration): 50%
- Inappropriate sexual behavior: 50%
Challenges to Independent Living

Adults with FASD:

• 50% had trouble finding a job
• 60% had trouble keeping a job
• 80% had trouble managing money and making decisions

(Streissguth et al., 1996)
"One of the things that I've learned, because I'm very, very impulsive -- I had some huge, nasty bills when I started living on my own," Sargent says. "If I had access to my money, nine times out of 10 I'm not going to think about the rent, I'm not going to think about the phone bill, I'm not going to think about electricity."

(Hunter Sargent, MPR, 2011)
Testimonial
A Parent’s Perspective

Linda Walinski, RN, LP
Planning for the Future

• Start early!
• Identify resources and stakeholders
• Get an updated assessment of functioning
• Consider:
  1. What level of support does the adolescent need to function in home, education, work settings?
  2. How much to involve adolescent in planning?
  3. Who can advocate for this individual?
Goals of Transition Program

1. Develop goals for the future
2. Design a high school education that helps the student to gain skills needed to reach his or her goals
3. Identify needed post-secondary school services and supports, linking students and families with services before they leave the special education system
Recognize Strengths

- Highly verbal
- Artistic, musical
- Athletic
- Long term visual memory
- Willing
- Helpful
- Loyal
- Curious

- Energetic and hard working
- Want to succeed
- Forgiving
- Spontaneous
- Good with young kids
- Friendly and outgoing
### Make a Mental Shift

<table>
<thead>
<tr>
<th>From seeing the student as...</th>
<th>To understanding the student as...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Won’t Bad, annoying Lazy, unmotivated Acting young Trying to get attention</td>
<td>Can’t Frustrated, challenged Trying hard, tired of failing Developmentally younger Needing contact, support</td>
</tr>
<tr>
<td>Professional shifts from...</td>
<td>To...</td>
</tr>
<tr>
<td>Stopping behaviors Behavior modification Changing people</td>
<td>Preventing problems Modeling, visual cues Changing environments</td>
</tr>
</tbody>
</table>

Diane Malbin (2002). Trying differently, rather than harder
Self-Reflection

Have your attitudes and perspectives on educating students with an FASD changed after attending this training?

A. Not at all
B. A little
C. Moderately
D. Quite a bit
Summary

Build understanding within your schools!

- The challenges to learning that the student with FASD is experiencing are caused by brain damage.

- Although individuals can learn many coping strategies, the brain damage is permanent.

- The prenatal effects of alcohol are varied, and no two individuals affected will have identical characteristics or needs. Consider each child’s unique strengths and developmental needs.

- Accommodations are needed to support learning, behavior, and social development.
Resources

MOFAS Resource Directory
http://www.mofas.org

Families Moving Forward
http://www.mofas.org/2012/09/families-moving-forward/

MOFAS In School Consultations

FASD Educational Strategies

MOFAS Basic, Standard, and Customized Training for Schools
http://www.mofas.org/professionals/training/
Questions?

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Minnesota Organization on Fetal Alcohol Syndrome

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