

## ***Preventing Fetal Alcohol Spectrum Disorders (FASD)***

***Broadcast Date: March 2, 2006***



### **Faculty**

**Kathleen Mitchell, MHS, LCADC**  
Vice President and National Spokesperson  
National Organization on Fetal  
Alcohol Syndrome (NOFAS)  
and  
Consultant to Emory Regional Training Center  
Atlanta, Georgia

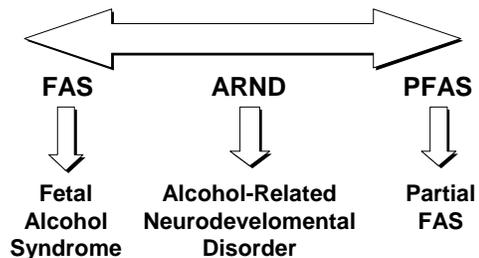
### **Program Objectives**

- Identify the specific criteria for diagnosis of Fetal Alcohol Syndrome (FAS) and understand how timing and dosing of prenatal alcohol can affect fetal development.
- Gain knowledge of behaviors and disorders that are consistent with individuals with Fetal Alcohol Spectrum Disorders (FASD).

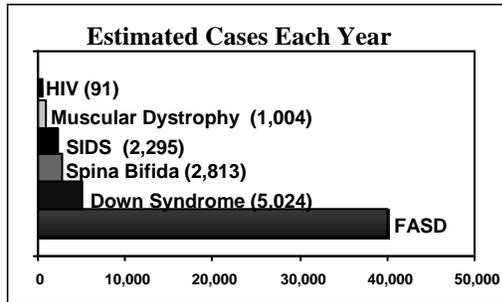
### **Program Objectives**

- Gain knowledge of biological, social and environmental differences in identifying and treating substance-abusing women.
- Identify techniques for assessing, intervening and engaging addicted women into the healing process.
- Discuss how families that give birth to children with FASD are affected.

### **Fetal Alcohol Spectrum Disorders**



## 40,000 New Cases of FASD Annually



## Costs of FAS

- FAS costs U.S. \$5.4 billion annually.
- An FAS birth carries lifetime health costs of \$860,000, although can be as high as \$4.2 million.
- Including quality of life, FAS prevention may be “cost effective” at up to \$850,000 per child.
- 1 in 100 births in the U.S. will have effects from exposure to alcohol.

## National Organization on Fetal Alcohol Syndrome Vision Statement

A global community free of alcohol-exposed pregnancies and a society supportive of individuals already living with Fetal Alcohol Spectrum Disorders (FASD)

## What Does NOFAS Provide?

- Public Awareness
    - Media Outreach
    - PSA
    - Awareness Campaigns
    - Youth Education
  - Professional Education
    - Curricula
    - Provider training
- [www.nofas.org](http://www.nofas.org)

## What Does NOFAS Provide?

- Advocacy
    - Government Affairs
    - Advisory
  - Constituent Services
    - Affiliate Network
    - Birth Mom Network
    - Support Groups
    - Consultation
    - Referral
- [www.nofas.org](http://www.nofas.org)

## Website, Newsletters, PSA's, Posters & Fact Sheets



[www.nofas.org](http://www.nofas.org)

**Circle of Hope**  
Sponsored by SAMHSA, FASD  
Center for Excellence



**Warrior Mom Network**



**Mission Statement**  
The mission of the Circle of Hope is to increase understanding and support and strengthen recovery for women who drank during their pregnancy(s), and their families.

**Goals**  
Improve and strengthen the lives of birth families. Provide peer support for birth families. Decrease the stigma, blame and shame that birth families may experience.

## Substance Use in Pregnancy

- Overall rates of alcohol use among pregnant women have declined since 1995. But rates of frequent and binge drinking remain at high levels.
- More than 130,000 pregnant women per year in the U.S. consume alcohol at risk levels.

## Substance Use in Pregnancy

- 1 in 30 women who know they are pregnant reports “risk drinking”.
- 1 in 7 women of childbearing age engage in "risk drinking".
  - Birth defects associated with alcohol exposure can occur before a woman knows she is pregnant.
  - Nearly 50% pregnancies are unplanned.

## 2 Things Necessary for Life:

- Water
- Women

- Myth:
  - An addict will not go into treatment until they have hit bottom.
- Truth:
  - An addict lives on an emotional bottom, we just need to take the time to tell them.

## Women Identify the Top Three Barriers to Addiction Treatment

- 39% said the inability to admit the problem is severe enough to warrant treatment (denial).
- 32% said the lack of emotional support for treatment from family members.
- 28% inability to provide adequate care for children.

## Women and Treatment

- Women receive the most benefit from treatment programs that provide comprehensive services for meeting their basic needs including access to:
  - Food, clothing, shelter
  - Transportation
  - Employment/vocational counseling
  - Legal assistance
  - Literacy training and educational opportunities
  - Child care
  - Social services

## Progression of Alcoholism

Stage 1 - Tolerance	Stage 2 - Physical Dependency	Stage 3 - Major Organ Change
high tolerance with occasional use	increased tolerance/possible a.m. use	possible daily or maintenance use (reduced tolerance)
occasional hangovers	withdrawal: headaches/nausea (anorexia, high BP, loss of concentration, weakness)	migraines vomiting rapid pulse, BP disorientation
disrupted sleep patterns	sleeplessness	insomnia
Colds/ infections	disease pathology developing	major organ damage
Irritability-mood swings-mild depression-isolation	MH diagnosis (depression, anxiety, panic) institutions and rx	suicidal ideation or attempts

K. Mitchell, 2004

Stage 1 Tolerance	Stage 2 Physical Dependency	Stage 3 Major Organ Change
memories of how nice use was	preoccupation/craving	use despite consequences
one-two gateway drugs	variety of drug use	multiple drug addictions
mild tremors	intentional tremors	seizures or D.T.'s
sexual pleasure	sexual problems	impotence
family problems	school & work problems	loss of family, job & school
trouble with the law (close calls)	DWI-DUI / possession	incarcerations

K. Mitchell, 2004

## Women Can and Do Recover From Addictive Disease; Treatment Needs To Include the Following:

- Biological differences
- Social differences
- Co-dependency issues
- Communication problems
- Shame and secrets
- Incorporate spirituality

## Moving from Victim to Warrior Mom!



## Our Families Journey Through Addiction, Denial and Recovery



**1977 - Karli, Danny and Erin  
A Happy Little Hippy Family**



**Karli age 10  
(diagnosed with cerebral palsy)**



**Our Family Process:**

- Years of frustration and misdiagnosis.
- Years of believing that Karli was not trying her best.
- Believing that Karli would “grow out of it”.
- Received Diagnosis of FAS for Karli (16 years of age).

**Acceptance Phase**

- Survival: Do or Die!
- Catapulted into Process of Recovery.

**Karli at 16 Receives Diagnosis  
of FAS New House Rules:**

No discussing what Karli cannot do!  
The focus changed to what Karli could do:

- Great artist!
- Friendly to everyone.
- Wants to be helpful.
- Everyone likes Karli.
- 100% pure of heart, Holy.
- Would not hurt another person-ever!
- Really wants your approval.
- Great with the elderly and individuals with severe handicapping conditions.



**Karli Possessed a Natural  
Ability for Spiritual  
Simplicity!**

- Maybe she was here to teach us? ? . . .
- The glass was now half full! !

**“We are not human beings  
having a spiritual  
experience, rather spiritual  
beings having a human  
experience.”**

Pierre Teilhard de Chardin

**Support and Understanding  
From My Family Was the Key to  
My Recovery**



**Individuals With FASD Make  
Powerful Advocates!**



**"Behold, thou shalt  
conceive and bear a son:  
and now drink no wine or  
strong drinks."**

JUDGES 13:7

### **Use of Ethanol in Threatened Premature Labor**

- View on the absolute safety of alcohol in pregnancy continued into the 1960's when the alcohol drip was introduced in obstetrics.
- One of few medical uses of ethanol.
- Involved I.V. ethanol infusion for 6–10 hours, reaching BAC as high as 160 mg/dl.

– First report — Fuchs, F., et al., Am. J. Obstet. Gynecol., 99:627 (1967)

### **Fetal Alcohol Syndrome**

- Specific pattern of facial features.
- Pre- and/or postnatal growth deficiency.
- Evidence of central nervous system dysfunction.
- Maternal Alcohol Exposure
  - Confirmed alcohol exposure or
  - Unknown alcohol exposure



**University of Washington  
School of Medicine 2000**

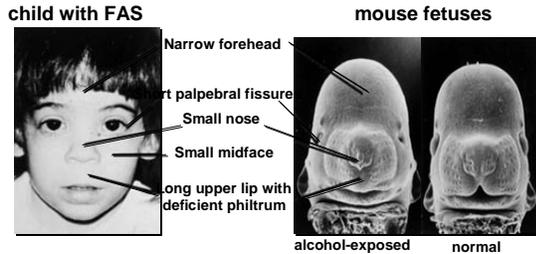
- Brain growth spurt period:
  - The sixth month of pregnancy through the second year of life.
- Findings: 1 binge (4 hours of intoxication) exposure to alcohol can permanently damage the developing brain; neurological connections essential for memory learning and thought are developed during this period.

- Dr. John W. Olney



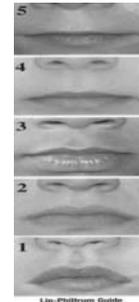
- Small palpebral fissures
- Smooth philtrum
- Thin vermilion

The facial features of Fetal Alcohol Syndrome can be seen in both a child and a mouse fetus that were exposed to alcohol during development



**Lip – Philtrum Guide**

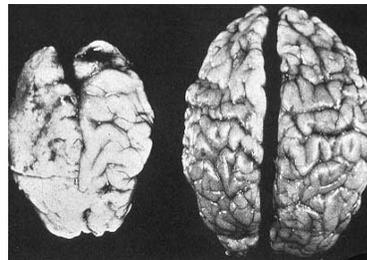
- ABC – Scores
- C- 5
- C- 4
- B- 3
- A- 2
- A- 1
- Smooth philtrum and thin vermilion must rank 4 or 5



**Growth**

- Confirmed prenatal or postnatal height or weight, or both, at or below the 10th percentile, documented at any one point in time.
  - (adjusted for age, sex, and race or ethnicity.)

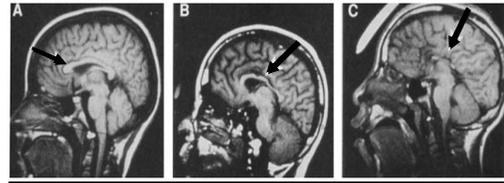
Structural head circumference at or below 10<sup>th</sup> percentile, abnormalities observable through imaging  
Neurological Functional



## Prenatal Exposure to Alcohol Can Cause Permanent Changes in the Brain

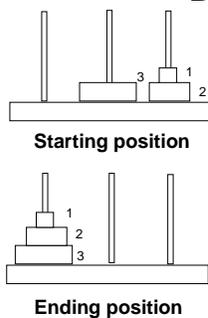
- These changes in the brain are not due to poor postnatal environments, being in foster care, or a host of other possibilities.
- Knowing what brain areas are involved might enable us to develop better treatment strategies.

Visualization of the brain of a normal individual (A) and two with FAS (B,C) shows permanent loss of the tissue indicated by the arrows (portions of the corpus callosum).

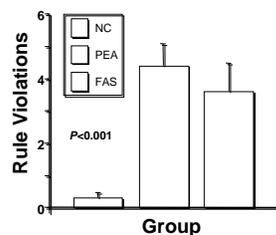


Normal FAS/ARND FAS

## Executive Functioning Deficits



Move only one piece at a time using one hand and never place a big piece on top of a little piece



## Summary of Neuropsychological Findings

- Heavy prenatal alcohol exposure is associated with a wide range of neurobehavioral deficits including visuospatial functioning, verbal and nonverbal learning, attention, and executive functioning.
- Children with and without physical features of the fetal alcohol syndrome display qualitatively similar deficits.

## Common Disorders Identified with FASD

- Autism/Aspergers' Disorder
- Attention Deficit Hyperactivity Disorder (ADHD)
- Borderline Personality Disorder
- Attachment-Bonding Disorder
- Depression
- Learning disability
- Oppositional-Defiant Disorder
- Post Traumatic Stress Disorder (PTSD)
- Receptive-Expressive Language Disorder
- Conduct Disorder

## University of Washington Fetal Alcohol and Drug Unit

In a study that examined 415 persons with FASD between the ages 6-61, Dr. Ann Streissguth found:

## Potential “Secondary Disabilities”

- Mental health problems (90%)
- Disruptive school experience (60%)
- Trouble with law (60%)
- Confinement (50%)
- Inappropriate sexual behavior (50%)
- Alcohol/drug problems (30%)
- Dependent living (80%)
- Employment problems (80%)

## Systems Impacted by FASD:

- Healthcare, insurance, HMO, MCO
- Education, (alternative/special ed)
- Justice, juvenile justice (recidivism)
- Shelters/housing
- Mental health and addiction (recidivism)
- SSI and disability
- Public assistance

## Early diagnosis can help prevent secondary disabilities



## Prevention of FASD Assessment of Mothers and their Children

- Screening
- Intervention
- Diagnosis
- Treatment



## Key Clinical Practices

- Ask:
  - All women of childbearing age about alcohol use.
  - All pregnant women about alcohol use.

## Opportunity

- Pregnancy is an opportunity for change.
- Women who are pregnant are more receptive to intervention programs and treatment than women who are not currently pregnant.

## Discuss Birth Experiences with Women

- Red Flags:
  - Two or more miscarriages?
  - Stillbirths?
  - Infant/child deaths (SIDS)?
  - Children with LD, ADHD, MH or behavioral disorders?
  - Children diagnosed with FASD?
- Positive response to any of the above questions should warrant a screening of all children for possible FASD (where substance use is known or suspected).

## During Screening

- Follow up the screening questions with probes.
- Be non-judgmental.
- Listen attentively to her concerns.
- Refrain from negative comments or reactions.
- Focus on your patient as well as her baby.

## Women with Addictive Disease

Many have lost their voice; have turned off their “inner wisdom”.

- Have low self-esteem.
- Have little self-confidence.
- Feel powerless.
- Majority have been physically and/or sexually abused.
- Are co-dependent.
- Have been living in secrecy.

## Identify or Create “Natural” Connections

- Re-connecting Women:
  - Women Circle’s/Clubs/Meetings
    - Artist way meetings, inner child groups, quilting.
  - Spiritual communities.
  - Social activities.
  - Health club/physical Activities/county recreation.
    - Art or yoga classes.

## Help Women to Change Their Belief Systems: Maybe I Could Experience Good Things in Life?

- Encourage her to nourish, giggle, hug, create, take risks, massage and to sit and listen and you will witness a *Beautiful Soul Bloom!*

**Hello SOUL-SELF!**

## Community Prevention

- Disseminate NOFAS brochures.
- Display NOFAS posters.
- Conduct educational and training workshops.



### **Take Away Message:**

- Identify women and/or their children with FASD.
- Pursue an assessment and diagnosis when signs of FASD are evident.
- Incorporate mind, body, and spiritual healing strategies for treating mothers of children with FASD.

### **Take Away Message:**

- Ensure that healthcare professionals are:
  - Trained to educate their clients on the effects of alcohol use during pregnancy on the developing fetus.
  - Competent in their ability to identify and appropriately pursue an assessment.
  - Understand possible treatment referrals for patients with possible FASD.
  - Discussing reproductive health options with women.



**Together we can prevent FASD and create systems of care to Support individuals with FASD.**



For a complete list of upcoming programs,  
go to the  
**Alabama Public Health Training Network**  
web site at  
**[www.adph.org/alphtn](http://www.adph.org/alphtn)**

**Produced by the  
Video Communications  
&  
Distance Learning Division  
Alabama Department of Public Health  
(334) 206-5618  
[alphtn@adph.state.al.us](mailto:alphtn@adph.state.al.us)  
March 2, 2006**

