FETAL ALCOHOL SPECTRUM DISORDERS IMPLICATIONS FOR THE LEGAL SYSTEM

...we can envision few things more certainly beyond one's control than the drinking habits of a parent prior to one's birth

Dillbeck v. State (Fla. 1994)

43% of juveniles in corrections with FASD had given at least one false confession, two-thirds of which resulted in charges

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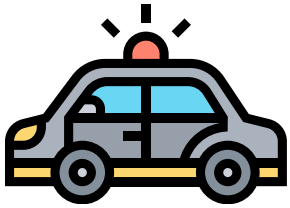
FASD IS A CONCERN AT VIRTUALLY ALL LEVELS OF THE LEGAL SYSTEM

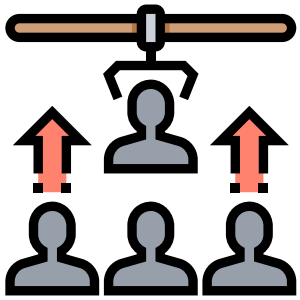
Pre-arrest

"We need to figure this out so you can go home."

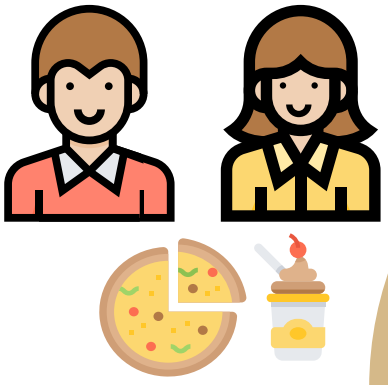


Interrogation room

People with FASD have an array of cognitive, social and neurobehavioral deficits that could lead to false confessions and inaccurate testimony, often from suggestibility and gullibility.



Parole and probation



People with FASD have brain damage which affects their ability to:

- understand
- communicate
- appreciate adversarial hearings
- assist their attorney
- accurately recount events
- understand complex explanations

They also:

- have memory deficits which they compensate for by filling in missing information
- have problems attending to what's going on in court
- often agree without understanding
- are susceptible to victimization
- are disinhibited
- are gullible

Incarceration

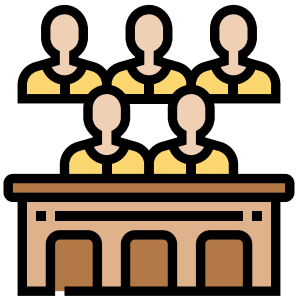
People with FASD often become victims of crime while being detained or serving a sentence in jail or prison.

Court proceedings:

People with FASD are often unable to form a working relationship with their attorney, provide relevant facts about their arrest and often cannot provide witness information relevant to their arrest. FASD produces brain damage which leads to problems with executive functioning, short and long term memory, processing information and long term planning. ALL these factors must be considered when evaluating competency to stand trial for people with FASD.

Sentencing

All judges must consider FASD as a mitigating factor. For example, in Alaska all judges must consider FASD at time of sentencing. FASD should be considered as a mitigating factor because people with FASD do not understand cause and effect of their behavior and it relates to the state of mind at the time of the crime.



COLLECTING DATA ABOUT PRENATAL ALCOHOL EXPOSURE (PAE).

Some alcohol use occurs in about 40% of pregnancies. Prenatal alcohol exposure is a common cause of premature birth, low birth weight, birth defects, learning disabilities, heart defects, and lifelong problems with independent living.

The prevalence of drinking during pregnancy is high. When taking a history remember that drug use does not exclude alcohol use. It increases risk.

Screening for PAE

When was your last drink?

Before	Pregnancy	
	Pre-awareness	Post-awareness
Unexposed	Exposed	Exposed & high risk

Screening for alcohol use begins with one question.

Charting PAE During Pregnancy

On average, how many days per week did you drink during pregnancy? _____ **(a)**

On an average drinking day during pregnancy, how many drinks did you have? _____ **(b)**

How many days per month did you have 4 or more drinks during pregnancy? _____ **(c)**

What is the most you had to drink on any one day during pregnancy? _____ **(d)**

What is a drink? _____

If drinking is reported, you can provide important information on frequency and quantity of alcohol use. This will be important for other professionals who will need this information for diagnosis and treatment when they interact with the family. Complete as many of these items as you can.

Drinking During Pregnancy

Total Exposure Throughout Pregnancy	
Days Exposed	80
Binge Days	80
# Standard Drinks (14 grams)	960
Hours Exposed	2,160
Total grams ethanol	13,440

Outcomes from drinking 4 beers each Friday and Saturday during the 40 weeks of pregnancy. Drinking four beers results in about 17 hours of fetal exposure to alcohol.

Documenting Prenatal Alcohol Exposure

If possible: Interview the mother
Interview relatives
Review medical records
Look for emergency department visits
Look for arrest records for DUI or domestic violence
Review prenatal care records

Prepare a notarized declaration. The accuracy of maternal reporting may be influenced by parents' concerns around losing custody of their children. They may worry about having this information used in adversarial custody hearings or that they might be charged with a crime.

ESTIMATING EXPOSURE RISK

If the mother or other reliable reporter is unavailable, you can provide information to estimate exposure risk by using this tool.

Maternal Risk Score

			Score
____	Age over 25 years	Check any one add 5	____
____	Unmarried, divorced, widowed, living with partner		
____	On TANF, WIC, Social Security or income < $16,000 per year		
____	Did not graduate from high school		
____	Poor diet		
____	Smokes more than 1/2 pack per day		
____	Drinks, but less than 2 days/week & less than 2 drinks/drinking day	Check here add 20	____
____	Age first drunk less than 15 years	Check any one add 35	____
____	In treatment more than three times		
____	In treatment in last 12 months		
____	Previous child died		
____	Previous child with FASD, or developmental disability		
____	Children out of home (foster care or adopted)		
____	Heavy drinker (drinks 3 or more drinks/day for 3 or more days per week, or more than 5 drinks/day on 6 or more occasions)	Check any one add 45	____
____	Uses inhalants or illegal drugs		

Score	Risk Category	Score	Risk Category
0	None	45-50	High
5	Low	55-105	Very High
20-40	Moderate		

Total Score ☐

What PAE Forecasts		
Prenatal	**Labor & Delivery**	**Postnatal**
• Smoking • Drug Use • Late and Infrequent Prenatal Care • Depression • Inadequate Nutrition • Miscarriage	• Stillbirth • Prematurity • Birth Defects • Hospitalizations	• Neglect • Abuse • Birth Defects • Poor Nutrition • Smoking • Parental Substance Abuse • Violence • Depression • SIDS

Prenatal alcohol exposure (PAE) is strongly associated with exposure to adverse childhood experiences (ACEs)

FASD and Adverse Childhood Experiences (ACEs)

1. Divorce/separation
2. Drinking/drugs
3. In foster care
4. Neglect
5. Unloving family
6. Depression
7. Physical abuse
8. Verbal abuse
9. In prison
10. Mother abused
11. Sexual abuse
12. In residential care

ACE score for children with and without FASD.

ACE SCORE	FASD		Non-FASD			
	N	%	N	%	RR	p
None or One	10	10.2	61	58.1		
Two to Five	35	35.71	37	35.24	3.45	<.001
Six to Ten	53	54.08	7	6.67	6.27	<.001

Alcohol Related Neurodevelopmental Disorder Behavioral Checklist (ABC)

Name _____ DOB ____/____/ ____ Age ____ Gender M F

In order to complete this checklist:
1) Behaviors must be impaired for the age of the person being assessed.
2) Interviewee needs to have known the person being assessed for at least one month.
3) After the reporter fills out the form, the clinician then adds other observed behaviors not already reported.

CHECK ALL THAT APPLY FOR THE APPROPRIATE AGE RANGE:

	Behavior	3-6 Years	7 Years +
1	Hyperactive		
2	Poor attention		
3	Impulsive		
4	Disorganized		
5	Seems unaware of consequences of actions		
6	No fear		
7	Would leave with a stranger		
8	Poor social skills		
9	Few friends		
10	Will talk or interact with anyone		
11	Easily manipulated and set up by others		
12	Socially inept (inappropriate speech or touching)		
13	Difficulty staying on topic during conversation		
14	Always talking		
15	Cocktail speech - little content		
16	Too loud		
17	Can't remember from one day to the next		
18	Below average IQ (<85)		
19	Poor school performance		
20	Suspended or expelled from school		
21	Poor sleeper		
22	Can't follow routine - needs reminders to get dressed, brush teeth, etc.		
23	Temper tantrums		
24	Extreme mood swings		
25	Requires constant supervision		
26	Been in trouble with the law		
27	Inpatient treatment for mental health or substance abuse, or in jail for a crime		
28	Inappropriate sexual behavior		
29	Poor motor skills		
30	Has or needs glasses		
31	Had foster care or was adopted		
32	Medication for behavior - ever		
33	Mother used alcohol or drugs during pregnancy (OPTIONAL)		

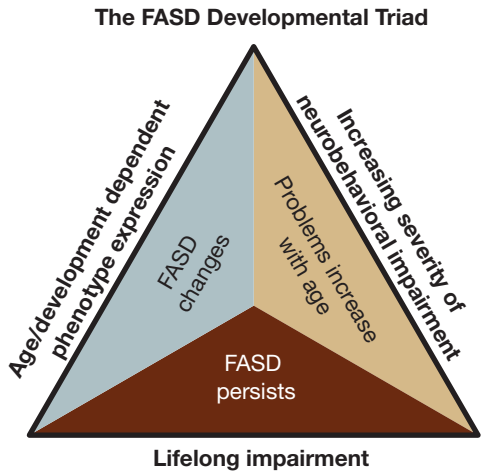
4) Calculate total score.

Total	Total
16	20

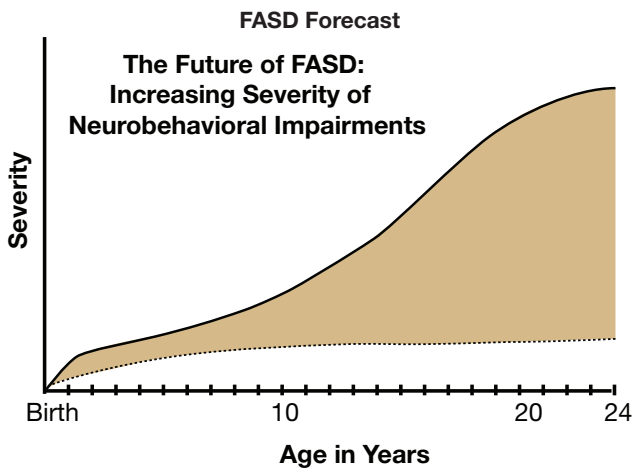
(Continue assessment if score is greater than or equal to above)

FASD: AGE BASED IMPAIRMENTS

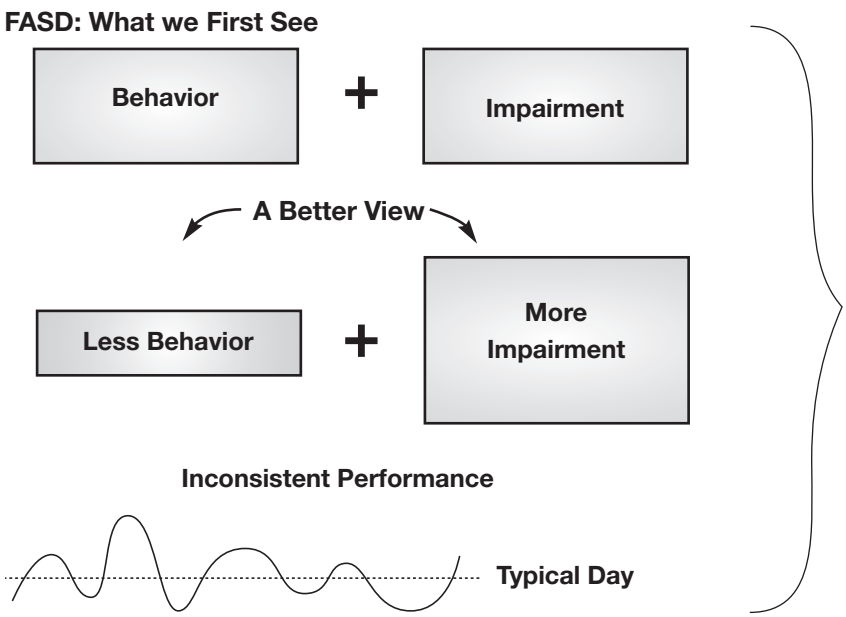
Age	Cognitive	Motor Skills	Socialization	Behavior
Infancy	Developmental delay Learning games Attention	Tremor Poor suckle Low tone Floppy	Interactive activities and games Attachment Reading others expressions	Sleep disturbance Regulation of behavior Irritable Temperament Impaired settling Cuddling
Toddler	Speech-language Understanding Toilet training Attention Impulsivity Memory	Tremor Fine motor Gross motor Balance Late crawling or walking	Easily Frustrated Separation problems Attachment Group participation	Difficulty in group settings Tantrums Aggression Stubborn
Child	IQ Academic deficits (math, spelling, written language) Humor Memory Recall Speech-language comprehension	Fine and gross motor Coordination Balance Handwriting Hand tremor	Requires increased supervision Difficulty sustaining friendships Group activities Games – activities with rules	ADHD Increased frustration Lack of persistence Increased risk taking Impaired independence for age Impaired executive functioning
Pre-Adolescence	IQ Academic deficits (math, spelling, written language) Planning Memory and recall Comprehension Generalization of skills and behaviors	Coordination Balance Handwriting Clumsy	Independent functioning Needs increased supervision Exploitation by others Appropriate boundaries	ADHD Impaired executive functioning Impulsive Repeats problem behavior Poor response to demands Risk taking
Adolescence/ Adult	Ability to work independently Self-care Money and time management Household routines Generalization of skills and behaviors Limited benefit from treatment programs without adaption	Writing Fine motor Balance Coordination	Independent functioning Peer exploitation Increased supervision Interpersonal boundaries	Increased risk for substance abuse Depression Anxiety Repeats problem behavior Increased risk taking Impulse control Planning ahead Meeting deadlines Asking for help Organization Record keeping Peer exploitation



The person will require ongoing assessments to have the best outcome.



The presentation of FASD varies by age and development. Severity and complexity almost always increase with age.

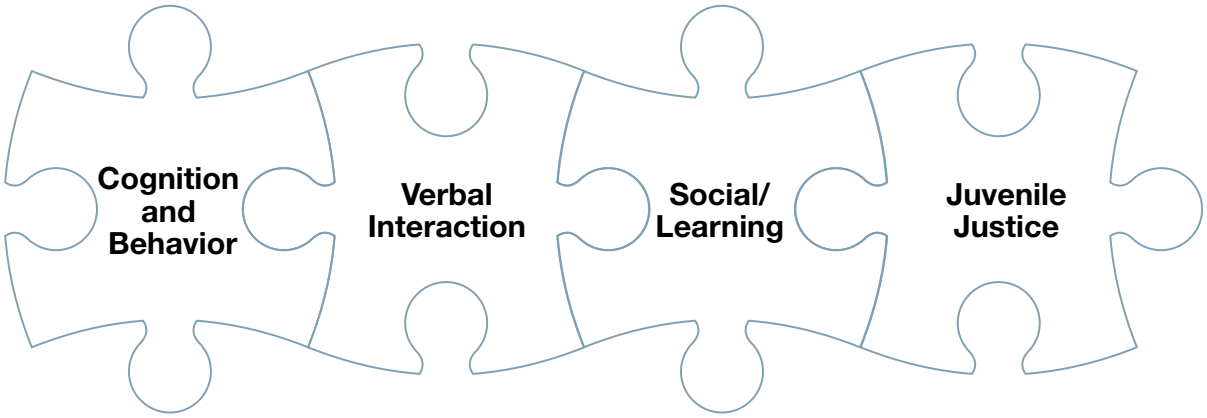


Most people with FASD have fewer behaviors and more impairments than we first suspect. This results in day to day performance that is HIGHLY variable.

DOMAINS OF IMPAIRMENT	MANIFESTATIONS (IMPAIRMENTS OR DELAYS) IN FASD Thinking about Can't or Won't
Executive Functioning	Repeats mistakes. Difficulty understanding consequences, poor time management, impaired planning and problem solving, difficulty in sequencing events. Poor organization, impulsivity, difficulty matching emotions with situation.
Sensory and Motor	Fine and gross motor impairments. Poor adaption to changes in social situations. Movement, light or background noise may make concentration or understanding difficult. Appetite regulation can be impaired (stealing food, overeating, hiding food). Vision impairments may be common.
Academic Skills	Math is frequently a problem, handwriting can be poor, both reading and reading comprehension are often impaired. Listening comprehension is also frequently impaired. Memory and attention deficits are also important factors.
Brain Structure	Decreased brain size, abnormal brain function and structure. Impaired ability to adapt and respond appropriately to age-dependent demands.
Living & Social Skills	Difficulty with daily routines, delayed toilet training, few friends, often victimized, poor money management. May need assistance with independent living skills, self-care (e. g. showering grooming may need reminders). Measures of adaptive behavior are useful measures of daily living skills.
Focus & Attention	Attention and distractibility are common (50% have ADHD). As demands increase, overactivity may increase. Impulsivity (may blurt out responses) increases. Anxiety exacerbates impairments.
Cognition (Reasoning & Thinking)	Impaired rate of learning and generalization of learned skills. Concrete or literal thinking, poor abstract reasoning skills. Social rules are difficult. Often has difficulty with age appropriate humor and teasing. IQ scores may exceed measures of adaptive behavior, identifying important deficits.
Communication	Expressive language skills very often exceed understanding. Impairments in both reading and listening comprehension. Nonverbal communication often impaired (difficulty with nonverbal cues). Ability to follow directions and instructions is impaired.
Memory	Long and short term memory deficits, highly variable ability to recall. Sometimes shuts down due to stress. Lengthy conversations often difficult, detailed instructions are often misunderstood. Needs daily schedules and even these may be difficult to follow. Often fills in missing information, repeated questions during interviewing may then be reported as facts.
Gullibility	Overly trusting, easily victimized, false confession can occur. Not appropriately cautious in interrogation or during probation.
Confabulation	Often related to memory deficits and desire to please. Often occurs during retelling stories or sequences of events. Memory of events and specific sequences are highly variable. People with FASD are highly suggestable.
Dementia	Early onset dementia is increased and prevalence increases across the lifespan. Often manifest as increasing difficulty with life's basic tasks and either increasing impairments or more gradual withdrawal.
What helps	Short directions (one or two steps), frequent breaks and reminders. Also useful is less talk, more pictures, and low stress.
What does not	Long directions, lengthy discussions, stress, or anger.

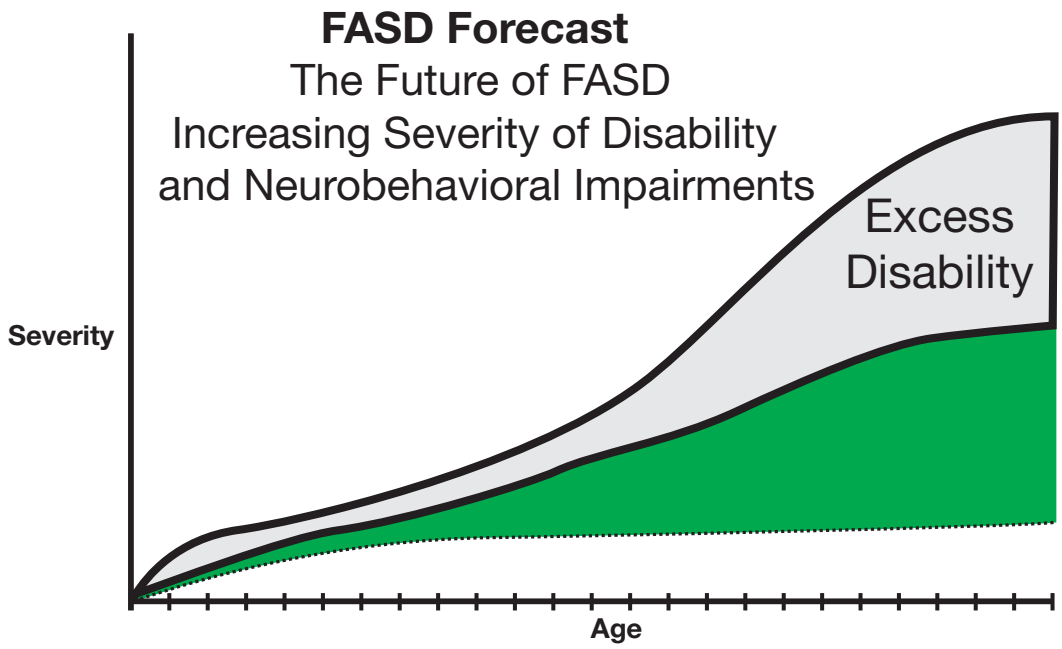
Thinking about thinking in FASD

4 Broad Areas of Impairment and 10 Domains



Cognition and Behavior	Verbal Interaction	Social/ Learning	Juvenile Justice
Executive Functioning	Confabulation	Academic Skills	Juvenile Justice
Cognition	Gullibility	Living and Social Skills	
Attention/ Concentration	Communication Skills		
Memory			

DIAGNOSIS LEADS TO DIAGNOSIS-INFORMED CARE.
DELAYED DIAGNOSIS AND INAPPROPRIATE TREATMENT INCREASES RISK FOR EXCESS DISABILITY



INTERVENTION COMPONENTS
PARENTS OR ADULTS WITH AN FASD

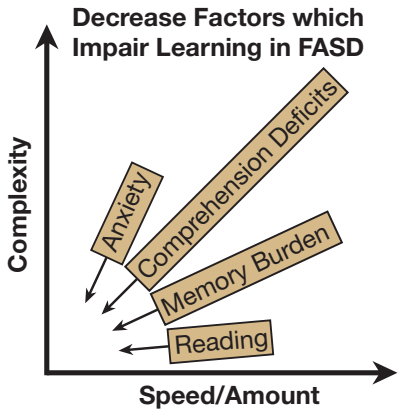
1) Do they have neurocognitive impairment

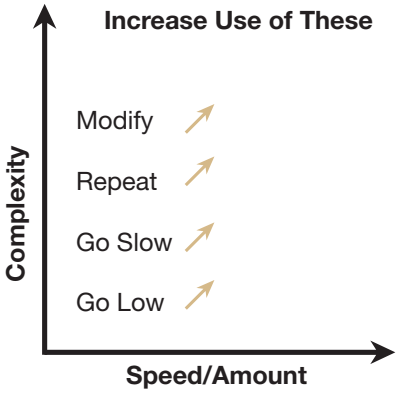
- Useful Measures
- Intelligence Testing
- Adaptive Behavior Testing
- Selectively-More Detailed Neurocognitive Testing

2) Basic Cognitive Skills in Adolescents and Adults with FASD

Characteristics	Grade Level	Percent Affected	
Reading	5.0	Memory	80%
Reading comprehension	4.5	Attention (ADHD)	75%
Oral Comprehension	5.0	Executive Function Impairments	80%

3) Learning in FASD





4) Essential Program Components

Provide short directions: an essential key for successful interventions
Make it concrete: picture guides are helpful for teaching key concepts
Work in small groups: allow more attention to topical material
Minimize anxiety, which increases impairment: especially important in treatment of substance abuse, sexual abuse or PTSD
Understand impairments: some problems cannot be treated and we need to learn how to adapt to them and minimize the effects
Address mental health concerns: need appropriate treatment
Go slowly: treatment or interventions need to last longer
Planning for aftercare is essential: improves generalization of learned behaviors
Think family history: FASD is often familial
Wishing and Anger Won't Help

5) Success rate of Substance Abuse Programs

It is important to understand how well your intervention program works. Is the substance abuse program you use effective 5% or 40% of the time? The efficacy of the programs are important keys to participant success.

Key issues:

1) Adolescents and adults with FASD have significant learning deficits which impact their ability to learn and remember.

2) We can improve the success rate of treatment programs by building in these treatment keys. See #4 below.

3) Useful strategies:
Modify content
Repeat important content
Modify pace with participants' ability to learn and remember short directions

Learn by reading and listening.

4) Essential factors for development of case management plans for adolescents and adults.

5) Most programs serving this population need to make more accommodations in response to their participants' learning impairments. Otherwise the content of the programs is not easily available to the participants.

Judicial Bench Card

Fetal	Alcohol	Spectrum	Disorders

It is essential that judges be trained on how to identify adults and children with FASD.
The United States has about 200,000 new cases of fetal alcohol spectrum disorders (FASD) each year. For most affected people the primary problem from prenatal alcohol exposure is brain damage/dysfunction. This will usually result in lifelong impairments which will change in response to age and development. There is no known safe level of drinking during pregnancy.

Prevalence of Alcohol Use

- Non-pregnant women during child bearing years: 54%
- Month before pregnancy: 50%
- Pregnant women: 12% (1 in 8)
- Late pregnancy: 8.4%

Rates of Prenatal Alcohol Exposure (PAE)

- Children of women in substance abuse treatment: very high
- Children of women in prison: 80%
- Children in foster care: 70-80%
- Increased in women with other drug use

Drinking and Pregnancy
In the majority of cases, drinking primarily occurs on weekends, but for women with alcohol use disorders drinking may occur on most days.

Alcohol rapidly crosses from the mother to fetus. Increasing maternal blood alcohol can be detected in the fetus within 1 minute. Maternal-fetal alcohol concentrations reach equilibrium in about two hours after women quit drinking.

Alcohol elimination from the fetus and amniotic fluid relies on mother's alcohol metabolism. The alcohol elimination capacity of the fetus is 5% of the mother's capacity. Promptly after birth, alcohol elimination rates reach 83.5% of maternal elimination rate. Blood alcohol concentration varies from person to person. For example, BAC varies by about 4 fold for women of the same weight consuming the same amount of alcohol.

PAE is an important marker for increased risk of postnatal environmental adversity
PAE is associated with increased rates of environmental adversity including other substance abuse, smoking, neglect, abuse, malnutrition, stressful life circumstances and mortality. These often persist throughout infancy and childhood. PAE should also be a concern for siblings.

Judicial officers often see people with prenatal alcohol exposure
FASD should be a frequent consideration. Every day in the United states there are 547 new cases of FASD. FASD has a high recurrence rate and younger siblings tend to be the most severely affected.

Diagnosis matters and appropriate services improve outcomes

Annual cost of care for children and adults with FASD
US lifetime cost is $2.5 million per person. Service systems most impacted are health care, foster care, education/special education, developmental disabilities, mental health systems, corrections systems, and substance abuse systems. The annual cost in the US is $3.4 billion

Outcomes
Manifestation of FASD changes over the lifespan. A two-year-old is at low risk for a substance abuse disorder, but adolescents are at very high risk.
A juvenile with FASD is 19 times more likely to be in the corrections system than an unaffected peer. People with FASD have increased mortality rates. Mortality rates are also increased for mothers and siblings.
Adults have low rates of independent living.

ACTIONS FROM THE BENCH

System-Level Actions

- Make prenatal alcohol exposure screening a regular component of child welfare cases.

- Identify community diagnostic services.

- Judges should facilitate and attend training on FASD for all court staff. This training should include a review of the ABA Resolution and Guidelines on FASD. This training should include local and regional assessment and treatment facilities.

- Train systems of care personnel on FASD and work to expand the community's capacity to screen, diagnose and provide interventions for affected persons.

Case-Level Actions

- Judges should have training in identifying FASD in parents and children. A program of systematic screening is strongly recommended in dependency courts, juvenile courts, and mental health courts.

- When FASD is diagnosed, screen siblings and parents.

- Pick foster placements carefully. Placements should be safe, stable and loving homes with caregivers willing to adopt if reunification fails.

- Limited/partial guardianships are often very helpful.

Just as courts are rapidly becoming trauma informed, these same courts need to become FASD informed

Important and Essential Roles of Prosecutors
Prosecutors require training on FASD. They need to be aware of the effects of neurocognitive impairments, gullibility and suggestibility on accurate testimony. They should also consider whether the person with FASD has increased risk of victimization.

Important and Essential Roles of Defense Attorneys
If there is any evidence that the mother may have consumed alcohol during pregnancy, the attorney must interview the birth mother, and family members including the birth father. The attorneys must consider the stigma attached with the interview and admission of consuming alcohol during pregnancy. The defense attorney must also look at the potential for FASD to increase risk of false confessions, competence to stand trial and mitigating factors including exclusions from the death penalty.

Effective intervention NOW reduces risk for alcohol exposure in subsequent pregnancies.