



In Canada, Fetal Alcohol Spectrum Disorder (FASD) with SFF or without SFF is **pervasive brain dysfunction** as a result of **prenatal alcohol exposure (PAE)**. **Pervasive brain dysfunction:** severe impairment (>2 SD below the mean) in **3 of 10 or more** Neurodevelopmental Domains. **PAE:** greater than 7 drinks per week or at minimum 2 binges at any point during pregnancy – including prior to knowledge of pregnancy. **There is no safe amount of alcohol in pregnancy.**

SCREENING

ALL caregivers should be asked about prenatal alcohol exposure and other prenatal substance use in a **supportive** and **non-judgemental** way.

Recognize your own biases in HOW, WHO and WHEN you ask:

- "Was your pregnancy planned or unplanned?"
- "How far along were you when you first become aware of your pregnancy?"
- "Before you were aware of the pregnancy, how much alcohol did you consume?"
- "After you discovered the pregnancy, how much did you continue drinking?"

PHYSICIAN ASSESSMENT

HISTORY

- **Birth history:** prenatal history, exposure to alcohol, drugs or cigarettes in utero, delivery, birth weight, post-partum complications, parental post partum mental health
- **Developmental History:** gross/fine motor, cognitive/learning, social-emotional, communication (speech/language), adaptive daily functioning (ADLs), *any regression?*
- **Review of Systems:** nutrition, seizures, sleep, hearing/vision, history of adversity/trauma/neglect, anxiety, mood, attention

EXAM

- Vitals, height, weight, head circumference
- Facial measurements to assess for SFF
- Dysmorphology exam
- Neurologic exam

PRESENTATION & DIAGNOSIS

Children may present to care for many different reasons including: known or suspected PAE **AND** problems with attention, hyperactivity, impulsivity, coordination, learning, mood, behavior, communication, social skills, daily functioning, etc.

History of PAE

History, Physical Exam and Multi-Disciplinary Team Assessment

Not FASD

FASD with SFF

FASD without SFF

At Risk

with SENTINEL FACIAL FEATURES (SFF)

means **ALL 3 features are present**

Short palpebral fissure lengths (>2 SD below the mean)

AND

Smooth philtrum (4 or 5 out of 5)

AND

Thin upper lip (4 or 5 out of 5)

FASD cannot be diagnosed when PAE confirmed absent. If SFF present, diagnosis can be made with unknown PAE. Infants with **SFF + microcephaly** do not require neurodevelopmental testing. (although, consider genetic testing to rule out other etiology)

Neurodevelopmental Domains

(≥ 3 of 10 domains impaired for FASD diagnosis)

- Motor skills
- Neuroanatomy/Neurophysiology
- Cognition
- Attention
- Language
- Memory
- Academic achievement
- Executive functioning
- Affect regulation
- Adaptive behavior, social skills, or social communication

- Consider genetic testing (Microarray) to rule out additional/contributing causes for the child's developmental presentation
- Assessments may be inconclusive for a child <8 years of age as some domains are difficult to assess in young children (esp. academics, adaptive functioning, executive functioning)
- **At-Risk for Neurodevelopmental Disorder (NDD), associated with PAE or At-Risk for FASD** are designations (not diagnoses!) used to indicate need for supports when a full diagnosis cannot be given yet

Multi-Disciplinary Team:

- MD expert in FASD
- Occupational Therapist
- SLP
- Psychology
- Social Worker

MANAGEMENT (I-C-E)

Individual/Child Support: optimize general health (sleep, exercise, nutrition); mental health support; build on strengths

Caregiver Support: parenting education, mental health & addictions counseling, advocacy support

Education/Community Support: resource navigation, early intervention, school engagement, transition planning

January 2023

Joel Luk (Medical Student, University of Alberta) and Dr. Sabrina Eliason (Developmental Pediatrician, University of Alberta) for www.pedscases.com