Prenatal Opioid Exposure

Current Knowledge

**Behavior**

Behavioral concerns may vary in level of intensity. Research suggests self-regulation concerns generally appear throughout childhood.

- School aged children have been shown to exhibit the following behaviors (1):
  - Greater levels of impulsivity
  - Inattention
  - More frequent internalizing and externalizing behaviors
- Children with prenatal exposure presented with increased ADHD and autism symptoms (2).

**Sensory**

Research has begun to show children with prenatal exposure may experience differences with sensory processing (3). This refers to how an individual takes in stimulation from their environment using their senses and their ability to respond appropriately.

- Anecdotal evidence vastly outnumbers scientific research exploring sensory concerns.
- Commonly mentioned difficulties include sensory craving behaviors (ex: craving movement, touch), and sensory sensitivities (ex: touch, sound).

**Learning**

In studies examining learning, children with prenatal exposure were:

- more likely to be evaluated for an educational disability
- more likely to be identified as having a developmental disability and special education supports (4)
- at risk for academic achievement decline compared to non-exposed peers during elementary and middle school (5)
- 3x more likely to fail to attain grade-level achievement (5)

**Who Can Help:**

- Developmental Psychologists and Developmental Behavioral Pediatricians can provide diagnostic services and intervention.
- Occupational therapists can evaluate and provide intervention.
- Developmental Behavioral Pediatricians can monitor learning. Contact your local school district to request in writing an academic evaluation for an Individualized Education Plan (IEP) or academic accommodations (504 plan).
Disclaimer: The current understanding of long-term outcomes following prenatal opioid exposure is still under exploration. Often, confounding variables such as potential for polysubstance exposure, socioeconomic status, and other social factors can limit ability to suggest causation; however, associations with prenatal opioid exposure have been identified in these areas. Below provides summaries of potential developmental outcomes associated with prenatal exposure to opioids, based on current research.

### Vision

Prenatal exposure has been linked to visual conditions that can impact how the eyes work together, take in visual information, and how the brain understands visual information. Concerns include:

- Nystagmus
- Strabismus
- Decreased visual acuity
- Delayed visual maturation
- Failed visual exams (6,7)

### Speech

Children with prenatal exposure were:

- more likely to be diagnosed with a speech of hearing impairment (9), language disorder, literacy disorder, and/or speech sound disorder (8)
- more likely to receive school based speech services in elementary school (9).

### Follow Up Care

Long term developmental monitoring is encouraged for continual assessment for developmental outcomes in children with prenatal opioid exposure. This care should be timely, family-centered, and stigma-free.

- Children with prenatal opioid exposure are less likely to access regularly scheduled well-child visits during early childhood (4).
- Mothers actively receiving treatment for Opioid Use Disorder reported decreased anticipatory guidance during visits with their child's primary care provider (10).

### Who Can Help:

**Vision**

- Ophthalmologists and Optometrists can diagnose and treat visual disorders.
- Certain visual diagnoses may qualify a child for Teacher of the Visually Impaired (TVI) services at a school.

**Speech**

- Speech Language Pathologists can evaluate and intervene.
- Audiologists can help rule out hearing concerns.

**Follow Up Care**

- Social work and case management services for coordination of care and decreasing potential barriers. Increase awareness of potential biases and work to provide stigma-free care. Peer support specialists can provide direct support to parents.