

## Long Term Impact

### Achievement

- ▶ Nicotine- poorer arithmetic and spelling tasks
- ▶ Alcohol- math skills, reading effected
- ▶ Marijuana- underachievement in reading and spelling
- ▶ Cocaine- increased odds of having an IEP and 2.8 times more likely to have a learning disability
- ▶ Amphetamines- lower math scores at 14-15 yrs old, and higher rate of grade retention
- ▶ Opiates- No data

### Language

- ▶ Nicotine- poor language development in early childhood, with poor language and reading abilities in 9-12 yr olds
- ▶ Alcohol- interferes with the development and use of language (may lead to problems with social interactions)
- ▶ Cocaine- Subtle language delays
- ▶ Marijuana- Heavy use in 1st trimester: lower verbal reasoning
- ▶ Opiates, amphetamines- no data

## Cognition/Executive Functioning

- ▶ Nicotine- learning and memory, slightly lower IQ
- ▶ Alcohol- IQ, poorer memory and executive functioning
- ▶ Marijuana- problem solving skills
- ▶ Opiates- No conclusive effects at this time
- ▶ Cocaine- visual-motor ability, attention, working memory
- ▶ Amphetamine- no data

## Behavior

- ▶ Nicotine- Impulsivity, attention problems, hyperactivity, negative and externalizing behaviors
- ▶ Alcohol- Attention and adaptive behavior
- ▶ Marijuana- Aggressive behaviors, inattention and impulsivity at 10yrs of age, increased risk of childhood depressive symptoms by 10 years of age, increased risk of delinquency by 14 years of age, early initiation of drug abuse: male and simultaneously exposed to violence
- ▶ Opiates- hyperactivity and short attention span (toddlers) memory and perceptual problems in older children
- ▶ Amphetamines- possible association of peer problems

## Growth

- ▶ Alcohol- associated with poor growth
  - ▶ Marijuana- Smaller head circumference at birth and the disparity increased as adolescents
  - ▶ Opiates- no effect
  - ▶ Cocaine, Amphetamines- Not conclusive
- 
- ▶ Environment plays a huge part in long term outcomes
  - ▶ Studies show that drug affected infants who go home to actively using parents have an 80% chance of using drugs by early middle school age
  - ▶ Still unknown if these infants are at an increased risk to drug addiction because of their early exposure
  - ▶ Imperative that parents get help with their drug addiction and education on the care of their infant in order to provide a safe environment for the baby

## **Things we hear about the babies in our Follow-up clinic:**

- ▶ They are generally very smart
- ▶ Often times very active
- ▶ Lots of parents tell us they are good babies
- ▶ They still tend to be easily overstimulated
- ▶ They continue to have mild to moderate symptoms of withdrawal
- ▶ Increased tone and torticollis seem to be two of the issues we see in follow-up clinic