

## Side Effects of Drug Use and/or Smoking During Pregnancy

- **Pre-Term Infants (Birth occurs before 37 weeks of pregnancy)**
  - Leading cause of death among pre-term infants is lung immaturity
    - Difficulty coordinating breathing and sucking/swallowing
  - Another obstacle of pre-term babies is immaturity of their digestive system and immune systems
    - May not be able to feed from breast or bottle
    - May need special equipment to feed them
    - May need special Formula
  - Show more problems than full term children with maintaining attention and with visual-motor coordination when they are school-age (Foreman et al., 1997)
- **Low Birth Weight (Newborns in the lowest 10% for their gestational age)**
  - Increased risk for developmental difficulty
  - 2/3 of infant deaths that occur in the period immediately following birth are among low-birth-weight-infants
  - 3 times more likely to have neurologically based developmental handicaps than other babies
  - Common outcomes include a decrease in coordination and intellectual capacities
- **Fetal Alcohol Syndrome (Studied with mothers who drank 3 oz. or more of 100- proof liquor/day-equivalent to 3 shot glasses of whiskey)**
  - All infants born to these mothers displayed some form of abnormality
  - Many suffered Fetal Alcohol Syndrome
    - Characterized by abnormally small head, under-developed brain, eye abnormalities, congenital heart disease, joint anomalies, and malformations of the face
    - Children are likely to be mentally handicapped
  - Research has found that in some cases 1-2 glasses of wine, either occasionally or daily, causes no known harm to the fetus, while other cases these same drinking practices resulted in “fetal alcohol effects”
    - These effects include deficits in cognitive and motor functioning



### Effects of FAS

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- **Marijuana**
  - Has not been found to cause birth defects but its use is associated with low birth weight
  - Some research has also found an increase in premature delivery in women who use marijuana more than once a week
- **Cocaine**
  - Medical complications for the mother-to-be include: heart attacks, strokes, rupture of the aorta, and seizures (Cunningham et al., 2001)
  - Babies are more likely to be stillborn or premature, to have low birth weights, to suffer from strokes, and exhibit birth defects
  - Babies born of cocaine-addicted moms are described as being irritable, liable to react excessively to stimulation, uncoordinated, and slow learners (Bendersky & Lewis, 1998)
  - Effects of cocaine exposure during the prenatal period may last for several years.
  - Pre-school age children exposed to cocaine exhibit delayed language development and difficulty regulating themselves when presented with novel tasks (Morrow et al., 2003; Noland et al., 2003)

\*While cocaine is linked to the above results researchers have shown that other influences correlating with cocaine use could also be the cause or contributor to the above mentioned effects.

- **Heroin & Methadone**
  - Babies are born addicted themselves and must be given heroin or methadone shortly after birth to avoid the common life-threatening ordeal of withdrawal
  - Often premature, underweight, and vulnerable to respiratory illnesses (Kaltenbach et al., 1998)
  - During the infant's weaning period they tend to be irritable, have tremors, abnormal cries, disturbed sleep, and motor control is diminished
  - Effects of addiction are apparent in their motor control 4 months later

- Their ability to pay attention is impaired even after 1 year (Yanai et al., 2000)
- Several studies reported long-term developmental problems in children exposed to heroin, methadone, or opiate derivative in utero \*Again, these cannot be solely attributed to the mother's drug use during pregnancy (Eyler & Behnke, 1999)

Cole, M., Cole, S.R., Lightfoot, C. (2005) 5<sup>th</sup> edition, *The Development of Children*, Worth Publishers,(NY) (pgs. 87-89 and 101-103).