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-equal 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
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)