Facts about Drug Use during Pregnancy

It is a common misconception that all birth mothers are currently using drugs or have used drugs at some point during their pregnancies. This is not always true. There are times, however, when a birth mother may have used drugs, including cigarettes and alcohol, before she knew she was expecting, or she may continue to use substances minimally or occasionally throughout her pregnancy. We want to provide you with the knowledge you may need to make the best decisions for you, your child and your family. The information below was provided by the Emory University School of Medicine and their Center for Maternal Substance Abuse and Child Development, as well as mothertobaby.org, a teratogen (substance known to cause birth defects) information service that is available to AIS clients.

Cigarettes

Studies assessing the incidence of prematurity have found mixed results, with some finding a significant increase and others not. (It has not been our experience at AIS that the incidence of prematurity is greater when birth mothers smoke ½ pack/day (10 cigs/day). In fact, it is very rare for our families to experience a premature delivery by their birth mothers.)

**Risks to Baby:** The most consistent finding associated with maternal smoking during pregnancy is lower birth weight. Most studies find a difference of up to 8.82 oz between babies of mothers who smoke and those who do not. Research does show that children of women who smoke at least 10 cigarettes a day have a higher incidence of asthma than children of women who do not smoke. Some studies suggest that children of women who smoke may have problems staying focused, more conduct problems, and an increased probability of being diagnosed with Attention Deficit Disorder.

Marijuana

Some studies have suggested there is an increased risk of premature birth and low birth weight for babies whose mothers smoked marijuana regularly throughout the pregnancy.

**Risks to Baby:** Most research studies have not found an increased risk for birth defects among babies exposed to marijuana prenatally. Some studies of prenatal exposure to marijuana have shown an effect on behavior, academic performance and short term memory of children. These results were seen more often in children whose mothers were heavy marijuana users, typically one or more marijuana cigarettes per day.

Alcohol

While there is no known safe amount of alcohol, a single drink is unlikely to cause a problem. The risks from heavy alcohol use and daily alcohol use have been well-established. The risks from infrequent binge drinking (5 or more standard drinks at one sitting) are less clear. The risks for occasional use of lower amounts of alcohol are also not clear. Alcohol crosses the placenta easily, but differences in genetics and metabolism of alcohol by both the birth mother and the developing baby may result in a wide range of risks.

**Risks to Baby:** Drinking alcohol during pregnancy is a leading cause of mental retardation. When a mother uses alcohol in large amounts and/or regularly during pregnancy, her baby is at risk for Fetal Alcohol Syndrome (FAS). The features of FAS include a pattern of certain birth defects that include small head and body size, specific facial features, and learning and behavioral problems. FAS is the most severe outcome of alcohol use during pregnancy. When a child has some but not all of the findings of FAS, health care providers may use another term, such as Fetal Alcohol Spectrum Disorder (FASD). FASD is associated with lifelong challenges, such as difficulties with learning and memory. Individuals with FASD are more likely to have difficulty understanding the consequences of their actions, have poor judgment, and difficulty with social relationships. Higher rates of dropping out of school, mental health problems, and alcohol or drug abuse have also been reported in individuals with FASD.
Cocaine/Crack
Cocaine is a local anesthetic and a powerful stimulant of the central nervous system. Recreational cocaine use is usually by inhalation, by injection or by smoking crack, a cocaine derivative.

**Risks to Baby:** Studies do not agree as to whether cocaine causes birth defects. Birth defects that have been reported with maternal cocaine use include abnormalities of the brain, skull, face, eyes, heart, limbs, intestines, genitals, and urinary tract. Most babies exposed to cocaine during pregnancy do not have a birth defect. The risk for a birth defect may be greater when the mother has used cocaine frequently during the pregnancy. Cocaine-exposed infants, especially those exposed near birth, have been found to be more irritable, jittery, and have interrupted sleep patterns, visual disturbances, and problems with sensory stimulation. Some of these complications may last 8 to 10 weeks after birth or even longer. Cocaine can cause significant central nervous system problems that may not be seen until the child is older. These effects may include problems with sustained attention and behavioral self-control, like increased aggression. Delays in learning, abnormal muscle tone, slower growth rate, language difficulties and an increased need for special education in school-aged children have been reported.

Methamphetamine
Methamphetamines are synthetic amphetamines or stimulants that are produced and sold illegally in pill form, capsules, powder, and chunks. Two such Methamphetamines are crank and ice. Crank refers to any form of Methamphetamine. Ice is a crystallized chunk form of methamphetamine that is usually smoked and produces a more intense reaction than cocaine or speed.

**Risks to Baby:** Specific pregnancy complications associated with intake of the drug include slowed fetal growth, birth defects, low birth weight, and delayed or incomplete development of motor skills. Research has shown that children whose mothers used meth were more likely to have attention difficulties in school. In some cases, the baby may be born addicted and experience withdrawal symptoms in the first few weeks after birth.

Opiates/Opioids
Opiates are derived naturally from the poppy plant, whereas Opioids are synthetic. Opioids were created for pain management. Common Names: Narcotics, Heroin, Codeine (Tylenol 3®), Hydrocodone (Vicodin®, Tussionex®), Oxycodone (Percocet®, OxyContin®), Meperidine (Demerol®), Methadone and Morphine. Methadone and Buprenorphine are used as treatment for addiction as quitting “cold turkey” can cause serious complications for the birth mother and the baby.

**Risks to Baby:** No evidence exists of an increased incidence of birth defects; however, there can be behavioral and cognitive development difficulties. Other risks include low birth weight, withdrawal symptoms, breathing problems in the first few weeks, and infections (mother passed to baby) because of sharing needles or other injecting devices. With proper treatment, most babies can be supported through the withdrawal process which may last days or weeks. Withdrawal in the newborn does not appear to be associated with any long-term complications.

**Methadone:** Women who are on a methadone program have fewer complications during pregnancy and childbirth and are generally healthier than those who are using heroin. There is some evidence of a reduction in obstetric complications with methadone. Babies cope better with a controlled and constant drug environment. The baby may still go through withdrawal even if the mother is taking methadone. There is no correlation between the symptoms and the mother’s dosage.

**Buprenorphine,** the active ingredient in Subutex, is less likely than methadone to cause addiction and has a calmer withdrawal period. Subutex has become the choice for buprenorphine administration during pregnancy. Studies have not been done extensively on Subutex use, but the evidence collected thus far clearly shows that it is not dangerous to use during pregnancy. Using Subutex during pregnancy also does not cause strong withdrawal symptoms in comparison with methadone.

SSRIs/Anti-Depressants
Common Names: Lexapro®, Celexa®, Paxil®, Zoloft®, Prozac®, Lithium

**Risks to Baby:** Taking anti-depressant medications during pregnancy does not appear to affect the unborn child. Some of the newer anti-depressants have shorter "half-lives" -- meaning they are metabolized more quickly and would probably be a better choice than one such as Prozac. Lithium, on the other hand, which is primarily prescribed for bi-polar illness, has been associated with increased fetal cardiovascular malformations.
Benzodiazepines
Benzodiazepines are medications used to treat anxiety, sleeplessness, seizures, muscle spasms, and alcohol withdrawal. Common Names: Valium (diazepam), Xanax (alprazolam), Klonopin (clonazepam), Restoril (temazepam), and Ativan (lorazepam)

**Risks to Baby:** It is generally felt that exposure to a benzodiazepine does not increase the risk for birth defects. If taken near the time of delivery, the baby may have withdrawal symptoms such as difficulty breathing, muscle weakness, irritability, crying, sleep disturbances, tremors, and jitteriness. These symptoms resolve over a period of time as the drug leaves the baby’s system and are not expected to have any long-term effects.

**General Information**
Since the fetus’s organs form during the first two months of pregnancy, exposure to a harmful drug during these few weeks can cause the most serious birth defects. A similar exposure later in pregnancy may have a different effect or no significant effect at all. Fortunately, birth defects resulting from drug exposures during the first two weeks after conception are rare, in part because the organs have yet to be formed. At this early stage, exposures have an “all-or-nothing” effect. That is, either the pregnancy ends in miscarriage because the insult is so great, or the embryo develops normally.

The majority of severe birth defects occur during the third to the tenth week of fetal development, when the fetus is most susceptible. Later on in pregnancy, after all the organs are formed, drug exposures can affect the developing fetus, but the risk appears to be less. During this latter stage, all the structures are formed and are basically increasing in size. Medical insults during this time may cause abnormalities of growth; that is, one or more body parts may turn out larger or smaller than they should be. For example, cocaine use has been associated with absent parts of arms or legs but this effect is rare, and the risk of running into a serious problem is less than it is with early exposures. The only exception -- and it’s certainly an important exception -- is the brain. Since brain growth and development continues through much of pregnancy, substances that affect brain development can have serious consequences even later in pregnancy.

**Hepatitis C**
Hepatitis C can be a result of intravenous drug use. It is a viral infection that can affect the liver. It is spread through contact with infected blood. If a birth mother has the Hepatitis C virus (HCV), there’s a 1 in 20 chance for transmission to the baby to occur at birth. Of the children that get HCV at birth, 40% clear the virus on their own by age 2. Of those who don’t clear the virus and have chronic HCV, most (80%) have little to no liver scarring by age 18. C-sections have not been shown to reduce the transmission of HCV from birth mother to baby. If there is a risk of a baby contracting HCV, he or she is not usually tested until 18 months of age. Children under 3 years are not usually treated.