



Environmental Exposures During Pregnancy^{©2004}

Environmental exposures are extremely common during pregnancy, since many women may not be aware they are pregnant for the first few months following conception. The majority of environmental exposures are not known to result in birth defects, however, it depends on the what the exposure is, the timing of the exposure, and the duration/amount of the exposure.

A teratogen is an agent, which can cause a birth defect. It is usually something in the environment that the mother may be exposed to during her pregnancy. It could be a prescribed medication, a street drug, alcohol, or a disease that the mother has, which could increase the chance for the baby to be born with a birth defect. About 4 to 5 percent of all birth defects are caused by exposures to one or more teratogens.

We are most concerned when a pregnant woman has been exposed to any of the following:

- Accutane or other acne medications
- Alcohol
- Antibiotics such as Tetracycline or Streptomycin
- Anticoagulants (blood thinners to prevent blood clots)
- Antithyroid drugs
- Any medication, vitamin, or herbal remedy *not* approved by your obstetrician
- Caffeine (more than five cups of coffee or other caffeinated drinks per day)
- Cat feces (from changing a litter box)
- Chemotherapeutic drugs (anti-cancer drugs)
- Diet pills
- Fevers over 101^oF or hot saunas/whirlpools
- Lead or heavy metals
- Male Hormones
- Medications for epilepsy (seizures)
- Nicotine (smoking)
- Recreational drugs
- Steroids
- Tranquilizers
- Undercooked or rare meats
- Vitamin A supplements
- X-rays (multiple x-rays resulting in more than 10 RADs of radiation)

The timing of the above exposures and the amount/duration of the exposure determine whether there is an increased risk for birth defects to occur. For example, exposures which occur during the first 2 weeks after conception follow the “all or none” law. This means that the environmental exposure will cause a miscarriage, or will not cause a problem at all. This is because the fertilized egg implants into the uterus from 6-14 days after conception, and therefore, during this 2 week timeframe, there is not a common blood supply between the mother and fetus. This means that whatever is in the mother’s bloodstream (medications, alcohol, etc.) prior to implantation, cannot reach the fetus.