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12 Steps to Reducing Fetal Exposures



EHHI

Environment & Human Health, Inc.

1191 Ridge Road
North Haven, Connecticut 06473
Phone (203) 248-6582 Fax (203) 288-7571
www.ehhi.org

Although obstetricians warn pregnant women ***not to drink alcohol and not to smoke during pregnancy,*** *we are learning that there are other chemicals and products that women should be careful about during those critical nine months. The Environmental Working Group found more than 200 chemicals in the cord blood of babies tested right after birth. Below are twelve suggestions of ways that may help reduce some of these exposures.*

1. Pesticides

The safest policy is to avoid using pesticides in your home or garden during pregnancy. Avoid them particularly during the first trimester when the baby's neural tube and nervous system are developing. The California Birth Defects Monitoring Program reported that three out of every four women are exposed to pesticides around the home. They also observed that



pregnant women exposed to household gardening pesticides had a modestly increased risk of having babies with oral clefts, neural tube defects, heart defects, and limb defects. The journal *Environmental Health Perspectives* (EHP), Volume 110, reports that children who are exposed to indoor pesticides are at an elevated risk for leukemia. EHP adds that the risk is increased during the first three months of pregnancy and when professional pest control services are used in the home.

2. Paint

The current recommendation is to avoid exposure to oil-based paints, lead and mercury. However, you



should also limit exposure to latex paints that contain ethylene glycol ethers and biocides. Biocides are used to retard mold. Ideally, you should get someone else to do the job for you. Recent studies show that infants and children who sleep in bedrooms with fumes from water-based paints and solvents are two to four times more likely to suffer allergies and asthma. It would be wise, therefore, to reduce exposures during pregnancy as well.

3. Solvents, paint thinners, paint strippers, polyurethane, etc.

The *Journal of the American Medical Association* reports



significantly more malformations in the fetuses of mothers who were occupationally exposed to solvents. Turpentine, liquid paint removers, and other solvents should all be avoided during pregnancy. Polyurethaning hardwood floors should also be avoided.

4. Toxic cleaning products

Oven cleaners and strong tile cleaners — both of which are used in tight spaces — should be avoided. Any cleaning product with a strong chemical odor should be avoided. If you do use chemical cleaning



products, make sure that you have good ventilation and that you wear gloves and clothing to protect your skin. Always read the warning and instruction labels. Never mix different chemicals together because the combination may create poisonous fumes, as when you mix ammonia and bleach.

5. Fragrances

A study of selected scented consumer products showed that they emitted more than 100 volatile organic compounds (VOCs). Some of them are classified as toxic or hazardous chemicals according to federal laws. Ten of the 100 VOCs identified qualify



under federal rules as toxic or hazardous. Some air fresheners plug into electrical sockets and pulsate air freshener pollutants on a continual basis. Scented candles also emit VOCs and are scented with synthetic oils that provide additional sources of petroleum-based fumes. Those most at risk from the fumes released by scented candles are pregnant women, children, and pets.

6. Plastics: Phthalates and Bisphenol A

Bisphenol A (BPA) is estrogenic and has been shown to cause heart disease, obesity, diabetes, and reproductive health problems in experiments with laboratory animals. BPA is used in a wide variety of consumer products and can be found in the linings of tin cans, and in hard and clear plastic containers that often have



the number 7 or the letters "PC" for the chemical polycarbonate on the bottom. Phthlates, which are endocrine disrupters, are used to soften plastics such as plastic shower curtains, some children's toys and vinyl flooring. Phthalates are also used to enhance fragrances and are frequently found in scented products. They disrupt the endocrine system by mimicking testosterone. Fetal exposures have been shown to cause a variety of reproductive abnormalities in rats.

7. Teflon-coated cooking utensils

A study done in 2005 by the nonprofit organizations Environmental Working Group and Commonweal found perfluorooctanoic acid (PFOA) in the umbilical



cord blood of newborns. Johns Hopkins Medical Center, which did a similar test in 2006, found PFOA present in the umbilical cord blood of 99% of the 300 infants tested. The U.S. EPA has declared PFOA a possible carcinogen. PFOA is a chemical found in teflon-coated pans and stain-resistant fabrics.

8. Cell phones



Pregnant women should **not** keep cell phones that are turned on close to their bodies. It is recommended when using a cell phone to either put it on speaker mode or use a wired earpiece.

9. Cat litter

Cats are carriers of the parasite toxoplasmosis, which lives inside their intestines and is passed on in their



feces. Therefore, it is recommended that pregnant women wear gloves, a mask, and that they wash their hands thoroughly when cleaning cat litter. The effects of toxoplasmosis are mild to the mother, but not to the fetus. Toxoplasmosis can cause both vision and hearing loss, as well as developmental delays in the affected child.

10. Fish containing mercury

The American Pregnancy Association recommends that pregnant women **(1) avoid** eating swordfish, tuna



(bigeye, ahi); and **(2) eat no more than three 6-oz servings per month** of sea bass (Chilean), bluefish, grouper, tuna (canned, white albacore), tuna (yellowfin); and **(3) eat no more than six 6-oz servings per month** of bass (striped, black), cod (Alaskan), halibut (Pacific and Atlantic), lobster, mahi-mahi, and snapper.

11. Artificial sweeteners



During pregnancy, women are advised to use artificial sweeteners in moderation. However, studies show that saccharin (Sweet 'N Low) crosses the placenta and may remain in fetal tissue. Therefore, its use by pregnant women remains in question.

12. Clean air and adequate ventilation



Clean and well-ventilated air is important for everyone's good health. Air pollutants should be kept at a minimum, both inside and outside the home and workplace. This is especially important during pregnancy.