

## Contributors

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# What you should know about *avoidable* risks of **Birth Defects & Other Reproductive Disorders**

## *Protect your baby!*

Every day, pregnant women are exposed to toxic substances that can be harmful to their babies. Potential effects include physical defects, learning disabilities, and other disorders.

This pamphlet suggests some easy things you can do to protect your baby's health.

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### **What are the most important steps I can take to help ensure a healthy baby at birth?**

See a medical doctor or midwife before becoming pregnant, or as soon as you think you are pregnant. Get regular checkups and follow their advice.

Eat a healthy diet. Make sure that you are getting proper amounts of vitamins, especially folic acid. If you are between 12 and 50 years old, you should eat 400 micrograms (mcg) of folic acid each day. This can prevent problems of the spine. All adult multivitamins have at least 400 mcg of folic acid. Fortified foods also contain folic acid.

Try to avoid or minimize your exposure to hazardous substances.

### **What is exposure?**

Exposure means coming into contact with a hazardous substance. Depending on the substance and the amount you are exposed to, an exposure can be toxic. There are many ways that we are exposed to toxic substances in our everyday lives, at work and at home. Alcohol and tobacco smoke contain a variety of toxic chemicals. We may breathe other chemicals in household products like paints, glues, and cleaners, or absorb them through our skin. Environmental pollutants can contaminate drinking water and foods, especially those high in animal fats.

If you are exposed to a toxic substance while pregnant, your baby is also exposed.

### **Can a developing baby be injured by very small quantities of hazardous substances that have no obvious effect on the mother?**

As a healthy adult, you may note the smell of the baby's freshly painted room, or the products used to refinish the furniture, but it will probably not be enough to make you feel sick. However, it may be enough to harm your baby. Even a very small exposure, at the wrong time while your baby is developing, can have negative effects.



***Tips marked with this symbol are steps you can take to help protect your baby's health.***

## Are the effects on the baby really worth worrying about?

Yes. These effects depend on the substance and the amount of exposure. Effects can include miscarriage, physical deformities, and improper organ growth. Some toxic substances can also damage brain function, resulting in learning disabilities, behavior problems, and lower IQ.

## How can I tell if I am being exposed to a toxic substance?

Symptoms of illness such as fatigue, muscle aches, cough, headache, or sore throat may indicate a toxic exposure. These symptoms may not appear until hours afterwards. Because fatigue and nausea are also normal symptoms of pregnancy, consult your doctor if you suspect you've been exposed to a toxic substance.

Some hazardous substances can be measured in the body, but it is expensive and impractical to test for these. Others cannot be detected in the body. Rather than trying to measure your exposure, it is more important to know the sources of hazardous substances, and to avoid them.

## Are reproductive hazards only for women, or are men also affected?

Reproductive problems can affect both men and women. The damage caused by a toxic substance may be hidden at first and take a long time to develop. For both sexes, serious exposures can result in infertility and impotence. Women may also experience menstrual problems.

## What are some sources of toxic substances during and after pregnancy?

All tobacco and alcohol products.

- ♥ **Don't smoke or be in areas where others smoke.**
- ♥ **Don't drink alcohol during pregnancy.**

Drinking water may be contaminated. Tap water may contain heavy metals such as lead from household plumbing, and other pollutants from outside the home. In rural areas, pesticides and fertilizers may seep into private wells.

- ♥ **Install a commercial water filter on your household tap or use a stand-alone container. Look for one that removes chemical pollutants and metals like lead, as well as chlorine and sediment particles. Read the label and change the filter as recommended.**

Vegetables and fruits may contain pesticide residues.

- ♥ **Always wash them well before cooking or eating raw.**

Fish is a beneficial and healthy food source. However, some fish and shellfish may contain harmful pollutants such as mercury, lead, cadmium, pesticides and other hazardous substances (dioxin, PCBs).

- ♥ **Ask your local health department if there are any fish consumption advisories in effect.**

Gardening and lawn care products such as pesticides, herbicides, and fertilizers.

- ♥ **Avoid skin contact. Don't breathe any fumes or dust given off by the products.**
- ♥ **Bathe and change clothes after using.**
- ♥ **Substitute non-toxic alternatives to pesticides.**

Household products such as cleaners that contain solvents (chemicals, like paint thinners, that dissolve other chemicals), flea collars, bug sprays, paints, stains, and sealants.

- ♥ **Read product labels and buy the least toxic alternative. Avoid skin contact. Don't breathe any fumes given off by the products.**

Fever thermometers containing mercury. Mercury is especially toxic to pregnant women and young children.

- ♥ **Buy a mercury-free thermometer, or trade your old one in.**
- ♥ **If you break a mercury thermometer, call your local poison control center. Do not touch the mercury or try to vacuum it up.**

Most homes built before the 1950s (and even some built before 1978) contain lead paint. Dust, paint chips, and peeling paint can have large concentrations of lead.

- ♥ **Do not sand or burn off old paint during pregnancy or when children are young. These activities can release large amounts of leaded dust.**

Hobby and home improvement supplies. For example, avoid solvents, paints, furniture strippers, glue, blown-in insulation, varnishes, and paint pigments that contain lead and cadmium.

- ♥ **Read product labels. Avoid hobbies and work activities that might expose you to toxic fumes.**

Many drugs and hormones are dangerous to use during pregnancy.

- ♥ **Ask your doctor before taking any drugs and medications of any kind.**

## If I feel OK, why might my baby still be at risk of injury?

As healthy adults, we have a fully developed and functioning immune system and liver. Our bodies work to minimize the effects of toxic substances. However, a developing fetus is much more at risk from these exposures. Its unformed organs cannot protect it, and the placenta that provides nutrition to the fetus does not block most harmful chemicals and metals.

## When is it safe to use chemical products?

There may be no safe time during pregnancy to be exposed to certain hazardous substances. During the first 3 weeks of pregnancy, severe exposures can result in miscarriage. After 3 weeks, organ systems are developing rapidly. An exposure during this time could result in birth defects or changes in the baby's development. During the end of pregnancy and early months of your baby's life, the brain, stomach and intestines, and heart are especially vulnerable.

## Should I nurse my baby?

Some hazardous substances can appear in mothers' milk. However, the benefits of nursing your child outweigh the hazard of trace amounts of contaminants in breast milk.

## What can I do to protect my baby's health?

- ♥ Get prenatal medical care and follow the advice of your doctor or midwife.
- ♥ Eat a healthy diet, and avoid foods high in animal fats. Take a multivitamin with 400 mcg of folic acid each day.
- ♥ Read product labels. Avoid contact with products containing solvents, and with metals like lead and mercury.
- ♥ Ask your employer about any chemical hazards at your workplace. Avoid contact with them.
- ♥ Follow the advice outlined here regarding sources of hazards to your reproductive health and your baby's well-being.
- ♥ When in doubt, **assume you should avoid contact with toxic substances during pregnancy.**