

## 2. HOW YOU ARE EXPOSED

Hidden exposure may happen by:



Eating or Drinking



Breathing



Touching

People can come into contact with possible toxics in their day-to-day environment -- at home, at work... in fact, anywhere. What people are exposed to, how much, and for how long, can have an effect on their health.

The human body is very complex and so are the ways in which things like chemicals can affect it. This is especially true during pregnancy. Something that may not seem to affect a pregnant woman can still affect a developing fetus.

## 3. WHAT ARE THE HEALTH EFFECTS?

There are substances in the day-to-day environment that can affect your health. Check books or websites for immediate health effects. This pamphlet focuses on the possible reproductive health effects which may include:

1. Difficulty getting pregnant.
2. Higher chances of a miscarriage or stillbirth.
3. Birth defects.
4. Long-term effects on children (for example learning disabilities, behavioral effects and cancer).

## 4. BETTER SAFE THAN SORRY

The precautionary principle suggests that if an activity could threaten human health and the environment a precautionary approach should be taken, even before there is complete scientific proof that the activity is harmful. Our recommendations are based on the precautionary principle...

- Reduce your use of and exposure to substances that may be toxic.
- Be aware of your day-to-day environment.
- Avoid exposure to possible toxics whether you are pregnant or not...
- Get active in your community with groups working to create a safe and healthier environment.

## 7. WHERE TO GO FOR MORE INFORMATION

### Pesticides

- Canadian Environmental Law Assoc. - 416 960-2284 - [www.cela.ca](http://www.cela.ca)
- Toronto Public Health - Healthy People, Healthy Environment - [www.city.toronto.on.ca/health/hphe](http://www.city.toronto.on.ca/health/hphe)
- Pesticide Action Network North America - [www.panna.org](http://www.panna.org)
- Ontario College of Family Physicians- [www.cfpc.ca/ocfp](http://www.cfpc.ca/ocfp)

### Lead

- Why Barn's Are Red: The Health Risks from Lead and Their Prevention Metro Toronto Teaching Health Units and SRCHC, 1995
- Canada Mortgage and Housing Corporation - [www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)
- Canadian Assoc of Physicians for the Environment - [www.cape.ca/lead.htm](http://www.cape.ca/lead.htm)
- Ontario College of Family Physicians - [www.cfpc.ca/ocfp](http://www.cfpc.ca/ocfp)
- Greater Boston Physicians for Social Responsibility - [www.igc.org/psr](http://www.igc.org/psr)

### Paints and Solvents

- The Safe Shopper's Bible, David S. Samuel, P. Stern. MacMillan USA, 1995
- Pollution Probe - [www.pollutionprobe.org/publications/toxic.htm](http://www.pollutionprobe.org/publications/toxic.htm)
- City of Toronto - [www.city.toronto.on.ca/hhw](http://www.city.toronto.on.ca/hhw) - 416 392-4330.
- Motherisk - [www.motherisk.org](http://www.motherisk.org) - 416 813-6780.

### Plastics

- Our Stolen Futures. Theo Colburn, et al. Penguin Books, NY, 1997.
- Health Care Without Harm - [www.noharm.org](http://www.noharm.org)
- Health Canada - [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

### Cleaning Products

- Hidden Exposures: A Practical Guide To... 2nd Ed. IAQWG and SRCHC
- Toronto Environmental Alliance - 416-596-0660 - [www.torontoenvironment.org](http://www.torontoenvironment.org)
- City of Toronto - [www.city.toronto.on.ca/hhw](http://www.city.toronto.on.ca/hhw) 416 392-4330.

### Electro Magnetic Fields (EMFs)

- Canadian Centre for Occupational Health & Safety - 1-800-263-8466
- EMFs: A Training Workbook for Working People, The Labour Institute NYC
- EMFRAPID - [www.niehs.nih.gov/emfrapid/home.htm](http://www.niehs.nih.gov/emfrapid/home.htm)
- Healthy People, Healthy Environment - [www.city.toronto.on.ca/health/hphe](http://www.city.toronto.on.ca/health/hphe)

### Asbestos

- The Asbestos Institute - [www.asbestos-institute.ca](http://www.asbestos-institute.ca)
- CMHC - 1-800-668-2642 - [www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)
- Health Canada - [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

- SRCHC Environmental Health Promotion: **416 461-1925**
- Sunnybrook and Women's College Health Sciences Centre: **416 351-3764**
- Toronto Health Connection: **416 338-7600**
- Hospital for Sick Children Motherisk: **416 813-6780**

# Hidden Exposures, Reproduction and Pregnancy



Many people, including pregnant women, come into contact with things in their day-to-day environment that may affect their health and their ability to have a healthy child. Some products that can affect pregnancy, such as cigarette smoke, alcohol, and use of some medications, are familiar, and most people try to reduce their exposure. There is not as much awareness of the possible effects of many other things that can be found in the day-to-day environment.

Most babies are born healthy, but it is important to improve the chances of that happening. Be aware of the things around you, as some substances may have immediate or long-term health effects.

This pamphlet presents information on the topics which pregnant women in prenatal classes identified as being of concern to them. It also offers tips on reducing possible hidden exposures.

**\* This information is useful for everyone...not only pregnant women.**

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## 1. WHAT ARE HIDDEN EXPOSURES ?



People come into contact with many things in the environment which they are unaware of. Some of these things may have an effect on their health. You can be exposed to them when you breathe (eg: air with solvents), eat (eg: food with pesticides), drink (eg: water from lead pipes) and touch (eg: surfaces cleaned with harsh chemicals). These are hidden exposures because you are unaware that you came in contact with something that may affect you.

Exposure to certain substances can affect the health of men, women and children. Hidden exposures to things that affect reproduction can influence the ability to get pregnant and the chances of having a healthy baby.

Most people know that smoking, exposure to cigarette smoke and drinking alcohol can have a harmful effect during pregnancy. But, chemicals in things like paints, plastics, cleaning products, dry cleaning fluids and insect repellent may also have harmful effects.

Most babies are born healthy. However, there are times during pregnancy when a developing fetus is more likely to be affected by toxic substances in the environment or those already in the mother's body.

Many people are not concerned about exposure to small amounts of chemicals. Some small exposures may not be harmful. However, certain chemicals can be stored in the body for a long time and small exposures to some chemicals can add up. Also different substances can interact with each other and may have unexpected effects.

- ***If you are pregnant, try to reduce your exposure to anything that may affect your health or the health of your fetus.***
- ***If you are not pregnant...why wait...take a step that will benefit your health & the environment...reduce your exposure to possible toxics.***
- ***Ask your healthcare provider for more information if you are concerned about high exposure to possible toxics.***

## 5. REPRODUCTIVE HEALTH EFFECTS

### Pesticides

Exposure to high doses of pesticides can make it difficult to get pregnant in both men and women. Exposure to pesticides at certain times of fetal development may have a negative effect on the pregnancy.

### Lead

Men exposed to high lead levels can have lowered fertility. Higher exposure in women may be associated with a higher risk of low birth weight, birth defects, stillbirth, deaths and nervous system damage in newborns.

### Paints and Solvents

Many paints contain volatile organic solvents (gases). Solvent exposure may affect a woman's reproductive health and fertility. Solvents are also found in everyday products like nail polish and dry cleaning fluids.

### Plastics

Polyvinylchloride (PVC) is of particular concern as DEHP, used in PVC, affects reproduction, sexual development and the developing immune system in laboratory animals. Other plastics may also contain chemicals which affect reproduction in lab animals.

### Cleaning Products

Some chemicals in strong cleaning products can affect the respiratory, nervous and endocrine/hormonal systems in lab animals and humans. Long term exposure to these chemicals in the environment may impact on reproductive health and fertility.

### Electro Magnetic Fields (EMFs)

Research in this field is not yet clear and sometimes conflicting. It is impossible to conclude that low frequency EMF exposure has no reproductive consequences although much of the evidence points in that direction.

### Asbestos

Not much research has been done on the reproductive impact of asbestos. High levels of asbestos exposure may increase a woman's risk of ovarian and uterine cancers.

## 6. WHAT YOU CAN DO TO REDUCE YOUR EXPOSURES

### Pesticides

Avoid chemical pesticides, especially while pregnant or nursing. Try natural alternatives. Eat organic foods, if possible. If you eat meat and dairy, try organic, or choose lean, low-fat versions of meat and dairy.

### Lead

Avoid possible exposure to lead. Ensure that your diet has adequate calcium. Contact Canada Mortgage & Housing Corporation about identifying & dealing with lead based paint in the home. Never scrape or use a power-sander to remove lead paint. It is better to paint over or get a professional to deal with it.

### Paints and Solvents

Avoid exposure to paints, solvents, paint thinner or stripper when pregnant. Use fewer products with solvents, such as dry cleaning fluids and acetone nail polish remover. Purchase paints with low volatile organic compounds.

### Plastics

Reduce your purchase of vinyl building products, furniture, furnishings and toys. Store food in glass or metal containers where possible. Use less plastic wrap where possible. Do not microwave formula or milk in plastic bottles.

### Cleaning Products

Always check the label and avoid the more toxic commercial chemical cleaning products. Make your own household cleaning products (check books or websites for recipes), or use alternative safer commercial products.

### Electro Magnetic Fields (EMFs)

Reduce exposure where possible. Avoid being unnecessarily close to high sources of EMFs such as powerlines & transformers. Consider placing furniture away from circuit boxes, and power line entry points (1 metre will do).

### Asbestos

Avoid doing renovations where there may be asbestos containing materials. Asbestos removal should be done by a properly trained contractor.