

## Health Before Pregnancy Environmental Checklist

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Many people come in daily contact with things in their environment that can affect their health and their ability to have a healthy child. Over 23,000 chemicals are in use in Canada, some chemicals are known to be hazardous. Most chemicals have not been studied enough for their harmful effects on the reproductive health of women and men, pregnancy and children. We do have information about many hazards and it is a good idea to become aware of everyday exposures and to learn how to avoid them.

Most babies are born healthy but it is important to improve the chances of this happening. You can make choices and changes before pregnancy to improve your health as future parents and to create a healthier environment for your future family. Here are four checklists that will help you learn about possible hazards and how to improve your environment.

**The Air You Breathe**

**The Food You Eat**

**Everyday Chemicals You Use**

**Renovations You May Make**

## The Air You Breathe

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Chemicals and other substances can accumulate indoors at home and at work and pollute the air we breathe. Common chemicals and substances include: cleaners, insect sprays, carpet fumes, wet paints, air fresheners, candle fumes, fumes from gas appliances, dust mites and moulds. These invisible pollutants can collect in dust particles, carpets, curtains, furniture and in the air we breathe. We need to get rid of them and to avoid collecting more pollutants

### Fresh Air Checklist

- Open your windows and use exhaust fans. Make sure your home breathes!  
Fresh air dilutes chemical fumes and open windows allow chemicals and other pollutants to escape instead of staying inside. Open your windows on days when the air quality is good and at times when there is not as much traffic.
- Dust once a week with a damp cloth. Dust is a combination of chemical and biological substances such as dust mites, molds and pet dander. Regular cleaning of carpets drapes and furniture that will trap dust will reduce dust and dirt in your air.
- Air out and wash rugs and furniture
- Damp dust mattresses and pillows covers weekly to prevent dust mites. Wash sheets, pillow-cases and blankets in hot water.
- Vacuum and change the vacuum filter regularly.
- Use a dehumidifier in damp or musty areas, get rid of any moldy rugs and repair leaks to prevent mold contamination.

Avoid using a humidifier as it helps mold and dust mites to thrive.

- Have your furnace checked regularly and install a carbon monoxide detector.
- Replace your furnace filters regularly and have your heating ducts cleaned as needed.
- Ventilate your work area. Use a fan, open a window, and keep plants nearby to help filter the air.
- Do not allow smoking in the house. Ask guests to smoke outside.
- Plant a tree in your yard and keep houseplants. Trees and plants improve the air quality in and around your home by filtering the air.

### Resources

Canadian Lung Association - Learn how to improve indoor air quality by visiting the Canadian Lung Association's virtual home at [www.YourHealthyHome.ca](http://www.YourHealthyHome.ca) or call 1-800-972-2636

The Canadian Mortgage and Housing Corporation - Download their Healthy Housing Fact sheets at their website <http://www.cmhc-schl.gc.ca/> or call 1 800 668-2642

## The Food You Eat

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Planning a pregnancy means thinking about healthy eating. Unfortunately some foods contain environmental contaminants such as mercury and hard to get rid of persistent chemicals that build up in our bodies overtime. Foods high in animal fat are more likely to contain these persistent chemicals. Some of these stored chemicals may be passed through the placenta during pregnancy. Some persistent chemicals have also been associated with damage to sperm quality. Many are linked to negative effects on child health and development. For example, methyl mercury, often concentrated in fish, is highly toxic to the baby's developing brain and nervous system.

Removing persistent contaminants from the environment depends on government and healthy environmental policy. In the meantime, the following checklist points out ways to reduce exposure to these contaminants while maintaining a healthy diet.

### What's in your Food Checklist

- Choose fish wisely. Fish is low in saturated fat, an excellent source of protein and rich in omega-3 fatty acids that are very beneficial to health. However fish can be contaminated with mercury.  
Couples planning a pregnancy, pregnant women, breastfeeding women and children should avoid fish that contain higher levels of mercury including fresh tuna, swordfish, king mackerel, shark, barramundi, gem fish, orange roughly, tilefish, walleye and northern pike.
- Choose fish and seafood low in mercury such as canned tuna, wild pacific salmon, bass, clams, cod, crab, flounder, haddock, halibut, herring, mackerel, oysters, perch, pollock, scallops, shrimp, snapper, sole, squid, tilapia and trout. Canadian guidelines give information about on how much canned tuna women of childbearing age, pregnant women, breastfeeding women and children should eat.
- When buying canned tuna, look for flaked tuna (Skipjack or Yellowfin tuna), which contain lower levels of mercury than Albacore, Bluefin, or fresh tuna.
- Trim the fat from meats to reduce their fat content and avoid eating the skins of fish and poultry.
- Cook meat, fish and poultry using a method that allows the fat drips off of it, such as grilling or baking.
- Try to eat more vegetable based protein such as beans, legumes and grains and use vegetable oils like olive or sunflower. These foods are low in fat and contain fewer persistent chemicals.
- Try to buy organic or locally grown produce. Buying locally grown produce reduces energy use for transportation and storage and reduces pollution and waste. If you have a limited budget for organic food, spend it on foods that are higher in animal fats such as meat, poultry, eggs & dairy.
- Wash and peel non-organic fruits and vegetables to reduce exposure to pesticides.
- Use glass or ceramic dishes to reheat or microwave food. Do not use plastic containers or plastic film wraps as heating can cause the chemicals in the plastic to leach into the food.
- Check your water. If you suspect that your water could be contaminated on route to your house by lead pipes you should have your water tested. You can buy test kits at most hardware stores. Let the tap water run for several minutes in the morning to flush any lead out. Use cold water from the tap for cooking & drinking.

## Resources

To learn more about mercury contamination, fish consumption and find links to current Canadian guidelines visit the Health Canada website at: <http://www.hc-sc.gc.ca/english/iyh/environment/mercury.html> or call (613) 957-2991

To learn more about persistent organic pollutants in food visit the Environment Canada Website at: [http://www.ec.gc.ca/pops/brochure\\_e.htm](http://www.ec.gc.ca/pops/brochure_e.htm) or call 1-800-668-6767.

## Everyday Chemicals You Use

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Many different cleaning products and body care products which we use everyday may contain harmful substances which may not be listed on the package. Cleaning products often contain ingredients that have not been fully studied, for their health impacts on pregnant women and children. There are many milder cleaning products that are effective and won't harm your health or the environment. Whenever possible, avoid using harmful household products (e.g., pesticides, air fresheners, furniture polish) and use non-toxic alternatives instead.

### Checklist

- Avoid using mothballs, flea collars or pesticides in your home and garden. Chemicals in soil and lawns can be tracked indoors. These chemicals can collect in carpets and remain there for a very long time. Some pesticides can accumulate in our bodies. Exposure to certain pesticides has been associated with reproductive problems and damage to sperm. Couples planning a pregnancy, pregnant women and breastfeeding women and children should avoid exposure to pesticides.
- If you work with environmental chemicals, check the information sheets and speak to your health care provider about these exposures.
- Avoid extra-strength cleaners, which may contain solvents, acids and other corrosive chemicals. Use mild cleaners, such as unscented, general-purpose soaps and detergents.
- Look for non-toxic household cleaners or make your own. For example, make your own furniture polish by mixing one part lemon juice with two parts vegetable oil. Use baking soda and water to clean ovens, bathtubs, sinks, and toilets.
- Avoid air fresheners. Air fresheners contain chemicals that actually pollute rather than freshen indoor air. Instead of using an air freshener, remove the cause of the smell, open windows and use fans to air out the room.
- Avoid dry cleaning. Dry cleaners tend to use harsh chemicals that can remain in clothes. When we wear the clothing, harmful chemicals can be absorbed through our skin. Choose to use a mild soap and wash by hand or use the gentle machine setting. You can also choose a dry cleaner that advertises solvent free cleaning.
- Look for natural ingredients in body care products. Many body care products are absorbed through the skin and can contain harmful chemicals such as formaldehyde and phthalates. Many have not been fully tested for their effects on pregnant women and children and can contain persistent chemicals.
- Choose products that list ingredients on the package. Avoid products with long ingredient lists, dyes (bright colours) and strong fumes or scents.
- Choose natural essential oils instead of perfumes. Perfumes are absorbed through the skin and may contain formaldehyde and other chemical such as phthalates that may be harmful to our health.
- If using hair or body sprays open a window and ventilate the area. Reduce exposure to hazardous products by using them only where needed, follow the manufacturer's instructions and ventilate the area.

## Resources

**Nova Scotia Allergy and Environmental Health Association.** Provides information about the health risks of everyday household products and suggests healthier product alternatives for personal care, household cleaning, baby care and household pesticide control. Visit their website <http://www.lesstoxicguide.ca> or call 1-800-449-1995

**First Steps for New Families** - [http://www.chechnet.org/improve\\_firststeps.asp](http://www.chechnet.org/improve_firststeps.asp)

First Steps is a monthly email program designed for couples planning a pregnancy, pregnant parents and parents with a newborn or young children. They provide monthly tips on how to create a healthy environment at home.

## Renovations You May Make

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Planning a pregnancy often means fixing up your home in preparation for a future baby. However, there are many hazards associated with renovating that are important to be aware of and to avoid. As floors, walls and ceilings are repaired or replaced, toxic substances such as lead, asbestos, pesticides and mould can be released into the air. Rebuilding with new materials can also result in exposure to harmful substances, including volatile organic compounds (VOCs) which gives off harmful fumes at room temperature, formaldehydes, paint fumes, dust and fungicides. Sanding, especially, in homes built before 1976, can release lead that collects in dust and indoor air.

### Renovation Checklist

- Couples planning a pregnancy, pregnant women, and young children should stay away from areas being renovated until the work is completed and the space has been ventilated, cleaned and all dust has been removed. Use plastic sheeting to separate living spaces from areas under renovation, and dust everyday to prevent the travel of hazardous substances. Plan to complete renovations three months before trying to conceive.
- Couples planning a pregnancy should avoid working with strong glues, adhesives or solvents. If possible, hire a professional to do this work and leave the house until the work has been completed and properly ventilated.
- Avoid pressure treated wood, which can contain arsenic, and particleboard, which gives off formaldehyde fumes. If these products are used give time for them to air outside before installing in the home.
- Avoid sanding old painted surfaces. Sanding can release lead into the air that accumulates in the carpet and dust and gets re-circulated in the air. This can be a very serious hazard especially if the house was built before 1976 when lead levels in paint were quite high. If possible paint over chipped or cracked paint instead of sanding. Make sure paint chips are removed and dust regularly.
- Use ceramic tiles, linoleum, or hardwood on your floors if possible rather than carpeting. Carpeting collects dust, chemicals and other substances.
- New carpets, drapes, and stuffed furniture can release chemical contaminants (e.g., formaldehyde, flame retardants, benzene, xylene) that can cause headache, fatigue, and difficulty breathing. Try to buy furniture made of solid wood. If new carpets or furniture are giving off fumes, air them outside or open windows for long periods of time.
- Look for safer building or construction materials such as low emission or natural fibre carpets, non-toxic glues and water-based paints displaying the Canadian Ecologo.
- Whenever you start a renovation project, take care by following instructions, Have good ventilation and wear protective equipment such as masks, goggles and gloves.

### Resources

Prescription for a healthy house: Practical Guide for Architects, Builders and Homeowners  
<http://www.herc.org/hhc/hhbook.html>

The Canadian Mortgage and Housing Corporation – Download their Healthy Housing resources including their Healthy Housing Renovation Planner at their website <http://www.cmhc-schl.gc.ca/> or call 1 800 668-2642.

