**Protecting Children is a Shared Responsibility!**

Children need clean air to breathe, safe water to drink, healthy food to eat and safe products to use. As adults, we must take action to create healthy environments for them, starting with our homes, schools and communities.

To protect children's health from environmental hazards, we need to reduce exposure to contaminants in air, water, soil, food and products. This will take time and must involve individuals, families, governments, communities, businesses, and industries. We must all work together to create a safer world for children. As children grow and develop, they have many "windows of vulnerability." Even before a baby is born, men and women should avoid exposure to substances that might harm the developing baby. 

In the face of uncertainty, but potentially serious risks, we need to take precautionary action. The best way to protect children is to reduce or eliminate as many known or suspected contaminants as possible from our air, water, soil, food and products. This will take time and must involve individuals, families, governments, communities, businesses, and industries. We must all work together to create a safer world for children.

Children need clean air to breathe, safe water to drink, healthy food to eat and safe products to use. As adults, we must take action to create healthy environments for them, starting with our homes, schools and communities. Action is needed before children are conceived, as human activities have created dramatic changes in our environment. Our children grow up in a world where the air is polluted by emissions from cars, trucks and factories; water is contaminated by chemicals and sewage; soil is contaminated by lead and other toxic substances; and children are exposed to harmful substances where they live, learn and play. While the exposure to individual contaminants may be small, the total exposure to many potentially harmful pollutants over a child's lifetime is of concern.

**Health Concerns**

Although there are no established guidelines for children in Ontario, Health Canada estimates that 20% of all children attending Ontario schools have been diagnosed with asthma. Children also behave differently. For example, children take more deep breaths than adults. Therefore, a child's body will take in and absorb more contaminants.

Children are at greater risk than adults.

Children are growing and developing, and are uniquely vulnerable to environmental contaminants. Relative to their body size, children breathe, eat and drink more than adults. This means that a child's body will take in and absorb more contaminants. For example, a child who inhales one litre of air has breathed in 500 million more particles than a similar adult. Indoor and outdoor air pollution, for example, is clearly linked to childhood asthma and other breathing problems. For children in Canada, asthma is the most common chronic disease among children. There are also many different health effects. For example, air pollution is linked with asthma as well as low birth weight and some birth defects. Toxic substances tend to be associated with many different health effects. For example, lead is linked with learning disabilities. 

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The Canadian Partnership for Children's Health and Environment (CPCHE) is a group of organizations that have been working together since 2001 to protect children's health from environmental exposures and toxic chemicals. We do this by reducing electricity use, walking instead of driving, supporting measures to curb urban sprawl and expanding public transit.

When it comes to our children, it is better to be safe than sorry. We can all contribute to a healthier environment by reducing our carbon footprint and doing what we can to protect children from being exposed to harmful pollutants. We can all make a difference!

Let's start now.

PLAYING IT SAFE: Childproofing for Environmental Health

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Children also behave differently. Children are at greater health concerns because:

- They are more in touch with the world around them, and are therefore more likely to be exposed to environmental contaminants.
- They have smaller lungs and breathe faster than adults.
- Their immune systems are not fully developed, so they are more susceptible to infections.
- Their skin is thinner, so they are more likely to come into contact with harmful substances through ingestion, inhalation or absorption.
- Their nervous systems are still developing, so they are more susceptible to the effects of toxic chemicals.
- Children are more likely to engage in activities that could expose them to environmental contaminants, such as exploring new spaces or putting objects in their mouths.

Indoor and outdoor pollution, for example, can affect children's health in a way that is not always evident. Pollutants can enter homes through ventilation systems or seep in through cracks or gaps in windows and doors. Children are also more likely to experience the adverse health effects of pollution because their lungs are still developing and their immune systems are not yet fully mature.

Indoor air pollution can be particularly harmful to children, who spend most of their time indoors. Common sources of indoor air pollution include tobacco smoke, mold, dust, and volatile organic compounds (VOCs). These pollutants can cause a range of health problems, including respiratory problems, allergies, and asthma.

Outdoor air pollution also poses a risk to children's health. Air pollution can contribute to a range of health problems, including respiratory problems, allergies, and asthma. In addition, exposure to air pollution can increase the risk of heart disease and stroke in adults.

Our understanding of the impact of environmental pollutants on children's health is still developing.

Our goal is to help create a healthier environment for children and to raise awareness of the importance of protecting children from environmental hazards. We can all make a difference by taking steps to reduce our carbon footprint and by supporting policies and programs that protect children's health. Together, we can make a difference!

For more information, visit www.healthyenvironmentforkids.ca.
Children need clean air to breathe, safe water to drink, healthy food to eat and safe products to use. As adults, we must take action to create healthy environments for our children. This requires action at all levels of government, from federal, to provincial, to local. Children spend their formative years in the comfort and safety of their homes, schools and communities, where they learn and play. It is our duty to be proactive in protecting our children — after all, they depend on us to keep them safe.

Children are at Greater Risk than Adults

As children grow and develop, they have many "windows of vulnerability." Even before a baby is born, many contaminants and toxic substances can enter the body through the umbilical cord. Vulnerable "windows of susceptibility" are open throughout childhood and the early adolescent years. Through childhood and the early end of adolescence, the brain, lungs and reproductive systems are still developing and are impacted by environmental contaminants.

Health Concerns

- Indoor and outdoor air pollution, for example, sharply limits children's ability to breathe normally and to be physically active.
- Pollution in the air, water and soil can cause illnesses and injuries among children.
- Children are at greater risk of injury and poisonings caused by pollutants.
- Children are at greater risk than adults of disease and developmental problems caused by environmental and toxic chemicals.
- Children are at greater risk than adults of illness and death caused by environmental and toxic chemicals.

Children also behave differently. For example, their bodies are still developing, their metabolism is faster and they eat and breathe more air per pound of body weight than adults. Bones are soft and susceptible to injury, teeth are not yet fully formed and the inner ear is more susceptible to noise. Children are also less able to repair the damage caused by pollutants.

Children's brains are developing rapidly at this time of life, so we must protect children from environmental influences that may harm their development. For more information contact:

www.healthyenvironmentforkids.ca

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PLAYING IT SAFE:
Childproofing for Environmental Health

The Canadian Partnership for Children's Health and Environment (CPCHE) is a group of organizations that have been working together since 2001 to protect children's health from environmental exposures and toxic chemicals. We do this by reducing or eliminating as many known or suspected contaminants as possible from our air, water, soil, food and products. This will take time and must involve individuals, families, communities, businesses and all levels of government. It is our duty to be proactive in protecting children's health, homes, schools and communities. This brochure is intended to help families and communities create and maintain healthy communities for children where they learn, live and play.
There are many things that we can do to protect our children! The following chart provides some childproofing tips and suggestions to create a healthier environment for our children. Some of these tips are intended for certain life stages; however, most should be used for children of all ages.

To learn more about what you can do, visit [www.healthyenvironmentforkids.ca](http://www.healthyenvironmentforkids.ca).

<table>
<thead>
<tr>
<th>Before Conception</th>
<th>During Pregnancy</th>
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<tbody>
<tr>
<td><strong>Why</strong></td>
<td><strong>Why</strong></td>
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<tr>
<td>Before pregnancy, the health of both parents is important to a child’s health at birth and throughout the child’s whole life. All the eggs a woman will release during her lifetime are created while she is still in the womb. It is therefore possible for a woman’s eggs to be affected by substances encountered by her own mother during pregnancy.</td>
<td>Pregnancy is considered the most vulnerable time in child development. Many contaminants can easily cross the placenta and reach the fetus. This makes it very important to avoid potentially toxic exposures while pregnant.</td>
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<tr>
<td><strong>What</strong></td>
<td><strong>What</strong></td>
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<tr>
<td>• Some toxic substances build up in animal fat, in some fish, and in our bodies. Eat a healthy diet low in animal fats and follow <em>fish advisories</em> to reduce your risk.</td>
<td>• Pregnant women and children should not participate in renovations. Avoid renovation dust, oil paints, solvents, varnishes, glues, degreasers and paint strippers.</td>
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<tr>
<td>• Fish are nutritious. However, be aware that some fish contain methylmercury. Children under 15, pregnant women and women of child-bearing age should limit their intake of certain fish.</td>
<td>• Pregnant and breastfeeding women should strictly limit their intake of fish high in mercury.</td>
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<td>• Fish lower in mercury can be eaten twice a week and include shrimp, salmon, tilapia, pollock, catfish, “light” canned tuna, farmed trout, haddock, flounder, canned sardines and breaded fish cakes or sticks.</td>
<td>• Consider choosing organic foods whenever possible.</td>
</tr>
<tr>
<td>• Fish high in mercury include swordfish, tilefish, marlin, shark, king mackerel, fresh or frozen tuna and canned “white”/albacore tuna. To play it safe, avoid eating these fish or eat them only rarely (less than one meal per month).</td>
<td>• Choose non-toxic pest control methods when possible.</td>
</tr>
<tr>
<td>• Sperm are formed continuously and may be harmed by lead, pesticides and other contaminants.</td>
<td>• Avoid dental x-rays and replacement of mercury fillings while pregnant if possible.</td>
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</tbody>
</table>

To learn more about children’s environmental health and what you can do, go to [www.healthyenvironmentforkids.ca](http://www.healthyenvironmentforkids.ca).
Children spend over 80 per cent of their time indoors. Contaminants can be tracked inside from outdoors and can originate from many sources inside the home. Most of these contaminants end up in indoor air and house dust.

**While Cleaning**

- Wash hands often.
- Take your shoes off at the door. Use washable entrance mats (wash separately from other laundry).
- Use a wet rag to remove dust and wash these rags separately.
- Vacuum rugs and floors with a powerhead weekly (twice a week in homes with a crawling child). Carefully dispose of vacuum bags and dryer lint in the garbage. Do not compost.
- Choose “green” cleaning products made with non-toxic ingredients.
- Avoid using aerosol sprays when possible.
- Discard old foam items (flame retardants in foam build up in house dust).
- Don’t burn garbage, especially plastics and treated wood.
- If you work with chemicals or in construction/renovation shower when you get home and wash work clothes separately.

**While Feeding**

Everyone is exposed to trace levels of contaminants in food. Breast milk can also contain small amounts of contaminants. However, health experts strongly agree that breast milk is the healthiest food for babies.

- Breastfeed your baby. Breast is best!
- Eat a healthy diet with lots of whole grains, fruits and vegetables.
- Choose low-fat meats and dairy, and low-mercury fish.
- Choose a variety of organic and/or unprocessed foods when you can, particularly those foods that your child eats often.
- Avoid heating food or drinks in plastic containers (including baby bottles) or covering items with plastic wrap, particularly when using the microwave. Use glass containers instead.
- Don’t use leaded crystal or lead-glazed pottery for storing or serving food and drinks.
- Choose glass or ceramic storage containers to store your food.
- Avoid cooking at high heat in non-stick pans to avoid chemicals being released from the non-stick coating.
- Discard burnt food, especially from the BBQ, as it contains cancer-causing chemicals.

To learn more about children’s environmental health and what you can do, go to [www.healthyenvironmentforkids.ca](http://www.healthyenvironmentforkids.ca).
Children need to play. Outdoors, this requires protection from too much sun and smog. Special care is needed using insect repellents. Indoors, toxic substances may be found in toys, craft supplies, inexpensive jewellery and other products.

**While Playing**

- Try to keep children out of the sun between 11 am and 4 pm. To play it safe, stay in the shade and wear hats and protective clothing.
- While outdoors during periods of high heat and smog, reduce strenuous activity, especially during afternoon rush hour, drink lots of water and rest frequently.
- Follow label instructions carefully if using any insect repellent.
- Apply a penetrating wood sealant (not paint) annually to treat fences, picnic tables and play structures built with pressure-treated wood bought before January 2004.
- Wash children’s hands after they play on any pressure-treated wood structures.
- Use non-toxic arts and crafts products and follow label instructions.
- Avoid soft vinyl toys, especially those for teething babies.
- Discourage children from using nail polish, nail polish remover, cosmetics and hair dyes.
- Discard metal toys, jewellery, key chains or decorations that are dull grey, heavy for their size and easily “draw” a grey line. They can contain dangerous levels of lead.
- Discourage children and teens from extended use of cell phones to reduce their exposure to radio waves.

To learn more about children’s environmental health and what you can do, go to [www.healthyenvironmentforkids.ca](http://www.healthyenvironmentforkids.ca).
Why 

Renovation dust can contain high levels of lead, asbestos and other toxic contaminants. Renovation and decorating products, such as solvents, paints and glues, can contain strong chemicals. New building materials, furnishings and rugs may release volatile organic compounds (VOCs).

While Renovating/Decorating

• Do not involve pregnant women or children in any renovation activities.
• Inform yourself about risks from leaded paint and asbestos in pre-1980 homes.
• Closely follow safety guidelines on labels to protect yourself and your family.
• Never sand old painted surfaces.
• Isolate renovation areas from the rest of the house.
• Vacuum frequently to remove dust and ventilate areas where solvents or glues are used.
• Plan to renovate in summer when you can open windows.
• Seal-off heating/cooling vents during all renovations.

• Choose less toxic products, such as low-VOC paints, finishes and adhesives. Try to avoid products with hazard symbols.
• Keep work clothes and shoes separate from other clothes. Wash work clothes separately.
• Don’t burn renovation waste that contains painted or varnished surfaces, pressure-treated wood or synthetic materials, such as old flooring or roofing materials.

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Risk than Adults

When it comes to our children, it is better to be safe than sorry. We can all take action to protect children — after all, they depend on us to keep them safe. The best way to protect children is to reduce or eliminate as many known or suspected contaminants as possible from their environment. This is why CPCHE encourages all children to have a healthy environment, where they can breathe clean air, drink safe water, eat healthy food and use safe products. As adults, we must take action to create healthy environments for children where they live, learn and play. It is our duty to be proactive in protecting our children — after all, they depend on us to keep them safe.

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PROTECING CHILDREN IS A SHARED RESPONSIBILITY!

The Canadian Partnership for Children’s Health and the Environment (CPCHE) is a group of organizations that have been working together since 2001 to protect children’s health from environmental exposures and toxic chemicals.

We do this by developing evidence-based recommendations for policymakers and governments so that they can better protect children from harm, and by strengthening and expanding public support for initiatives that protect children.

To learn more about what communities and governments can do to protect children’s health, and for more details on things that you can do, see the CPCHE website at www.healthyenvironmentforkids.ca.