

## Chapter 4

# Creating a safe environment indoors and outdoors

## Introduction

Children are curious. They love to explore. Make the children's environment, indoors and out, as safe as possible so that they have the freedom to explore without fear of being hurt or adversely affecting their health.

In this chapter, you'll find information on the following topics:

- Child care safety check
- Smoke-free environments
- Indoor air quality and mould
- Protection from air pollution
- Sun safety
- Safe water
- West Nile Virus protection
- Pesticides
- Car seat and booster seat safety
- Pedestrian and sidewalk safety
- Cycling safety
- Playground safety

## Tips for success

- Check your centre regularly for unsafe equipment and other potential hazards
- Share information on the above topics with parents and guardians, to encourage home safety practices. Refer to Appendix 4 for resources and pamphlets
- Be safety conscious
- Keep emergency telephone numbers posted by all your telephones. Refer to the *Community resources* section for important numbers

# Child care centre safety check

When doing your regular safety checks, here are some areas to consider:

- Make sure the handrails of your staircases are at a level children can reach
- Make sure windows are locked and designed to keep children from falling through them
- Make sure sleeping areas are well ventilated
- Cover all electrical outlets with safety caps and keep extension cords out of reach
- Ensure the temperature of the hot water of any sinks that children have access to (e.g., activity room, washroom and diaper change table sinks) is no higher than 49°C or 120°F. This is to prevent children from scalding themselves (54°C or 129°F if you have an electric hot water heater)
- Make sure that the toys used by infants are not small enough for them to choke on. Be sure to check that toys brought in by parents or housed at the child care centre do not have small, broken, sharp or loose parts
- Check large play equipment, both indoor and outdoor, regularly for broken parts, sharp edges protrusions, entanglements and entrapments. Place mats under indoor climbing equipment
- Store all medications in a locked container/cabinet in an area inaccessible to children
- Ensure that the outside play area is free of dead trees or trees with dead branches
- When using a wading pool:
  - Provide constant supervision
  - Use only with children over the age of three. Refer to Appendix 4 *Play pools*
  - Dump water from the pool at the end of outdoor play time. Refer to the section on *Protecting children against West Nile Virus* in this chapter
- Ensure all cribs, playpens, strollers and high chairs comply with current safety standards
- Ensure change tables are properly designed as outlined in section 2:5 *Change area set-up*
- Refer to Appendix 4 *Sample child safety product list* and *Keeping your home safe-checklist* (available in other languages) for further information

# A smoke-free environment

Under the Smoke-Free Ontario Act, (SFOA), all Day Nurseries, including licensed private home day care premises must be 100 per cent smoke-free. This requirement applies 24 hours per day, 7 days per week, whether or not the children are present. York Region Community and Health Services encourages unlicensed private home day care premises to keep their facility 100 per cent smoke-free as well.

Refer to Appendix 4 for the following resources: *Breathing Space stickers*, *Steps to make your home smoke free* and the *Smoke Free Ontario Act 2005: How the Act affects Day Nurseries and Private Home Day Care*.

Also under the SFOA, the outdoor grounds of all Day Nurseries that are attached to a school must be 100 per cent smoke-free. York Region Community and Health Services encourages all child care premises, both private and public to make their outdoor grounds 100 per cent smoke-free.

Numerous studies have demonstrated that children are at a greater risk than adults from exposure to second-hand smoke. Children have smaller airways and they breathe more rapidly which means that they inhale more pollutants relative to their total body weight. Children exposed to second-hand smoke are at risk for coughs, Pneumonia, Asthma, ear infections and Sudden Infant Death Syndrome as well as an increased risk for cancers and cardiovascular disease in adulthood.

The SFOA was amended in January 2009 to prohibit smoking in a vehicle, whether moving or stationary, carrying children under the age of 16. This law was supported by the Ontario Medical Association which indicated that smoking in a vehicle is at least 27 times more toxic than in a home, even if the windows are down.

Refer to Appendix 4 for the following resources: *Thanx Mom and Dad for a smoke-free ride* pamphlets and *Kids on Board. It's a smoke-free zone* posters.

Children learn by example and may witness habits that can last a lifetime. As a child care provider you are in an excellent position to encourage smoke-free lifestyles:

- Encourage parents to create a smoke-free environment for their children by making their homes and cars 100 per cent smoke-free
- Be a positive non-smoking role model for both children and parents
- Teach smoke-free lifestyles to the children with fun educational kids activities

For more information on the *Smoke-Free Ontario Act* please visit the Ministry of Health Promotion website at [www.mhp.gov.on.ca/english/health/smoke\\_free/legislation.asp](http://www.mhp.gov.on.ca/english/health/smoke_free/legislation.asp) or contact York Region *Health Connection* at 1-800-361-5653 and speak to Tobacco Education and Control at ext. 4825.

# Indoor air quality and mould

Indoor air quality has become a significant health issue in recent years. In studies conducted by the Environmental Protection Agency (EPA), indoor air pollution has been ranked as one of the top five environmental risks to public health. Considering persons from industrialized countries can spend more than 90 per cent of their time indoors, public health professionals have become increasingly aware of the various causes of indoor air pollutants and the steps that can be taken to minimize the risks.

Indoor Air Quality pollutants may be a result of the following:

- Natural sources
- Poor building design
- Inadequate ventilation
- Inadequate maintenance
- Structural components and furnishings
- Consumer products (cleaning products, personal care products and occupant activities (Yeager, 1999))

The symptoms of indoor pollutants are very similar to allergies, Influenza, and the common cold. There is a lot of uncertainty about what concentrations or periods of exposure are necessary to produce specific health problems. People also react very differently to exposure to indoor air pollutants. (EPA's *The Inside Story: A Guide to Indoor Air Quality*, 2009)

If you think your child care centre has indoor air quality concerns, please contact Health Connection at 1-800-361-5653 and speak to a public health inspector or for more information on indoor air quality please visit our website:

<http://www.york.ca/Services/Public+Health+and+Safety/Environmental+Health>

## Mould

Moulds belong to the fungus family and are present almost everywhere in indoor and outdoor environments. Mould thrives in areas where it is wet or damp (e.g., bathrooms and basements). Fungi are highly adapted to growing and reproducing, rapidly generating new spores in the process. Mould growth can negatively affect air quality because it releases spores into the air that may be inhaled. Also, many fungi can produce fungal metabolites that have been identified as toxic agents. If inhaled, swallowed, or if they come into contact with skin, these mycotoxins can be harmful to your health.

Moulds may grow on any damp or humid surface and may cause indoor air quality health concerns. Mould prefers water-saturated materials containing cellulose (e.g., wallpaper, ceiling tiles, carpets, insulation material, chipboard and drywall). Mould can often become a problem after a water leak or a flood in a structure. If areas are kept dry, mould cannot grow. The presence of mould growth, water damage, or a musty/mildew odour should be addressed immediately.

# Can mould affect the health of children?

Human exposure to mould can occur in different ways. It can be a result of direct physical contact with mould or by inhalation or ingestion of its spores or fungal metabolites. Whether or not symptoms develop depend on the nature of the mould, the amount of exposure and the susceptibility of the exposed individual.

Respiratory symptoms in children that are exposed to mould can include persistent sneezing, eye irritation, rhinitis, coughing and wheezing. Asthmatic children are especially at risk as mould may trigger Asthma attacks.

## What are the most common symptoms?

- Runny nose
- Cough
- Eye irritation
- Congestion
- Headache
- Fatigue
- Aggravation of Asthma

It is important to understand that symptoms associated with mould are non-specific and could arise from a variety of medical conditions other than indoor air contaminants. Some factors associated with poor indoor air quality that also could generate symptoms similar to mould include poor air circulation/ventilation, allergens in settled dusts and off-gassing of chemicals from paint, carpeting and furnishings.

If children are experiencing the symptoms noted above, they should see a physician who may make a referral to a medical specialist trained in occupational/environmental medicine.

The Health Protection Division of York Region Community and Health Services is available to work with local school boards and child care centres to conduct investigations regarding mould and other indoor air quality issues.

If you suspect there is a mould or an indoor air quality concern in your school or child care centre contact *Health Connection* at 1-800-361-5653 and speak to a public health inspector.

# Protection from air pollution

## Air pollution harms our health

Each day we burn fossil fuels for our daily energy, electricity and transportation needs. It is the burning of these fossil fuels that generates the air pollutants that affect our local air quality, and greenhouse gases that contribute to global climate change. Taking steps to reduce air pollution also helps address climate change, which helps to improve the health of our communities today and in the future.

Outdoor air pollution originates from a variety of sources including: vehicle exhaust, factories and utilities, solvents (e.g., oil-based paints, chemical sprays/cleaners), lawnmowers and other gasoline or diesel-powered machinery, pesticides, asphalt road paving and construction and barbecues.

Air pollution can cause health problems in all people; however, those most effected are:

- Young children
- Pregnant women
- Seniors
- People suffering from Asthma
- People with heart and lung problems
- Smokers

Children are at a higher risk from exposure to air pollution because they are outdoors more, their lungs are still developing and they breathe at a faster rate.

Signs and symptoms caused by smog/air pollution include:

- Coughing
- Wheezing
- Chest tightness

Air pollution has been linked to increases in Asthma symptoms, hospital admissions and early death rates. Evidence also suggests that long-term exposure to smog is associated with an increased risk of Lung Cancer and Heart Disease. In addition, existing heart and lung conditions and sensitivity of asthmatics to allergens may be aggravated.

The Ontario Medical Association estimates that air pollution contributes to an estimated 9,500 premature deaths in Ontario each year. (Source: Ontario Medical Association WebLink: Ontario Doctors Caring for You. June, 2008)

## How air pollution levels are monitored

The Air Quality Index (AQI) reports current air quality based on a specific level of an individual air pollutant. The new Air Quality Health Index (AQHI) reports on the health risk posed by a mixture of pollutants including ground-level ozone, particulate matter and nitrogen dioxide. The key difference is that the AQI is an air quality information tool, while the new index is a personal health protection tool.

In Ontario, the AQI is measured on a scale and translates pollutant levels into a number from 1 to 50+ to determine whether the air quality is considered to be good, moderate or poor. The lower the number, the better the air quality. The Ministry of Environment (MOE) may declare a Smog Advisory if forecasts indicate a possible AQI reading exceeding 50 in a given geographic area. Smog Advisories are usually issued between the months of May and September.

The AQHI is a rating scale that measures air quality in relation to a person's health on a scale from 1 to 10. This scale recognizes that air quality affects everyone in different ways. For example, a reading of five would have a different meaning or impact to a child with heart or breathing problems than those who don't. A reading of 1 represents a low risk to a child's health and 7 or greater represents a high risk. Recommendations for the high risk population may include a reduction or rescheduling of strenuous outdoor activities.

AQHI forecasts are posted at [www.airhealth.ca](http://www.airhealth.ca).

Refer to Appendix 4 or call York Region *Health Connection* at 1-800-361-5653 to obtain the AQHI brochure – *The Air Quality Health Index: Protect your health. Know the numbers.*”

The Ministry of the Environment (MOE ) website posts air quality reports and three day forecasts on their website [www.airqualityontario.com](http://www.airqualityontario.com). Register for direct notification of *Smog Alert by Email* on the provincial website. Air quality reports are also available by calling 416-246-0411 or 1-800-387-7768.

## How those most affected may be protected

During episodes of poor air quality levels, the following actions can be taken to minimize exposure to air pollutants.

- Check the AQHI daily as well as registering with the MOE's Smog Alert Network at [www.airqualityontario.com](http://www.airqualityontario.com)
- Be aware of every child who has a medical condition that may be moderately or severely aggravated by high air pollution levels
- Monitor any children who fall into the above category during all outside activities between May and September
- Be ready to seek medical attention for these children and contact their parents or guardians as required

- Reschedule outdoor activities to another time when air pollution levels are not high. If outdoor activities are necessary, then frequent rest breaks should be scheduled and taken
- Avoid strenuous exercise activities during high pollution times
- Encourage children to stay hydrated by drinking plenty of fluids
- Keep children away from high traffic areas to reduce exposure to vehicle exhaust
- Consider energy conservation actions to reduce your facility's contributions to local air pollution

Refer to the section on *Consent to obtain emergency medical care on behalf of the child* in Chapter 1. Refer to Appendix 4 *Smog advisory today - why should I care? Even healthy kids are vulnerable* for additional information.

## **Help reduce air pollution levels**

Child care centres should take the following actions and refrain from activities that could worsen the air quality:

- Limit the use of cars: walk, cycle, carpool or take public transit
- Telecommute (work from home) and teleconference whenever possible
- Reduce unnecessary engine idling of your vehicle at all times. If you are going to be stopped for more than 10 seconds (except in traffic), turn off your engine
- Restrict the use of oil-based paints, solvents, pesticides, glues, gas-powered engines (such as lawnmowers and leaf blowers) and barbecues
- Conserve energy; turn down the air conditioner and turn off lights you are not using. Use energy efficient light bulbs. Install low-flow showerheads and aerators in faucets to conserve water
- Consider purchasing products with the Energy Star rating label
- Refer to Appendix 4 *York Region anti-idling fact sheet* and the *Smog Alerts booklet* for more information

For further information on air quality issues, contact York Region *Health Connection* at 1-800-361-5653 and speak to a public health inspector.

Refer to Appendix 4 for the *20/20 The Way to Clean Air Planner Brochure*, filled with tips to reduce your energy use, or contact the Clean Air Partnership at 1-866-583-2020 or visit [www.cleanairpartnership.org/2020](http://www.cleanairpartnership.org/2020)

# Sun safety

Protecting children from the harmful effects of the sun can greatly reduce their lifetime risk of developing Skin Cancer. According to the Canadian Cancer Society (2001), one in seven children born today will develop Skin Cancer during their lifetime. In fact, the majority of lifetime exposure to the sun will occur before a child reaches the age of 18 (World Health Organization, 2001).

As child care providers, it is important to protect children by following the *SunSense Guidelines*, developed by the Canadian Cancer Society.

- Reduce sun exposure between 11 a.m. and 4 p.m. (especially when the UV Index is over three), as the sun's rays are strongest between these hours. Try to plan your outdoor activities before 11 a.m. or after 4 p.m.
- Seek shade or create your own, especially between 11 a.m. and 4 p.m. Trees, umbrellas, and shade structures can provide protection from the sun's harmful rays
- Wear protective clothing. Choose clothing that is loose fitting, tightly woven, lightweight and covers your arms and legs
- Wear a wide-brimmed hat that covers your head, face, ears, and neck. Hats such as baseball caps do not provide enough protection
- Wear sunscreen with a Sun Protection Factor (SPF) of 15 or higher. Look for a "broad spectrum" sunscreen which offers protection against both UVA and UVB rays. Sunscreen should be applied generously 20 minutes before outdoor activities, and re-applied at least every two hours (and after swimming or perspiration). Use sunscreen along with shade, clothing and hats, not instead of them
- Keep babies under one year of age, out of the direct sun. Babies need extra protection because their skin is very sensitive. Keep their stroller, playpen, or carriage in the shade. Do not apply sunscreen on babies under six months old

In addition to following SunSense Guidelines, child care centres can practice and promote sun safety by:

- Having a written sun safety policy. Health professionals are available to assist in creating a policy that provides guidelines for outdoor activities for both children and staff. Call York Region *Health Connection* at 1-800-361-5653 to speak to a public health nurse
- Establishing a routine for going outside that includes wearing hats and protective clothing, and applying sunscreen
- Providing or encouraging parents to provide their own sunscreen for their child.

- Obtain written permission from parents for child care providers to apply sunscreen to their children. In addition, encourage parents to provide hats and protective clothing
- Ensuring the children's play area has natural and/or built-in shade structures for protection from the sun
- Integrating sun safety education into programming:
  - Play the video *Sun Safe Play Everyday* (Canadian Dermatology Association)
  - Read the storybook *Block the Sun, Not the Fun* (Canadian Paediatric Association)
  - Host a silly hat day
  - Celebrate Sun Awareness Week
  - Draw and colour pictures of sun safe outdoor play
  - Play shadow games
  - Post the UV index daily
- Distributing sun safety information to staff and parents
- Encouraging staff to be sun safe role models

**For more information please call York Region *Health Connection* 1-800-361-5653 and speak to a public health nurse or refer to Appendix 4 for resources, pamphlets and website links.**

# Safe water

Safe water is essential for life and health. Child care centres rely on potable (drinkable) water for many different activities throughout their centres. Whether water is used for drinking and cooking, sensory play stations or swimming at the beach, it is important that the water is safe.

## Drinking water supply

### Municipal

Child care facilities on municipal water have a water supply that is constantly monitored and treated. York Region and each municipality are required to sample the water in accordance with the *Drinking-Water Systems Regulation* administered by the Ministry of the Environment.

Water quality reports for the municipal water supply are available on the York Region website at [http://www.york.ca/Services/Water/Water+Quality+Reports/default\\_Annual\\_WQ\\_Reports\\_New.htm](http://www.york.ca/Services/Water/Water+Quality+Reports/default_Annual_WQ_Reports_New.htm). This site explains how our water is treated, what tests are performed and includes water sampling results. It also links to each municipality's water quality reports.

### Private well

Child care facilities that obtain their water from a private well are also required to comply with the Ministry of Environment's regulation, *Drinking-Water Systems Regulation*. Testing, treatment and reporting requirements are detailed in this regulation. Adverse water quality results must be reported to York Region Community and Health Services, health inspection line at 1-877-464-9675, ext. 4599 during regular business hours or 905 830-3375 after hours.

Remember to protect your well from contamination. Do not store, use or dispose of manure, gas, salt and garbage or any other contaminant near your well. Conduct routine checks of your well to ensure it is properly maintained and not damaged. The well seal and well cap should be securely in place and watertight. If the well cap is damaged, replace it immediately, otherwise contaminants have direct access to the well. The ground surrounding the well casing should slope away from the well to prevent standing water. Do not store or use chemicals around the well. If your well needs to be upgraded or repaired, it must be done by a licensed well contractor.

York Region Community and Health Services can provide your child care centre with information on the following:

- How to disinfect your well
- Emergency water treatment
- How to correctly sample your well water
- Water treatment devices
- General information on your well
- What to do in the event of a water outage

## **Boil water advisories**

Boil water advisories can be issued to any child care facility regardless of whether municipal water or a private well services your centre. Boil water advisories can be issued if the safety of the drinking water servicing your centre is affected. If a boil water advisory is required, York Region Community and Health Services will contact your centre. Your centre will be advised of the requirements that must be taken during the advisory. Notification will be given when the boil water advisory is lifted, and normal use of the water may resume. Refer to Appendix 3 *Enteric Outbreak Control Guidelines for Child Care Centres*.

## **Contingency plans**

All child care centres should have a contingency (“What to do if...”) plan in place, in the event of a boil water advisory or a water outage. This contingency plan will ensure that an adequate safe water supply is available for drinking, cooking, cleaning, handwashing and other uses necessary for the operation of your centre. The contingency plan should also address when centres will be closed due to prolonged water outages. A plan for an alternative water source should be included. Generally, an alternate source means a municipally treated supply or bottled water. Refer to Appendix 4 for information on *Emergency water treatment* and *What to do when you have no water*.

Immediately report planned or unplanned water outages due to plumbing or water main breaks, to your local municipal works department (if your facility is serviced by a municipal water supply) and to the York Region Community and Health Services, health inspection line at 1-877-464-9675, ext. 4599 during regular business hours or 905 830-3375 after hours and speak to a public health inspector.

**Call a public health inspector on our Safe Water Team for clarification or for any additional information regarding drinking water at 1-877-464-9675 ext. 4599.**

## **Bathing beaches**

York Region Community and Health Services staff routinely sample and monitor selected public beaches within the Region. Samples are taken weekly during the summer months and monitored for bacteria levels as well as issues that may affect the health of the bather.

Look for the beach water quality signs posted at your local beach. The blue sign indicates water is safe for swimming whereas the red sign indicates the water is not safe for swimming. Also, it is not recommended to swim at the beach within 48 hours after a heavy rainfall.

York Region Community and Health Services offers a beach monitoring hotline that is routinely updated. Child care centres can check the status of the beaches within the region by calling the York Region *Community and Health Services*, health inspection line at 1-877-464-9675 ext. 4599. Beach information is also available through the York Region website at [www.york.ca](http://www.york.ca).

**Please call the health inspection line at 1-877-464-9675 ext. 4599 during the summer months for further information on the status of your local beach.**

## Pesticides

A pesticide is any substance used to repel, destroy or prevent the development of a pest. Many commonly found household products are pesticides, including lawn and garden products such as weed killers (herbicides), insect repellents and sprays (insecticides) and mice poisons, (rodenticides).

Pesticides, if misused, can be poisonous to humans, especially to children. People can be exposed to pesticides by inhaling them, by absorption through the skin or by ingestion. Children are at greater risk because pound per pound of body weight, children breathe more, eat more, and have faster metabolisms. It is important to store all hazardous substances out of reach of children.

All pesticides for sale or use in Canada are registered under the *Pest Control Products Act* and managed through Health Canada's Pest Management Regulatory Agency (PMRA). Provincially, the *Pesticides Act* is regulated by the Ontario Ministry of the Environment (MOE). The MOE is responsible for regulating the sale, use, storage, transportation and disposal of pesticides. Ontario's cosmetic pesticides application ban came into effect on April 22, 2009. The requirements of the ban are detailed in Ontario Regulation 63/09 and the Pesticides Act, which was amended by the Cosmetic Pesticides Ban Act, (CPBA) 2009.

The provincial ban supersedes local municipal pesticides bylaws to create one clear and understandable set of rules across the province.

Under the CPBA 2009, pesticides cannot be used for cosmetic purposes on lawns, vegetable and ornamental gardens, patios, driveways, cemeteries, and in parks and school yards.

York Region Community and Health Services recommends that any indoor chemical products be only used as a last resort and be applied when children are not in the facility and applied strictly according to the label directions. Children should not be able to come in contact with pesticides. Be sure to dispose of empty pesticide containers at your local Household Hazardous Waste (HHW) centre. You can find the closest HHW centre by calling 1-877-464-9675 ext. 5702.

If you have concerns or questions about pest control or any hazardous material you can contact the Ministry of the Environment at 1-800-565-4923 or [www.ene.gov.on.ca](http://www.ene.gov.on.ca), the Health Canada Pest Management Regulatory Agency 1-800-267-6315 or [www.pmra-arla.gc.ca](http://www.pmra-arla.gc.ca), or York Region *Health Connection* at 1-800-361-5653 and speak to a public health inspector.

**Refer to Appendix 4 or call York Region *Health Connection* at 1-800-361-5653 and speak to a public health inspector to obtain further information or visit <http://www.ene.gov.on.ca/en/news/2009/030401mb.php> for more information.**

# Protecting children against West Nile virus

## West Nile virus

West Nile virus is found in infected birds and is transmitted to humans by the bite of an infected mosquito (primarily the *Culex* species). West Nile virus was first identified in Uganda in 1937. In 1999, it was isolated in the United States for the first time. By 2002 it had spread to 44 states in the USA and five Provinces in Canada including Ontario. As of September 2007 West Nile virus has spread to all Canadian provinces.

## How is West Nile virus spread?

West Nile virus is spread to humans by the bite of an infected mosquito. Mosquitoes become infected when they bite a bird carrying West Nile virus. The virus is not spread by person-to-person contact through activities such as touching, coughing, sneezing, kissing or drinking from the same cup.

Other modes of transmission are currently being investigated. International research has confirmed that the virus can be transmitted through transplanted organs and blood transfusions. Some evidence indicates that a person can be infected by handling a West Nile virus-infected bird, although the risk is very low. As a precaution **do not handle dead birds with your bare hands**.

## Risks to children

“Children are far less likely to suffer from West Nile virus than adults,” says Dr. Lee Ford-Jones, an infectious disease specialist at the Hospital for Sick Children. She adds that “symptoms of West Nile virus are uncommon in children, and when an infection does occur, it is much milder than in adults.” Dr. Ford-Jones further explained that West Nile virus affects children and adults in different ways, with children being at very low risk of having a serious complication from West Nile virus infection. The Canadian Paediatric Society, however, does caution that immunocompromised children may be at risk for more severe disease from West Nile virus.

The mosquitoes that most commonly cause West Nile virus are not generally active during the daytime; they are more active during the early evening and early morning (dusk and dawn). That is why it is important to minimize the time spent outdoors during these periods when mosquitoes are most active. Children who are in child care during the daytime are at a lower risk of exposure.

Children who go out on field trips during the daytime are also at minimal risk of exposure. However, if the field trip is to an area with heavy tree cover, or that is known for high mosquito activity, or if the trip is between dusk and dawn, you will need to take precautions against mosquito bites.

# Preventing mosquito bites

## Cover up

Mosquitoes are attracted to darker colours, so wear light coloured clothing when going outside during times when mosquitoes are most active. Long sleeved shirts or jackets, long pants and socks should be worn. Pant legs can be tucked into socks for added protection.

## Use insect repellent

Child care providers are advised to obtain written permission from parents before applying insect repellents on children.

Consider using an insect repellent containing DEET (N-diethyl-m-toluamide). The concentration of DEET should be no greater than 30 per cent for adults and no greater than 10 per cent for children. Do not use DEET on children under six months of age - use mosquito netting to cover infants. Federally regulated non-DEET products are also available. For more information about personal insect repellents please visit the Health Canada Pest Management Regulatory Agency web page: [www.hc-sc.gc.ca/cps-spc/pest](http://www.hc-sc.gc.ca/cps-spc/pest)

- Follow the instructions on insect repellent labels carefully
- Apply repellent sparingly on exposed skin and clothing. Do not use under clothing
- Do not use repellent on open wounds or irritated or sunburned skin
- Do not get repellent in the eyes. If this happens rinse with water immediately
- Wash skin with soap and water when you return indoors or when protection is no longer needed
- Avoid breathing mist from spray-type repellent. Always apply in well ventilated areas
- Never spray repellent inside a tent. Do not use near food
- Parents should check their children for sensitivity to repellents by applying repellent to a small area of skin on the arm and waiting for 24 hours before use
- Apply sunscreen first, followed by the insect repellent
- There is no evidence that there is a hazard to the unborn or breastfeeding child associated with the use of DEET by pregnant or lactating women when used as recommended by the manufacturer
- Refer to Appendix 4 *How to protect yourself from West Nile Virus* for additional information

## **Clean up around the child care centre**

The best way to keep mosquitoes away is to clean up areas of stagnant water (i.e., water that has been sitting without moving) where they are likely to breed. Look around your property and get rid of places that are potential mosquito breeding sites, including:

### **Containers of stagnant water**

- Clean up and empty containers where water collects, such as in old tires, flower pots, wheelbarrows, barrels or tin cans that are outdoors
- Change the water in bird baths every seven days
- If appropriate, drill holes in the bottoms of containers so water can't collect

### **Swimming or wading pools**

- Turn over wading pools when not in use
- Immediately remove water that collects on pool covers
- Make sure the pool pump is circulating
- Refer to Appendix 4 for further information on play pools
- The York Region Health Protection Division does not recommend the use of play pools for children, especially for those children that are not yet fully toilet trained

### **Eaves and drains**

- Clear leaves and twigs from eavestroughs, storm and roof gutters throughout the summer
- Make sure drainage ditches are not clogged
- Check flat roofs frequently for stagnant water

### **Yard and lawn**

- Decaying debris can end up in storm sewers and become a food source for mosquito larvae
- Turn over compost frequently and fill in depressions in lawn areas
- Clear out dense shrubbery where mosquitoes like to rest
- Make sure door and window screens are tight fitting and in good repair

# Car seat safety

According to Health Canada, motor vehicle collisions are the leading cause of death and injury for children one to nine years old. In Ontario alone, collisions took the lives of 13 children and injured 2006 others all under the age of nine (Ministry of Transportation, *Ontario Road Safety Annual Report, 2005*).

Using the correct seat for a child's weight, height and developmental ability, installing the car seat tightly, and properly harnessing a child in their seat are all vital aspects of safe car seat use.

According to Transport Canada, 75 per cent of collision-related deaths and injuries could be prevented by the correct use of an infant or child car seat.

Since September 2005, the *Ontario Highway Traffic Act* has included child care providers in the broader group of drivers who are required to use child car seats when traveling with babies and children.

Child care providers are in an excellent position to promote car seat safety to parents/caregivers, as they are frequently in a position to observe parents/caregivers dropping off and picking up children in their vehicles.

## Some tips for helping ensure that children are riding safely

- Read the car seat and vehicle manuals for correct installation and use
- Make sure babies are **rear-facing until all three of these criteria are met:** 1) a minimum weight of 10 kg (22 lbs), 2) they can pull themselves to a standing position unassisted, and 3) are one year of age. Once all three criteria are met, the child can be forward-facing with the car seat tethered to one of the designated anchor locations in the vehicle with the tether strap pulled tight, until they are 18 kg (40 lbs)
- Depending on the year of the vehicle, car seats can be installed with either the new latch system **or** the vehicle seat belt; check your vehicle manual for the option(s) available to you. Pull the latch or seat belt tight to hold the car seat in place. There should be no more than 2.5 cm (1 inch) of movement in all directions. A seat belt locking clip is only to be used if the vehicle manual says to do so
- Check that only **one** finger can be put between the shoulder harness and the child's collarbone
- Check that the chest clip is at the child's armpit level
- Refer to Appendix 4 for *Car Seat* resources (available in other languages) or please call York Region *Health Connection* at 1-800-361-5653 and speak to a public health nurse for more information

# Booster seat safety

A booster seat works with the existing seat belt system to raise a child so that the seat belt fits correctly across their shoulder, chest and hip bones. Booster seats provide 60 per cent more protection than seat belts alone, and substantially reduce the risk of serious injury.

The *Ontario Highway Traffic Act* requires that once children reach a minimum weight of 18 kg (40 lbs), children move from a forward-facing car seat into a booster seat, and remain in a booster seat until **one of these three criteria** is met: 1) reached a weight of 36 kg (80 lbs), or 2) a standing height of 145 cm (4 feet 9 inches), or 3) are eight years of age. From a safety point of view, height is the most important sign that a seat belt alone will properly fit a child.

New legislation passed October 31, 2006 requires that every vehicle has as many seatbelts as passengers. Drivers are responsible for ensuring each passenger under 16 years of age has and wears a seatbelt.

## Tips for booster seat use

- Read the booster seat and vehicle manual before installing a booster seat
- A booster seat is not a substitute for a car seat for a child under 18 kg (40 lbs)
- High back boosters and backless boosters **must be used with a lap/shoulder seat belt**
- With the backless style, it is important to ensure that the vehicle seat and/or head rest are high enough to provide head and neck protection for a child
- Be aware that seat belt adjusters are not regulated for use in Canada. In fact, crash tests in the U.S. have shown that they increase the likelihood of injury or death
- Discuss booster seat use with parents/caregivers to help ensure they have the correct information

Refer to Appendix 4 for *Booster Seat* resources (available in other languages), or for more information please call York Region *Health Connection* at 1-800-361-5653 and speak to a public health nurse.

# Pedestrian and sidewalk safety

## Facts to consider

According to Safe Kids Canada (2008):

- More than 2,412 Canadian children are seriously injured by vehicles every year
- Child pedestrian incidents are a leading cause of injury-related death for children under the age of 14
- Approximately 30 children die each year due to pedestrian injuries
- Most incidents occur between 3 p.m. and 6 p.m., when many Canadians are driving home from work

## How to prevent injuries

- **Teach children the “5 steps to safely crossing the street”**
  1. Stop
  2. Look both ways
  3. Listen for traffic
  4. Wait until the street is clear and keep looking until they have crossed the street
  5. Make eye contact with drivers to be sure they see you
- **Under age nine? Don’t cross alone.** Children under age nine should be accompanied by an adult, or an older child, when crossing the street
- **Sidewalks are safest.** Teach children to always walk on the sidewalk. In areas without sidewalks, teach them to walk as far away from traffic as they can and to walk facing approaching traffic
- **Follow the same rules you want children to follow.** You may want to cut across the street in the middle of the block, but you want children to learn to cross at the intersection. Be a positive role model

# Cycling safety

## Facts to consider

- Every year, over 50,000 children are seriously injured in bike-related mishaps
- 25 per cent of all the children injured are under seven years of age
- According to Safe Kids Canada, head injuries are the number one cause of serious injury and death to kids on wheels
- A fall from 60 cm (two feet) can cause permanent brain damage; a fall at a speed of 20 km/hour can result in death
- According to the *Highway Traffic Act*, cyclists 17 years old and under are required to wear a bicycle helmet when riding a bicycle
- Wearing a bicycle helmet reduces the risk of head injury by 85 per cent and reduces the risk of brain injury by 88 per cent
- Children under the age of ten do not have the physical and mental skills necessary to drive a bicycle on the road

## How to prevent injuries

- **Wear a helmet.** Make sure children wear certified, properly fitted **bicycle** helmets (refer to manufacturer's instructions) **every** time they ride their bike.
  - Hockey, baseball or other sports/activity helmets are not designed to absorb the type of impact that may occur in a cycling crash or fall
  - Helmets should not be worn when playing on playground equipment
  - The Canadian Standards Association (CSA) has introduced bicycle helmet certification standards for children under the age of five. Helmets that meet these requirements have a permanent yellow label informing purchasers that the helmet is designed for children under five years
  - Bicycle helmets must comply with one of the following safety standards, identified by stickers printed on the inside of the helmet: CSA, Snell, ASTM, CPSN, NOSCAE
  - Do not buy a helmet second-hand, as you may not know how old it is or if it has been in a crash
- **Make sure the child's helmet fits properly** – use the **2VI shake shake shake rule**:
  - **2** – the helmet should sit two finger widths above their eyebrows
  - **V** – the straps should form a V shape under their ears
  - **1** – only 1 finger should fit between their chin and the straps
  - **Shake Shake Shake** – make sure their helmet is snug; it should not move around when they shake their head
  - **Remember** to remove anything that could interfere with the way a helmet fits such as baseball caps, big hair clips, ponytails and headphones.

- **Ensure supervised riding.** Young children should cycle with an adult, as most do not have the skills to cycle safely without supervision. After the age of ten children need lots of practice and training before they can ride on the road or alone.
- **Make sure the bike fits.** A bike that is too big or small is unsafe. How to check: when a child sits on their bike, their toes should touch the ground on both sides
- **Be a role model.** Set a positive example when cycling with children and wear **your helmet every time you ride!**
- Refer to Appendix 4 *Keeping Kids Safe on Scooters (from the Keeping YorKids Safe series) Safe and It's your head use it!*

# Playground safety

## Facts to consider

According to Safe Kids Canada:

- Each year about 2,500 children aged 14 and under are hospitalized due to falls on playgrounds
- Children ages five to nine have the highest risk of playground injury
- About four out of five hospitalizations for playground injuries are the result of broken bones; about 14 per cent are the result of head injuries, which are some of the most serious injuries that can occur on the playground
- For most injuries, boys are injured much more often than girls, but this is not the case with playground injuries; boys have only a slightly higher risk for playground injuries than girls (53 per cent for males vs. 47 per cent for females)
- Young children (between ages one and four) are also at risk for playground injury; they are often injured because they are still developing their balancing and climbing skills, putting them at risk for falls

## Spotting the hazards

Do you have a safe playground at your centre? The three key areas of prevention are surfacing, equipment and active supervision.

### Surfacing

Safe surfacing beneath playgrounds will reduce the severity of injuries from falls. A fall onto a shock-absorbing surface is less likely to cause an injury than a fall onto a hard surface. Follow the *National Standard of Canada - CAN/CSA Z614-07, Children's Playspaces and Equipment*, for the appropriate material and depth to be used. For a copy of the *National Standard of Canada - CAN/CSA Z614-07, Children's Playspaces and Equipment* contact the Canadian Standards Association at [www.csa.ca](http://www.csa.ca) or phone 1-800-463-6727. The protective surfacing beneath the playground structure is to be maintained on a daily basis to ensure that it does not become compressed and that it is free of any hazardous objects.

### Equipment

Playground equipment is designed for two age groups: 18 months to five years; and five to 12 years. Ensure that children in your care use equipment designed for their appropriate age and ability level. Inspect your playground structures daily for signs of wear, missing safety rails, vandalism or any other possible hazard. Refer to Appendix 4 *Playground Safety* and *Playground-danger of strangulation and sand box safety* for additional information.

## Active supervision

Young children need to be supervised at all times. Active supervision also includes:

- Recommending parents remove drawstrings on children's clothing
- Ensuring that shoelaces are tied
- Recommending that children wear a neck warmer instead of a scarf
- Ensuring any loose clothing is tucked in
- Not allowing skipping ropes or other ropes to be tied to any part of the play structure
- Taking off all helmets before using playground equipment because they may cause an entrapment and strangle a child
- Guarding younger children (18 months to five years) on equipment as their hands or feet may slip unexpectedly

Educate children on safe behaviour when at playgrounds. Children must learn:

- To wait their turn
- That bullying is unacceptable. Refer to Chapter 9 *Preventing Bullying*
- To only go feet first down slides
- That only one child at a time is permitted on play equipment
- That they should always use the handgrips that are provided
- To stay away from the front and back of moving swings