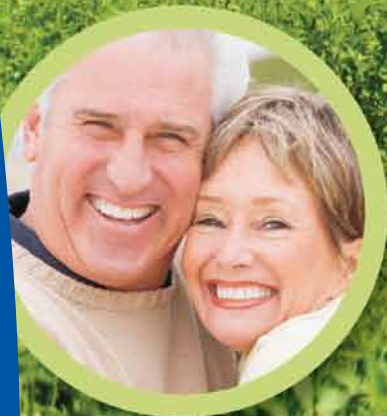


# Simply Safer is Simply Smarter

How to Build or Renovate for a Safer Home



20#  
version

There is no place like home. Whether you live in a house, condo or apartment there are simple measures you can take to make your home a safer place.

Durham Region Health Department • Haliburton, Kawartha, Pine Ridge District Health Unit  
Hastings & Prince Edward Counties Health Unit • Peterborough County-City Health Unit

# LIGHTING

Lighting plays an important role in your home. Consider increased lighting in high traffic areas such as outdoor walkways, paths, entrances, hallways, stairways, bedrooms and bathrooms.

- Allow for as much natural light as possible with windows and sun tunnels
- Keep lighting consistent throughout your home
- Place switches in convenient, easy to reach places – all home and room entrances, top and bottom of stairs, bedside, bathroom
- Place all switches at the same predictable height and locations
- Place switches no higher than 48 inches (122 cm) from floor
- Use automatic sensors and/or night lights both indoors and out
- Replace dim, burned out or glaring lights with bright, soft white lights
- Choose rocker-type switches
- Install electrical outlets in corners for easy lighting access



## Did you know?

Seniors over 80 years need 5 – 8 times more light than people in their 20's.



# FLOORING and LEVEL CHANGES

Most slips and trips occur on the same level. Flooring choices play a key role in home safety. Choose non-slip flooring options and smooth transitions between different flooring surfaces. (the bridge between two different flooring surfaces)

## Thresholds

- Indoor thresholds should be flush, no more than ¼ inch (.6 cm) high
- Avoid thresholds by using the same flooring throughout
- Doorways to outdoor spaces such as a balcony or deck should have a low sill or threshold beveled at maximum slope of 1:2/50%

## Levels

- Avoid single steps as they are hard to notice
- Create a step free entrance into your home
- Avoid sunken or raised rooms such as in living rooms
- Keep the most used rooms on one main level such as bathroom, laundry, master bedroom, kitchen

## Flooring

- Use the same non-slip flooring throughout one level
- Consult your retailer on non-slip flooring options
- If using carpeting choose short/low density, less than ½ inch (1.3 cm) pile, with a firm pad



## Did you know?

The wrong cleaning products can make your flooring slippery. Always use the recommended cleaning product.

# BATHROOMS

Bathrooms can be safe, stylish and functional for all ages. Consider both design and structural elements when making choices for your bathroom.

## Grab Bars

- Install  $\frac{3}{4}$  inch wood reinforcement in walls to position and secure grab bars
- Make sure grab bars are securely anchored according to product specifications
- Install up to 3 grab bars: 2 inside or near the tub/shower and 1 next to the toilet
- Choose grab bars with a textured grip



Photo courtesy of Moen Inc.

## Flooring

- Choose a non-slip surface for inside the bathtub or shower stall
- If using tile, choose textured or smaller tiles with more grout lines for greater traction
- Consult your retailer on non-slip flooring options

## Fixtures

- Install threshold-free walk in showers with an option for seating
- Install a hand held flexible shower hose on a vertical sliding bar
- Use a raised toilet mounted at 17 – 18 inches (43 – 45 cm) compared to the more usual 15 inches (38 cm)
- Locate the bathroom near the bedroom

see over for diagram →



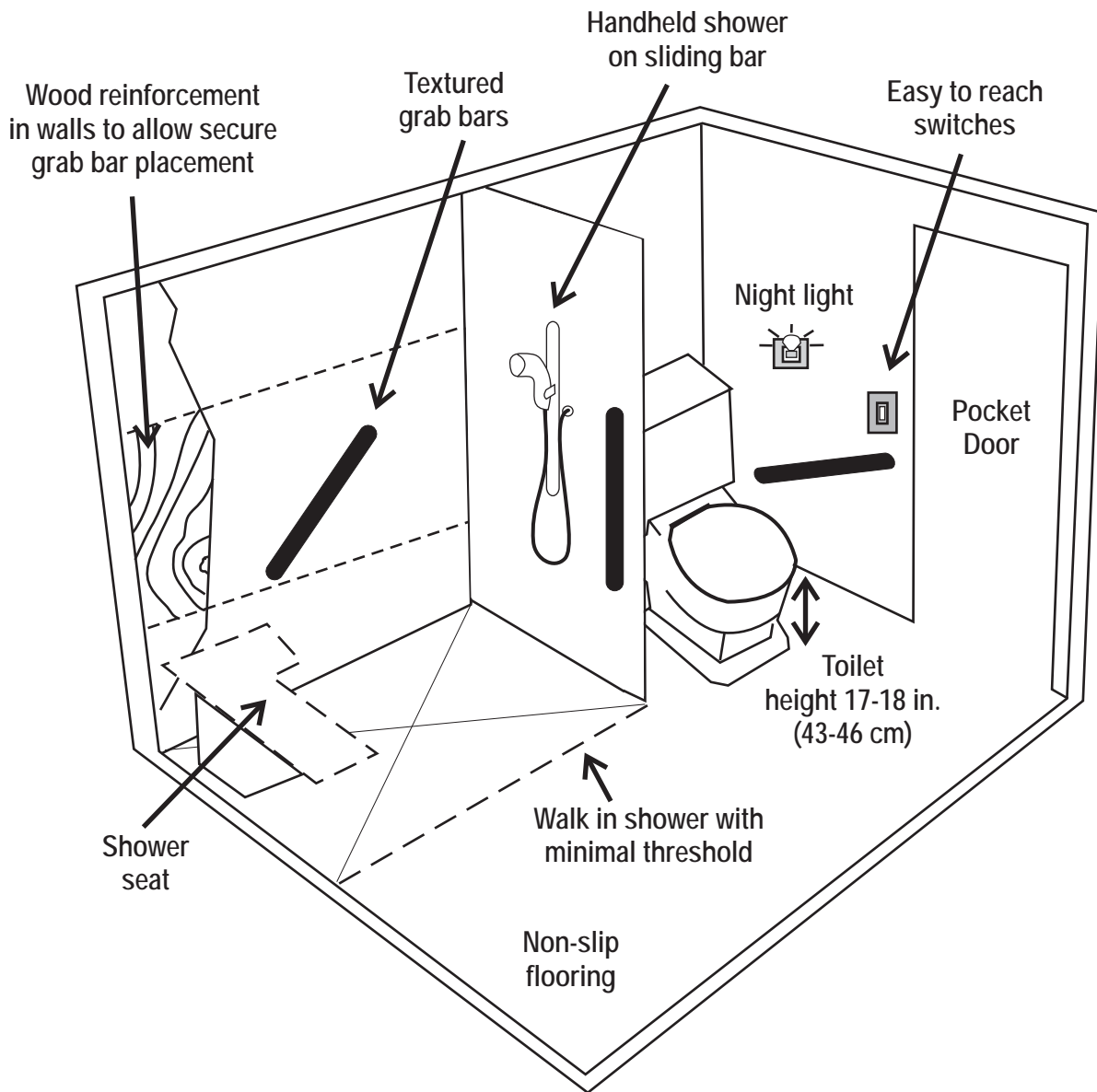
Photo courtesy of Moen Inc.

## Did you know?

New stylish grab bars are available to match your bathroom décor.



Photo courtesy of HealthCraft Products Inc.



For product selection and/or specific placement consult with an occupational therapist.

# STAIRS

Whether inside or out there are simple steps you can take to make your stairs safer.

## Handrails

- Install wood reinforcement in walls to position and secure handrails and safety gates
- Mount 1 ½ inches (3.8 cm) away from the wall to allow grasp
- Install handrails on both sides of stairs
- Extend handrails one step length past the top and bottom step
- Install at adult elbow height 36 – 39 inches (90 – 100 cm)
- Choose a handrail that is 6 ¼ inches (16 cm) around or less for proper grip



## Stair Design Features

- All steps should be uniform
- Ideally at least 11 inches (30 cm) deep and at least 7 inches (18 cm) high
- Backs of steps should be closed in
- Avoid curved staircases
- Have spacious landings at top and bottom
- Vertical spindles should be 2 2/3 inches (6 cm) or less apart

## Stair Covering

- Make sure surfaces are non-slip and non-glare
- Securely attach low-pile, non patterned carpeting to stairs
- Consult your retailer on non-slip flooring options
- Mark the edges of stairs with contrasting colours where practical

### Did you know?

Each day, more than 10 people in Ontario are hospitalized because of a fall on stairs or steps.

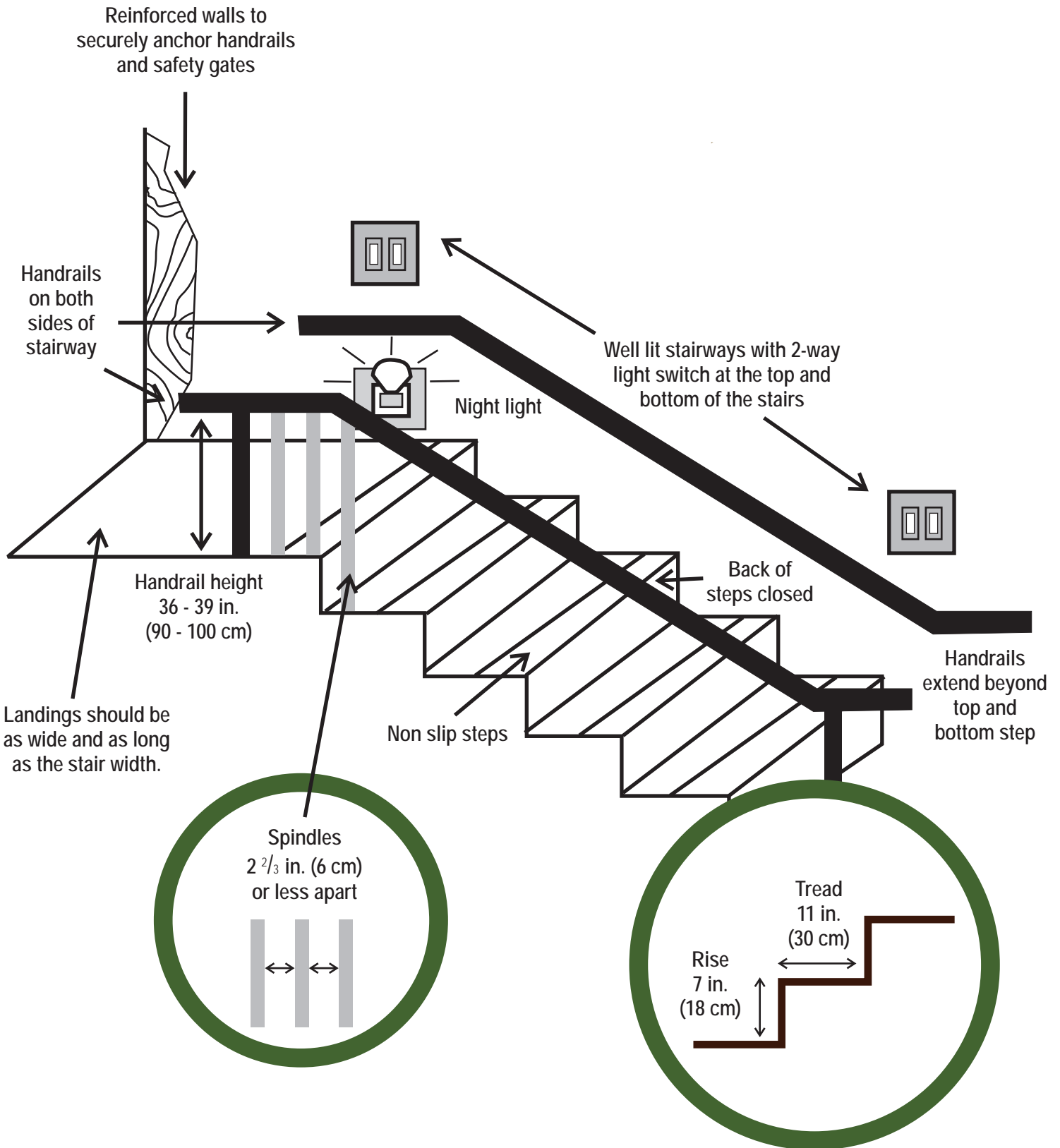
## Lighting

- All stairways should be well lit
- Install easy to reach light switches at both top and bottom of stairway
- Install light switches no higher than 48 inches (122 cm) from floor
- Use automatic sensor and/or night lights
- Place light fixtures where bulbs will be easy to change

## Other

- Make sure all outdoor stairs are well lit, non-slip and include railings

see over for diagram →





# ADDITIONAL CONSIDERATIONS

## Childproof Windows

Young children can easily fall from open windows causing serious injuries and deaths. Check your local by-laws. Landlords may be required to install window guards.

- Window screens are not designed to prevent falls
- Install window guards or window stops to keep windows above the first floor from opening more than 4 inches (10 cm)
- Consult your retailer for window options

## Safety Gates

- Safety gates are used to prevent infants and toddlers from falling down stairs or as a barrier between rooms
- Only use hardware mounted gates at the top and bottom of the stairs, properly anchored to door jams or walls
- Pressure mounted gates, which you squeeze and then release into a door frame, are not recommended or safe for use on stairs
- Gates should always be installed and used according to the manufacturer's instructions.



## Accessibility

Accessible homes using universal designs serve the most people, regardless of their age or levels of ability or mobility. Homes that can be easily adapted to your changing needs can delay or prevent the need for you to move. Some accessible and universal features include:

- Wider doorways and hallways to accommodate walkers and wheelchairs
- Lever style door handles and faucets
- Mainfloor bathroom, bedroom and laundry
- Wider stairs to accommodate a future stair lift
- Pocket doors for improved access
- A wider tub to accommodate future needs and assistive devices

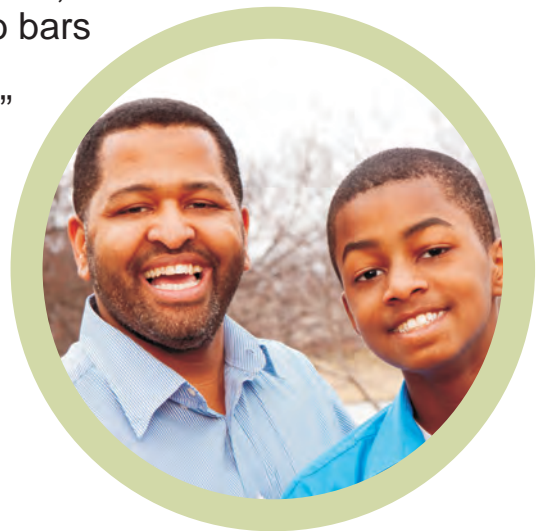
## MARY'S STORY

Mary and John have lived in their comfortable home for most of their lives. They love where they live, they have great neighbours, and family lives close by.

Eight years ago, Mary was taking care of her elderly mother who had moved in with them. Mary had **grab bars** installed in the bathroom, a new **raised toilet**, a **walk-in shower** (the old shower was leaking and had to be torn out to be repaired anyway), and **extra handrails** installed on all of the stairways, on the advice of her mother's visiting health care provider. They advised that a fall could put her elderly mother at risk of serious injury. Mary was thrilled to find an attractive style of grab bar with a bronze finish that matched the rest of her bathroom. She also loved the open-style shower with bench seat. She was pleased that her bathroom and home didn't have to look like a hospital to be safe.



Not long after caring for her mother, Mary's teenage son injured his leg in a soccer game and found he was using the grab bars, shower with bench seat and stair handrails during his recovery. Now, several years later, Mary is surprised to find she uses those same grab bars and handrails on a regular basis. At the time she thought to herself, "I'm 45, these are for old people!" But they have been great **for everyone** who lives here. Last year, John broke his right arm while playing hockey. He found that a stair handrail on both sides was helpful when he only had use of his left arm. Mary also appreciated having the added handrails when she was adjusting to her new bifocal glasses.

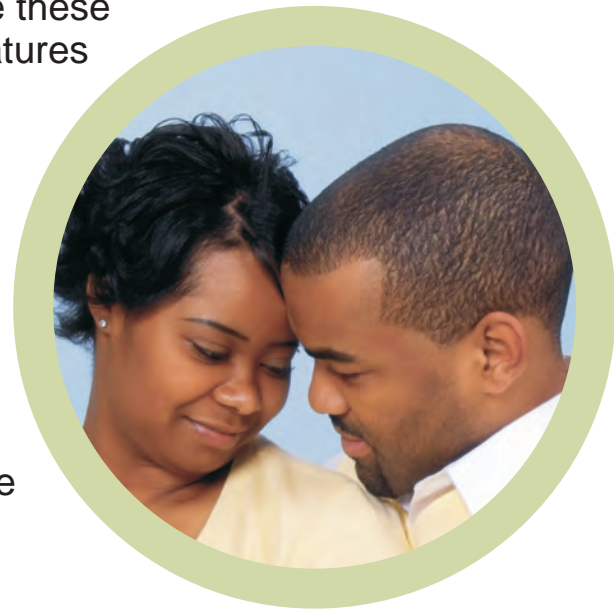


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During a renovation three years ago, to create a main floor master bedroom and bath, Mary and John added other safety features such as improved lighting, night-lights and low-pile carpets. “We were making some structural changes so it was easy to include these while we had the workers here. And now that we have grandchildren visiting our home, I am glad we took the time to add things like night-lights. They proved useful for John as well, when he had a change in his blood pressure medication and was making many trips to the bathroom at night - I’m sure they prevented a fall or two!” When Mary looks ahead to the future, she sees herself and her husband staying in this house, for a long time to come.



Mary’s daughter and son-in-law are building a new home, and are working with the builder to include many of the features Mary has in her home. They are finding there is even less cost to include these features when building new. Also, the added features will help with the resale of their home. They are installing grab bars in the showers and tubs, since they see this as useful for all ages. While they don’t feel that they need grab bars by the toilet just yet, they are having the bathroom walls reinforced to install them later on. They designed the stairs and reinforced the stair walls too, planning for children and safety gates. All of the lighting, stairs and flooring have been carefully chosen to make this an age-friendly home that will accommodate them for years to come.



# WHY BUILD or RENOVATE for a SAFER HOME?

Your home is one of the most important investments you make. Whether you are 25 or 65, small changes made now can increase the resale value of your home and make it a safer and more comfortable place for a lifetime.

Your home is also where many serious injuries can happen. Most are due to falls. About half of all falls happen at HOME. Research shows that most falls in the home are related to

## Poor Structural and Design Features

Common HAZARDS include:

- STAIRS
- BATHROOMS
- FLOORING and LEVEL CHANGES
- LIGHTING



With proper planning, including design and product choices, most falls in the home can be prevented. Use these design ideas in your renovation or building plans and enjoy your investment for a lifetime.



# FUNDING SOURCES and REBATES

Before you build or renovate find out if you are eligible for funding or rebates to make your home safer. Please call or visit these websites for a full description of the programs.

1. **Canada Mortgage and Housing Corporation**

[www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)

Key Search Word: Consumers Programs and Financial Assistance

For more information: 1-800-668-2642

2. **Canada Revenue Agency**

[www.cra-arc.gc.ca](http://www.cra-arc.gc.ca)

Key Search Word: Home Renovation Tax Credit

For more information: 1-800-959-8281

3. **Ontario March of Dimes – Home and Vehicle Modification Program (HVMP)**

[www.marchofdimes.ca](http://www.marchofdimes.ca)

Key Search Word: Home and Vehicle Modification Program

For more information: 1-877-369-4867

4. **Veterans Independence Program (VIP)**

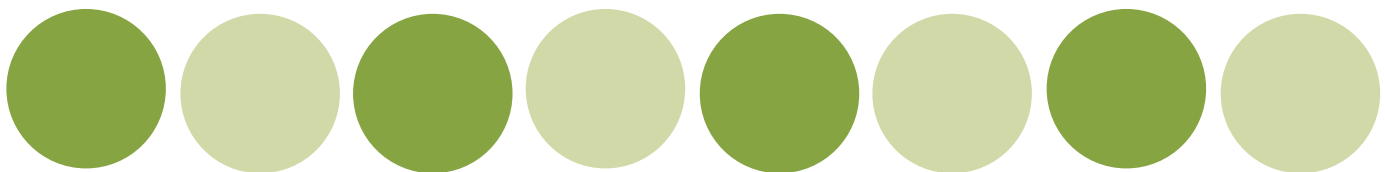
[www.vac-acc.gc.ca](http://www.vac-acc.gc.ca)

Key Search Word: Veterans Independence Program

For more information: 1-866-522-2122

5. **Your Local Municipality**

Tenants living in apartment buildings should check with their municipality to see if there is a window safety by-law. This may mean that a landlord must provide window stops or guards for you.



## ADDITIONAL RESOURCES

[American Society of Interior Designers \(ASID\)](http://www.asid.org) [www.asid.org](http://www.asid.org)

Search path: Design Knowledge → Aging and Accessibility → Design for Aging → Home for a Lifetime: Interior Design for Active Aging

The leading organization for interior design professionals. Related articles and guide booklets on interior designing for safety and aging in the home.

[Canada Mortgage and Housing Corporation \(CMHC\)](http://www.cmhc-schl.gc.ca) [www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)

Search path: Consumers → Renovating a Home → Renovation Fact Sheets OR

Search path: Consumers → Maintaining a Home → Adaptations for Seniors

1-800-668-2642

CMHC is Canada's national housing agency. Includes a series of fact sheets to help you plan and assess your renovation project. Accessible and universal design options included.

[Health Canada](http://www.hc-sc.gc.ca) [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

Search path: Healthy Living → Seniors

Seniors and Aging: Preventing Falls in and Around the Home

[Ministry of Municipal Affairs and Housing](http://www.obc.mah.gov.on.ca) [www.obc.mah.gov.on.ca](http://www.obc.mah.gov.on.ca)

Information on the Ontario Building Code.

[Safe Kids Canada](http://www.safekidscanada.ca) [www.safekidscanada.ca](http://www.safekidscanada.ca)

Search path: Safety Topics → Home and Safety → Baby Falls

1-888-723-3847

Safe Kids Canada is the national injury prevention program of The Hospital for Sick Children giving parents practical and reliable solutions to keep kids safe. Includes fact and tip sheets.

[The Center for Universal Design](http://www.design.ncsu.edu/cud) [www.design.ncsu.edu/cud](http://www.design.ncsu.edu/cud)

Universal design simplifies life for everyone by making products and environments more usable for all ages and abilities, at little or no extra cost. Information on universal design principles and ideas.

[The Secret to Aging Beautifully](http://www.agingbeautifully.org/ranch) [www.agingbeautifully.org/ranch](http://www.agingbeautifully.org/ranch)

A universal design demonstration site using design elements to prevent injuries and to encourage a lifestyle that leads to health and longevity.

[Yellow Pages](#)

Search path: Bathroom Accessories, Bathroom Remodeling, Home Improvements, Hospital Equipment and Supplies



**Peterborough County-City  
HEALTH UNIT**

...because health matters!

For more information contact: Injury Prevention Program

705-743-1000  
[www.pcchu.ca](http://www.pcchu.ca)

**Durham Region Health Department Haliburton, Kawartha, Pine Ridge District Health Unit  
Hastings & Prince Edward Counties Health Unit Peterborough County-City Health Unit**

Sources: Canadian Centre for Occupational Health and Safety, Canada Mortgage and Housing Corporation, National Association of Home Builders, Ontario Building Code, Safe Kids Canada, SMARTRISK, University of Ottawa Community Health Research Unit

Nov 2012