

Strong fumes and toxic chemicals in dust – during and after home renovations and energy upgrades – can put residents' health at risk.

Pregnant women, couples planning to become pregnant and families with young children need to take extra care. Being exposed to even low levels of some chemicals can disrupt the way a fetus, baby or child grows and develops.

Contractors and renovators are also at risk from on-the-job exposures, and may carry harmful chemicals home to their families.

There is plenty we can all do to prevent harm.





Home renovations and energy retrofits or upgrades can make homes more comfortable, reduce energy bills, and help protect the environment. However, they can also put children's health at risk from exposures to toxic substances.

Fortunately, families, contractors and do-it-yourselfers can take some simple actions to make sure their home upgrade projects are child healthy.



The Canadian Partnership for Children's Health and Environment (CPCHE) is a collaboration of environmental, public health, child care and physician organizations that have been working together since 2001 to advance protection of children's health from toxic chemicals and pollution. Funding for this publication was provided by the Ottario Trillium Foundation via the Canadian Environmental Law Association, the lead CPCHE partner for this project.

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Renovate Right



How to make sure a home repair or energy upgrade is **Child** healthy



www.healthyenvironmentforkids.ca

Steps to a Child healthy

home repair or energy upgrade

Renovating an older home?

Take extra care if your home was built before 1990. Paint in older homes often contains high levels of lead. Lead is toxic, especially to the developing brains of children, including in the womb. Old caulking may contain PCBs (highly toxic chemicals). Asbestos may be present in old tiles, shingles, insulation and heating duct tape. Get professional help to remove asbestos materials safely.

Isolate the work

- Whenever possible, pregnant women should not do home renovations and should stay out of areas being renovated. Kids should stay out too.
- Remove belongings from the work area. Completely cover whatever is left with plastic sheets. For wall-to- wall carpeting, completely cover with drop sheets.
- Ensure the work is done when the furnace or air conditioning is off to avoid blowing dust or fumes through the home.
- Tape durable barriers such as wood or heavy cardboard over air ducts.
- Tape plastic sheets over doors and other openings. Check often for leaks.

Bust that dust

- Clean the workspace daily to control dust. In the work area, use a shop vacuum fitted with a filter and bag for capturing fine particles. Or, use wet rags, a damp mop, or a broom and sweeping compound. Outside the work area, use a vacuum with a HEPA filter.
 - Throw out rags that have been used to clean up dust. Store brooms, mops and vacuums away from other household items.
 - When removing waste, use sealed bags or covered boxes to keep dust contained.
 - Don't remove old paint from windowsills, walls and other surfaces (it often contains lead). Instead, cover with a good quality primer before repainting, or get rid of old painted materials.
 - Take care not to spread the dust around. Change out of work clothes and shower before sitting on furniture, cooking or playing with children. Use a separate hamper for work clothes and wash separately from other laundry.

Solution Choose & use products carefully

- When possible, choose renovation products that won't give off strong fumes. Look for quick-drying and VOC-free or low-VOC caulking, paints and glues.
- Choose flooring and other materials that have factory-applied stains and coatings.
- Choose smooth flooring products, instead of carpeting, to allow for easy dust cleanup.
- Whenever possible, choose products with the fewest hazard symbols. For products with hazard symbols be sure to follow label instructions carefully.
- Tightly seal all opened product containers. store them out of reach when not in use, and dispose of any leftover products as hazardous waste.

Volatile organic compounds (VOCs) are in many products, including caulking, glues and pressed wood. Products with VOCs often have a strong chemical smell. Many VOCs are harmful to human health.

Are you a tenant?

If your building manager or landlord is planning to renovate your home, become involved. Start off by giving them a copy of this brochure. Let them know that there are simple actions they can take to protect your family's health. Keep written notes of any conversations. Questions? Click on "tenants" on CPCHE's renovate-right.ca.

www.healthy forkids.ca Energy retrofits help to cut drafts. But homes that are too tightly sealed can lead to higher indoor air pollution, or mould from excess moisture. Adding ventilation and eliminating moisture sources and leaks are some ways to prevent these problems. For more, visit renovate-right.ca.

Regular house dust

contains low levels

of toxic chemicals.

Renovation dust

contains much

higher levels. It is

to protect babies

and children from

exposure to harmful

chemicals in dust.

especially important



₩ Take care of the air

- In addition to careful dust control, use a window fan, facing outdoors, to force any airborne dust and fumes outside.
- Keep windows open after the work is done until the fumes are gone. Open windows regularly to bring in fresh air.
- Add ventilation when upgrading kitchens and bathrooms to avoid problems with mould.
- Install carbon monoxide detectors and test for radon.
- Reduce the use of products with strong fumes and fragrances.