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Finger Lakes Children's Environmental Health Center

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Healthy Homes, Healthy Families

A GUIDE TO PROTECTING YOUR FAMILY'S HEALTH
BY MAKING YOUR HOME A SAFER ENVIRONMENT



THIS BOOKLET INCLUDES PRACTICAL TIPS FOR REDUCING ENVIRONMENTAL HAZARDS IN YOUR HOME AND STATEWIDE RESOURCES FOR MORE INFORMATION.

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Americans spend 90 percent of their time indoors.

—EPA, 2011



Healthy Homes, Healthy Families

WHAT IS AN ENVIRONMENTAL HEALTH HAZARD?

Environmental health hazards include physical hazards or toxins that may enter our bodies through air, food or water. Some environmental health hazards can make you sick right away; others show no signs for many years, so it is important to understand and avoid them now.

WHO IS MOST AT RISK?

Environmental hazards usually have the biggest impact on children because it affects their developing bodies while in the womb and after birth, not to mention that their hand-to-mouth behavior, size, and activities such as crawling subject them to additional hazards. Early life exposure to environmental contaminants can lead to many health problems later in life, including neurological problems, obesity, heart disease and cancer.

Environmental hazards can also be passed from a mother's body to her unborn baby or to the baby through breast milk. This means women who are pregnant or breastfeeding should also avoid exposure to environmental hazards.

WHY FOCUS ON HOMES?

Americans, especially children, spend most of their time indoors. Environmental health hazards in homes can have major effects on families' health, like asthma, lead poisoning or even cancer.

WHAT CAN I DO?

This booklet describes some common home environmental health hazards and suggests simple ways to reduce these hazards in your home. Resources for more information are found throughout the booklet. Refer to page 27 for national and state resources.

PARTNERS IN HOME HEALTH

Improving home environmental health requires a combination of physical and behavioral changes. Collaboration among residents, property owners and local organizations to address home hazards are essential for protecting the health of children and families. Throughout this guide, we offer tips for residents and property owners, as well as resources for addressing larger problems.

FOLLOW THE NATIONAL CENTER FOR HEALTHY HOUSING'S SEVEN STEPS FOR CREATING A HEALTHIER HOME. KEEP IT:

- 1 DRY**
 - Use vent fans or open a window while showering and cooking.
 - Find and fix water leaks right away.
- 2 CLEAN**

Practice the healthy housekeeping tips mentioned throughout this guide.
- 3 PEST-FREE**

Discourage pests from entering your home by taking away their food, water and shelter (see page 9).
- 4 SAFE**
 - Reduce clutter and clean up spills to reduce falling hazards.
 - Set water temperature at 120°F or lower to prevent scalding.
 - Cover outlets to prevent electric shock, and lock chemicals away to prevent unintentional poisonings.
 - Keep the poison control center number in your cell phone and posted near land lines (1-800-222- 1222).
- 5 CONTAMINANT-FREE**
 - Use safer chemical alternatives whenever possible.
 - Follow instructions carefully whenever you are handling a chemical.
 - Refer to sections of this booklet for reducing exposure to chemical hazards.
 - Avoid using pesticides to get rid of pests (see page 9).
- 6 VENTILATED**

Tightly sealed homes can trap environmental hazards. Especially in newer homes, make sure your ventilation system allows fresh air to enter the house.
- 7 MAINTAINED**

Have appliances (furnace, water heater, fireplace) inspected annually by a professional. Fix hazards such as broken handrails, electrical hazards and peeling paint right away.

For more information on these “steps for creating a healthier home,” visit the National Center for Healthy Housing’s Resources page: www.nchh.org/resources.aspx.

Asthma
accounts for
more than
14 million
missed school
days every year.

—American Lung Association



Asthma Triggers in the Home

Asthma is chronic, meaning it cannot be cured. When you have asthma, the air passages in your lungs are very sensitive and can easily become inflamed and swollen. Different irritants, or “triggers,” cause asthma attacks in different people.

During an asthma attack the bronchial tubes (airways) become inflamed and irritated, fill with mucus and the muscles constrict. Symptoms of an asthma attack include coughing, wheezing, chest tightness and difficulty breathing. Untreated asthma can lead to hospitalization or death.

THERE ARE MANY POSSIBLE ASTHMA TRIGGERS IN THE HOME, INCLUDING:

- Tobacco smoke
- Dust mites
- Mold
- Pets
- Pests
- Strong fragrances

WHAT YOU CAN DO IF YOU HAVE ASTHMA:

- Go to the doctor for asthma follow-up visits at least every six months.
- Make sure your bedroom is asthma safe:
 - Lightly spray area with water before dusting or sweeping to keep dust out of the air.
 - Reduce clutter (this collects dust and attracts pests).
 - Don't let pets in the bedroom.
 - Use allergen dust covers on pillows and mattresses.
 - Wash and dry bedding on the hottest settings and vacuum carpets with a HEPA filter vacuum weekly.
 - Keep humidity in your home between 35% and 55%. Dust mites thrive in humid environments.

How to Reduce Triggers

TOBACCO SMOKE

- Quit smoking and encourage others to quit.
- Keep tobacco smoke out of your home and car.
- Ask smokers to smoke outside with a jacket that can be left outside (clothes trap and carry smoke inside with you).

DUST MITES

- Reduce the amount of fabrics, pillows, carpeting and stuffed animals in the bedroom.
- Use allergen dust covers on pillows and mattresses.
- Wash bedding and washable stuffed animals weekly in very hot water (at least 130°F).
IMPORTANT SAFETY NOTE: water that is hotter than 120°F can cause injury. If your water heater is set hotter than 120°F for any reason, install scald guards where needed in kitchens and bathrooms to prevent burns.

HOUSEHOLD CHEMICALS

- Store safely, separate from food and away from children. Store in the original container.
- Never mix chemicals.
- Read and follow directions carefully.
- Use in a well-ventilated room with good airflow.
- Avoid using air fresheners.
- Choose non-toxic cleaning products without fragrances.
- Use safer alternatives to chemicals for cleaning, such as borax, vinegar and baking soda.

MOLD AND MOISTURE

- Find and safely clean small amounts of mold with warm, soapy water. Allow the area to dry completely.
- Throw out water-damaged or musty/moldy materials.
- Find and fix water leaks right away.
- Use a fan that ventilates to the outside or open a window when cooking or showering to reduce moisture.

PETS

- Keep pets out of bedrooms.
- Wash hands after touching pets.

PESTS (RODENTS, COCKROACHES, ETC.)

Safely address the pest problem using integrated pest management (IPM, see page 18):

- Avoid using dangerous chemicals.
- Remove sources of food, water and shelter.
- Store food in sealed containers.
- Clean up crumbs and spills right away.
- Fix water leaks and insulate cold water pipes.
- Clean up clutter and take the garbage out often.
- Seal cracks and holes using steel wool, copper mesh, and/or caulk to keep pests out. Only leave pet food out while pets are eating.

Asthma Resources

Asthma Basics is a free 50-minute online course that helps people learn about asthma. This course is for anyone with asthma, parents, caregivers, friends and family. It is ideal for school/childcare provider staff and the community at all levels. Participants learn about asthma, how to identify and manage asthma symptoms, how to understand the value of an Asthma Action Plan and how to respond to a breathing emergency. To learn more, visit www.lung.org/asthmabasics.

American Lung Association of the Northeast

1-800-LUNGUSA (1-800-586-4872)

www.lung.org/associations/charters/northeast/

Lungtropolis® is a free, fun-filled website for kids ages 5 to 10 with asthma and a great source of advice for parents. When kids visit Lungtropolis, they become asthma control agents and conquer the mucus mob. While playing they learn how to control their asthma. The website guides parents through steps to help recognize and manage their child's asthma symptoms. Interactive quizzes and questions make it easy to learn how to keep their child healthy and active. To learn more, visit www.lungtropolis.com.

Local Health Departments — Contact your local health department with questions about possible causes of poor indoor air quality such as furnace combustion, radon, carbon monoxide and mold.

www.health.ny.gov/contact/contact_information/

New York State Department of Health offers information about asthma and how to control it.

www.health.ny.gov/diseases/asthma/

New York State Integrated Pest Management (IPM) Program of Cornell University provides information on Integrated Pest Management. See “Household Chemicals” (page 18).

New York State Smoker's Quitline has trained specialists to support you and your quit plans. Provides a FREE starter kit for eligible NYS smokers, information about local quit programs and free help from Quit Coaches.

1-866-NY-QUITS (1-866-697-8487)

www.nysmokefree.com

University of Rochester Environmental Health Sciences Center

offers a virtual tour of a healthy home with information about how to reduce environmental health hazards in your own home.

www.ehsc.urmc.edu/healthyhomes

General Home Hazards

There are a variety of general home hazards that can cause unintentional injuries such as poisoning, falling and choking.

WHAT YOU CAN DO

- Set your water temperature at or below 120°F. If you have your water temperature set higher to control dust mites, install scald guards where needed in kitchens and bathrooms to prevent burns.
- Reduce clutter and make repairs to prevent falls.
- Keep chemicals (cleaners, medicine, etc.) away from children. Store them:
 - Away from food
 - High up
 - Behind childproof locks

SAFE DRIVING

Always wear seatbelts in the car. Secure children in an age-appropriate car seat until their 8th birthday in accordance with New York State law.

HELMET SAFETY

New York State law requires helmets when riding bikes, skateboarding, riding on a scooter, rollerblading and skating up until the age of 14. Older children and adults should also wear helmets to prevent serious injury.

SAFE SLEEP

Always sleep babies on their back in an empty crib without blankets, bumpers or toys; items in the crib can cause your baby to suffocate. A baby that sleeps or naps with a parent or sibling can be crushed or suffocated. Even five minutes in an unsafe sleep environment can cause death. Your baby is safest without a blanket and sleeping on their back. For warmth, dress your baby in sleep clothing such as a one-piece sleeper.



Home accidents kill one person every 16 minutes in the U.S.

—U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

General Home Resources

The Centers for Disease Control and Prevention (CDC) “Protect the Ones you Love” initiative helps parents and caregivers take steps to prevent unintentional injuries in the home.

1-800-CDC-INFO (1-800-232-4636)

www.cdc.gov/safecchild

The Injury Free Coalition for Kids is an injury prevention program whose mission is to prevent injury to children through research and prevention programs. The Coalition is a great resource for injury prevention information and strategies.

National Office

Columbia University Mailman School of Public Health

1-212-342-0514

info@injuryfree.org

www.injuryfree.org

Local Fire Departments — contact your local fire department to learn more about smoke alarms and carbon monoxide detectors, and how to install them properly.

Local Health Departments — Contact your local health department with questions about general housing complaints such as:

- Cockroaches, mice, insects and other pests
- Garbage/litter
- Odors

Many health departments can also offer information about other health and safety topics.

www.health.ny.gov/contact/contact_information/

New York State Department of Health offers information about many environmental health concerns in the home and workplace, along with resources for assistance.

<https://www.health.ny.gov/environmental/index.htm>

Use their interactive map to find contact information for regional, district and county environmental health programs near you:

https://www.health.ny.gov/environmental/water/drinking/doh_pub_contacts_map.htm

New York State Healthy Neighborhoods Program provides home assessments and interventions in selected communities throughout New York State. The program addresses environmental health hazards like:

- Asthma
- Tobacco cessation
- Indoor air quality
- Lead
- Fire safety

Visit their website or contact your local health department to find out if this program is available in your neighborhood.

www.health.ny.gov/environmental/indoors/healthy_neighborhoods

University of Rochester Environmental Health Sciences Center offers a virtual tour of a healthy home with information about how to reduce environmental health hazards in your own home.

www.ehsc.urmc.edu/healthyhomes

Household cleaners are the number one cause of poisoning of children.

—EPA



Household Chemicals, Pesticides and Poisons

Many cleaning products, pesticides, medicines and other household chemicals are toxic and could be harmful to you and your children. Children are at the highest risk.

WHAT YOU CAN DO PRACTICE SAFE STORAGE:

- Store medicine and household chemicals, like cleaning products, bleach, pesticides, automotive products and paint out of the reach of children.
- Use a locked cabinet whenever possible.
- Never leave household chemicals out or unattended.
- Store all products in their original container.
- Store chemicals separate from food products. Many chemical containers look like common food containers.

PRACTICE SAFE USE:

- Read labels on household chemicals very carefully and follow directions.
- Keep the room well-ventilated and have good air flow while you are cleaning.
- Never mix different household chemicals.
- Avoid long-term storage of unused chemicals. Safely dispose of old or leftover chemicals.
- Consider using safer alternatives. Vinegar, baking soda and borax are excellent non-toxic cleaners.
- Use integrated pest management (IPM, see pages 9 and 18) to deal with pests.
If IPM doesn't work and you decide to use chemicals, call a professional.

Household Chemicals, Pesticides and Poisons Resources

NYS Integrated Pest Management (IPM) Program of Cornell University provides information on integrated pest management (safer methods to address pest problems).
nysipm@cornell.edu
www.nysipm.cornell.edu

Household Hazardous Waste Disposal Facilities accept hazardous materials that cannot be thrown out or recycled safely, such as appliances, fluorescent light bulbs and pesticides. Contact your city, town or county to learn how to dispose of household hazardous waste safely.

www.dec.ny.gov/chemical/8782.html

Visit the New York State Department of Environmental Conservation to learn more about household hazardous waste.

www.dec.ny.gov/chemical/8485.html

Indoor air
levels of
pollutants may
be 2-5 times
higher than
outdoor levels.
Occasionally
they can be as
much as 100
times worse.
—EPA

Indoor Air Quality (IAQ)

ASBESTOS

Asbestos is a naturally occurring mineral fiber that was used in building insulation, floor and ceiling tiles and other materials until it was banned in 1989. When the material is broken or crumbling, fibers can be breathed in through the air. Long-term exposure to these fibers can cause asbestosis, lung cancer or mesothelioma.

CARBON MONOXIDE

Carbon monoxide (CO) is an odorless, colorless, toxic gas. It comes from burning fuels (gas, oil, etc.). CO can kill you or make you ill before you are even aware it is present. Only a CO detector can detect it.

FURNACE

If you have a hot air furnace, it greatly impacts your home's air quality. Make sure your furnace is working properly to avoid indoor air problems like dust and carbon monoxide.

MOLD

Mold is a fungus that grows in moist, warm areas of the home, like the attic, basement, bathroom and kitchen. Certain molds can cause respiratory and sinus problems or asthma attacks. Many molds are harmless, but some can cause significant health problems.

RADON

Radon is a colorless, odorless, naturally occurring, radioactive gas found in soil. Radon may enter basements of houses through cracks in concrete walls and floors or through dirt floors. It is the second leading cause of lung cancer in the United States.

TOBACCO SMOKE

Tobacco smoke can cause many serious health problems. See pages 7 and 8 for more information.

WHAT YOU CAN DO ASBESTOS

If your home has asbestos that is in good condition—not cracked or crumbling—it does not pose a hazard. However, contact an asbestos abatement and removal professional if you have asbestos in poor condition, are not sure, or are planning to remodel.

Consult the yellow pages to find asbestos abatement contractors or go to the New York State Department of Health website: www.health.ny.gov/environmental/indoors/asbestos/homeowners.htm

CARBON MONOXIDE (CO)

Install CO detectors near sleeping and living areas. New York State law requires CO alarms in all dwellings that have an attached garage or any fuel-burning appliances or heating system. Contact your local fire department for information about how to properly install CO detectors. www.amandaslaw.org

FURNACE

Have your furnace inspected annually by a professional. Replace your furnace filter with a new, high-quality filter 3–5 times a year or as specified by your product. For disposable filters, choose one that is accordion-style and has a “MERV” (minimum efficiency reporting value) rating of 8–12.

MOLD

Reduce moisture to prevent mold growth. Use vent fans or open a window when showering or cooking. Insulate cold water pipes, fix water leaks and clean up spills immediately. Clean small amounts of mold (fewer than 10 square feet) with soapy water or a 10% bleach solution (about 1.5 tablespoons per cup).

For bigger jobs, contact your local health department for advice.

RADON

Test your home. Inexpensive kits can be purchased online or at any hardware store, or through the New York State Department of Health, Radon Division. This is also a great resource for radon information. 1-800-458-1158 www.nysradon.org

Lead Hazards

LEAD POISONING

Lead is a toxin that affects the brain, heart, bones and kidneys. Because of children's growing brains and bodies, lead poisoning has a greater impact on children than adults. Even small amounts of lead in children's bodies can cause permanent learning and behavioral problems, often with no physical symptoms. This can include a lower IQ, hyperactivity and behavioral problems.

LEAD HAZARDS IN THE HOME

Lead poisoning occurs when harmful amounts of lead are swallowed or breathed in. Homes built before 1978 are at risk for containing hazardous leaded dust and paint. Lead can also be found in soil, jewelry, toys, home remedies, ceramics, candy or water.

One in 38
U.S. children
has lead
poisoning.
—CDC

Lead Hazards

WHAT YOU CAN DO

- **Have your child tested for exposure to lead.** By NYS law, children must be tested at age 1 and again at 2. If you are pregnant, your doctor should assess your risk for lead exposure.
- **Have your home professionally tested for lead** if it was built before 1978.
- **Prevent exposure:**
 - Wash children’s hands and toys with soap and water frequently.
 - Eat foods rich in iron, calcium and vitamin C.
 - Keep children away from cracking or peeling paint.
 - Cover bare soil with grass or mulch.
- **Use lead-safe cleaning techniques:**
 - Wash windowsills and floors weekly with soapy water.
 - “Work wet”—lightly dampen the cloth or floor when you dust or sweep.
 - Clean often with soap and water.
 - Use a HEPA (High-Efficiency Particulate Air) filter vacuum when cleaning.
- **Renters—talk with your landlord** about safely addressing potential lead hazards. If you are a renter, you cannot be evicted for requesting a lead inspection of your home.
- If your home was built before 1978, **use Lead Safe Work Practices when doing any renovation or repair work** that disturbs any painted surface. If hiring, **find a contractor certified by the EPA under the Renovation, Repair and Painting rule (RRP)** following federal guidelines (www.epa.gov/lead/rrp-reg.html). Pregnant women and children should stay away from the property until work is completed.

Lead Hazard Resources

Coalition to Prevent Lead Poisoning offers information, resources, and educational materials on lead poisoning prevention. Though the Coalition focuses its efforts in Central New York, much of the information they offer has been utilized across New York State, including educational materials in multiple languages including English, Spanish, Burmese, Karen, Nepali, Somali, Swahili, and American Sign Language.
admin@leadsafeby2010.org
www.letsmakeleadhistory.org

Local Health Departments offer general information on lead hazards. The NYS Department of Health also offers information and resources on its website.
www.health.ny.gov/environmental/lead

New York State Healthy Neighborhoods Program provides home assessments and interventions in selected communities throughout New York State. The program addresses environmental health hazards like:

- Asthma
- Tobacco cessation
- Indoor air quality
- Lead
- Fire safety

Visit their website or contact your local health department to find out if this program is available in your neighborhood.
www.health.ny.gov/environmental/indoors/healthy_neighborhoods

New York State Regional Lead Resource Centers evaluate and provide medical treatment for children with elevated blood lead levels.
bit.ly/leadresourcecenters

Financial and Legal Resources

Many home health improvements are free or low cost. However, some may require costly repairs, such as fixing a major leak or replacing the roof. Grants or loans may be available to homeowners through local housing agencies.

Renters may find they need legal support in addressing home hazards. Free or low-cost advice may be available through local legal aid services. Local municipalities (city or town governments) may also offer information or assistance.

FINANCIAL RESOURCES

PathStone is a non-profit organization that provides services for low-income families and communities throughout New York, Pennsylvania, New Jersey, Ohio, Indiana, Vermont, Virginia and Puerto Rico. Available services vary by location, but include emergency and supportive services, energy assistance, homeownership and housing choice, and housing rehabilitation. 1-800-888-6770
www.pathstone.org

Local Housing Authorities help renters access low-income housing and programs to promote self-sufficiency.
bit.ly/NYhousingauthorities

LEGAL RESOURCES

LawHelpNY - Low-income homeowners and renters who need legal assistance in connection with housing, as well as other health insurance and disability issues, can find the name of a local legal services program through LawHelpNY.
www.lawhelpny.org (click on "Find Legal Aid in NYS")

U.S. Department of Housing and Urban Development lists New York based resources to help tenants understand their rights, find housing, and access financial assistance resources.
bit.ly/NYrentalresources

National and State Healthy Homes Resources

NeighborWorks® organizations build strong communities by offering a variety of services that benefit renters, prospective homebuyers, and current homeowners. Contact NeighborWorks® America or use their online Network Directory to find a chartered member near you.
www.neighborworks.org
1-202-760-4000

Healthy Home: Environmental Health Hazards — this DVD combines the Coalition to Prevent Lead Poisoning's *Lead Awareness for Parents* with a series of short videos about maintaining a healthy home. These segments have been translated into Spanish and ASL, and are available online at bit.ly/healthyhomesvideos and bit.ly/leadawarenessforparents.

Environmental Protection Agency (EPA)

Region 2 Office (serving NJ, NY, Puerto Rico, the US Virgin Islands, and eight tribal nations) 877-251-4575 (toll free)
www2.epa.gov/aboutepa/epa-region-2

Department of Housing and Urban Development (HUD)

www.hud.gov

Centers for Disease Control and Prevention (CDC)

www.cdc.gov

Department of Agriculture: Research, Education and Economics (REE)

www.ree.usda.gov

National Center for Healthy Housing (NCHH)

1-877-312-3046 (toll free), www.nchh.org

National Environmental Health Association (NEHA)

1-866-956-2258 (toll free), www.neha.org

New York State Department of Health

www.health.ny.gov