**Massachusetts Department of Public Health | Bureau of Environmental Health**

# Asthma and Your Environment

## Some chemicals and pollutants in your environment where you live, learn, work, play, or visit can make your asthma worse.



What is asthma?

Asthma is a lung disease that makes it difficult to breathe. Airways that carry air in and out of the lungs become swollen and tight. People who are having an asthma attack often cough, wheeze, and feel that they need to catch their breath.

How do I know if I have asthma?

Talk to a doctor if you or your children have trouble breathing. The cause of asthma is not known, and there is no cure. A serious asthma attack can result in death.

What are environmental asthma triggers?

Asthma triggers are any chemical, pollutant, or allergen around you that make your asthma worse. Asthma triggers can also be strong chemical smells, dust, or pets. YOUR asthma triggers may be very different than other people with asthma. Not all asthma triggers make every person feel the same way. **Environmental asthma triggers are found both indoors and outdoors**.

Use the following information to help keep asthma triggers away from you and your family.

Indoor Asthma Triggers

ENVIRONMENTAL CHEMICALS AND POLLUTANTS

### Hazardous Substances

• Strong smelling household cleaners or any product with a strong odor such as paint, perfume, hairspray, air fresheners, bug-spray, mothballs, insect bombs, or foggers.

• The fumes from your car when idling in the garage or near your house or apartment. Idling is leaving your car engine on when the car is not moving.

• Vapors and or fumes from gas, oil, or kerosene stoves.

*What you can do:*

• Open a window when you use household cleaners or cook to allow fresh air into the house or apartment.

• Don’t let your car idle in a garage or any enclosed space.

• Vent furnaces, electrical ranges, space heaters, and gas, wood, and coal stoves to the outside.

• Use air conditioners (or dehumidifiers) whenever possible.

### Secondhand Smoke

• Smoke from a burning cigarette, pipe,   
cigar, etc.

What you can do:

• If you smoke, quit.

• If you do not smoke, avoid places where other people smoke.

### Pets and Bugs

• Dander, i.e. skin flakes, from birds, cats, dogs, gerbils, rats, and mice can remain in the house or apartment dust long after the animal has left.

• Cockroach droppings can also affect asthma.

What you can do:

• Keep pets away from fabric-covered furniture (especially your bed), carpets, and stuffed toys.

• Wash your hands, face, and arms after playing with your pet.

### Molds

Molds live in warm, moist places such as basements, kitchens, bathrooms, under old carpets, ceiling tiles, or any place that collects water.

What you can do:

• Prevent mold by repairing leaks and   
moist areas.

• Wash all surfaces with vinegar (do not use bleach, as it can trigger an asthma attack).

• Repair moldy ceiling tiles and carpets to keep mold away.

• Use dehumidifiers whenever possible.

### Household Dust Mites

• Dust mites are tiny insects that cannot be seen with the naked eye.

• Dust mites can be found in any fabric-covered item in your home (mattresses, sofas, clothes, stuffed toys, carpets).

What you can do:

• Wash bed sheets, pillowcases, and blankets frequently in hot water.

• When vacuuming, wear a mask and replace vacuum bags frequently. Use dust mite covers on your pillows and mattress.

Some Outdoor Asthma Triggers

**Sulfur Dioxide (SO2), Ozone (O3), and Dust**

• Sulfur Dioxide (SO2) is a common air pollutant that results from coal- and oil-burning power plants.

• Ozone, also known as smog, is one of the most common air pollutants that can trigger asthma attacks.

• Dust is made up of solids (e.g., street sand from construction work, paint chips, smoke) or liquids (vehicle exhaust, etc.)

What you can do:

Controlling outdoor triggers can be difficult. Here are some steps to reduce your exposure.

• Consider staying indoors when ozone or other pollutant levels are high.

• Pay attention to air pollution warnings in local newspapers, online, or on television and radio.

• Close windows and use air conditioning.

• Limit outdoor activities to early in the morning or later in the evening.

• Consider removing your shoes at the door.

• Protect respiratory passages with a scarf in cold weather.

• Use an inhaler at first sign of   
respiratory difficulty.





For Additional Information on Asthma:

Asthma Prevention & Control Program  
MA Department of Public Health, 250 Washington Street, 4th Floor, Boston, MA 02108   
Phone: 617-624-5070, Fax: 617-624-5075, TTY: 617) 624-5992

American Lung Association of MA   
Phone: 800-499-LUNG, Fax: 781-890-4280, Email: [info@lungne.org](mailto:info@lungne.org), [www.lungne.org](http://www.lungne.org)

Asthma and Allergy Foundation of America, New England Chapter   
Phone: 781-444-7778, Toll Free: 877-2-ASTHMA, Fax: 781-444-7718, Email: [aafane@aafane.org](mailto:aafane@aafane.org)   
[www.asthmaandallergies.org](http://www.asthmaandallergies.org)

Boston Healthy Homes and Schools Collaborative  
Phone: 617-451-0049 ext.530, Fax: 617-451-0062, [www.bhhsc.org](http://www.bhhsc.org)

Bureau of Environmental Health   
MA Department of Public Health, 250 Washington Street, 7th Floor , Boston, MA 02108  
Phone: 617-624-5757, Fax: 617-624-5777, TTY: 617-624-5286   
[www.mass.gov/dph/environmental\_health](http://www.mass.gov/dph/environmental_health), [www.mass.gov/dph/asthma](http://www.mass.gov/dph/asthma)

Revised 2016