



ASTHMA is a chronic respiratory condition that affects the lungs and causes repeated episodes of wheezing, chest tightness, shortness of breath and nighttime or early morning coughing¹. The cause of asthma is unknown, but is thought to be influenced by the environment and genetics. In Indiana, 10.3% of adults (2013)² and 9.5% of children (2011)³ have a current asthma diagnosis.

Environmental Triggers in the Home

The cause of asthma is unknown, but people with asthma have inflamed airways, which cause them to be more reactive and sensitive to triggers. Because Americans are spending more and more time indoors (up to 90% of their time⁴), it is important to know common environmental triggers that can be found in the home. Common environmental triggers that are found in the home include:

- Allergens, such as pollen, pet hair or dander
- Cockroaches, dust mites and other pests
- Mold
- Tobacco and wood smoke
- Nitrogen dioxide from gas stoves

Environmental Trigger Management

Adults and children with asthma and their families can reduce the amount of triggers they are exposed to by:

- Regularly using an air cleaner or purifier
- Using a dehumidifier to prevent mold growth
- Using mattress and pillow covers on asthmatics' beds to prevent exposure to dust mites and other allergens
- Turning on the exhaust fan when using a gas stove or oven and the bathroom exhaust fan while bathing
- Washing sheets and pillowcases in hot water
- Not allowing pets in bedrooms to reduce the amount of pet dander

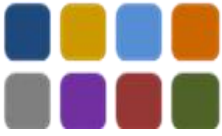
Table 1. 2013 Indiana Asthma Call-Back Survey Responses⁵

Indoor Environmental Triggers	Percentage of Yes Response*
Gas Used for Cooking	47.5%
Mold (past 30 days)	10%
Pets Inside the Home	62.5%
Cockroaches (past 30 days)	3%
Mice or Rats (past 30 days)	10%
Wood Burning Fireplace/Stove	10%
Unvented Gas Fireplace/Stove	6.4%
Smoking Inside the Home	22.5%
Carpeting or Rugs in Bedroom	68.4%

Table 2. 2013 Indiana Asthma Call-Back Survey Responses for Trigger Management⁵

Action Taken to Reduce Trigger Exposure	Percentage of Yes Response*
Air Cleaner/Purifier Regularly Used	25%
Dehumidifier Regularly Used	33.9%
Kitchen Exhaust Fan Regularly Used	55%
Mattress Cover Used	31.4%
Pillow Cover Used	27.6%
Sheets/Pillow Cases Washed in Hot Water	37.4%
Bathroom Exhaust Fan Regularly Used	63%
Pets Not Allowed in Bedroom (If Inside Pet)	23.6%

*Percentages will not equal to 100%



TAKE ACTION: Steps you can take to prevent or control asthma

- ❑ Monitor your level of control with a validated control test such as the [Asthma Control Test™](#) or the [Asthma Control Questionnaire®](#):
 - [Test for children ages 4 to 11 years](#)
 - [Test for those 12 years and over](#)
- ❑ During routine medical visits, talk with your health care provider about your asthma symptoms, triggers, medications and side effects.
- ❑ Identify and avoid asthma [triggers](#) that can cause symptoms or attacks.
- ❑ Avoid smoking and being around others who are smoking.
- ❑ Take medications as prescribed by your health care provider.
- ❑ Work with your health care provider to create an [Asthma Action Plan](#)—these plans include information concerning daily treatment, medications, short and long-term control measures, and explain when to seek medical treatment.
- ❑ Ensure students and employees have immediate access to quick-relief medications.
- ❑ Encourage school staff, child care providers and employers to maintain asthma friendly environments, such as: [No-Idle Zones](#), and [Ozone Action Days](#).

Community resources

- ❑ To be connected with Indiana asthma programs and resources, visit the [Indiana State Department of Health Asthma Program's Resource Guide](#) or call the [Indiana Family Helpline](#) at 1-855-Help-1ST (855-435-7178). Additional information can be found at the [Asthma Community Network](#), [Centers for Disease Control and Prevention](#), [United States Environmental Protection Agency](#) and the [American Lung Association in Indiana](#) websites.
- ❑ To get help with tobacco cessation, call the [Indiana Tobacco Quitline](#) at 1-800-QUIT-NOW (800-784-8669) or visit www.quitnowindiana.com.
- ❑ The [American Lung Association Asthma Clinical Research Centers](#) regularly recruit asthma patients for their studies.
- ❑ [AIRNow](#): an index for reporting daily air quality in local regions.
- ❑ To find participating American Lung Association [Breathe Well, Live Well](#) programs in your area, visit the [In My Community](#) page and enter your zip code.
- ❑ [Improving Kids' Environment's](#) website also provides resources for environmental trigger management and tips for green cleaning and integrated pest management.

References

1. Centers for Disease Control and Prevention [CDC]. (2015). *Asthma*. <http://www.cdc.gov/asthma/default.htm>.
2. CDC and Indiana State Department of Health Data Analysis Team. (2014). *Behavioral Risk Factor Surveillance System Prevalence Data, 2013 adults*.
3. CDC and ISDH DAT. (2012). *Behavioral Risk Factor Surveillance System Prevalence Data, 2011 children*.
4. United States Environmental Protection Agency [US EPA]. (2015). *Asthma Triggers: Gain Control*. <http://www.epa.gov/asthma/triggers.html>.
5. CDC and ISDH DAT. (2014). *BRFSS Asthma Call-back Survey, 2013 adults*.

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