

- Therapy includes education, environmental control, pharmacologic management, and the use of objective measures to monitor the severity of disease and guide the course of therapy.
- Managing asthma should be fostered in the child as the child increases in age and maturity.

Allergen Control

Nonpharmacologic therapy is aimed at the prevention and reduction of exposure to airborne allergens and irritants. House dust mites and other components of house dust are frequent agents identified in children who are allergic to inhalants. The cockroach, another common household inhabitant, is an important allergen in many locations. Exterminating live cockroaches, carefully cleaning kitchen floors and cabinets, putting food away after eating, and taking trash out in the evening are essential measures to control cockroaches. The mouse allergen is the most recent allergen to be identified in the homes of inner-city children with asthma. The role of cat and dog dander in allergen-induced asthma has also been studied. Although some studies suggest sensitized persons should carefully evaluate having such pets in the household, the overall data are inconsistent on the effect of cat or dog exposure and subsequent asthma development ([Chen, Tischer, Schnappinger, et al, 2010](#)). Additional sources of respiratory irritants include ozone, particulate matter produced by tobacco smoke, wood-burning stoves, cleaning products, pesticides, mold spores, nitrogen dioxide, and sulfur dioxide; these are believed to contribute to asthma morbidity in children and should be avoided or minimized ([Liu, Covar, Spahn, et al, 2016](#)). Living in homes close to busy roads, damp homes with mold, and exposure to tobacco smoke are significant contributing factors in the development of asthma in infants and small children ([Heinrich, 2011](#)).

Skin testing identifies specific allergens so steps can be taken to eliminate or avoid them. Often, simply removing the offending environmental allergens or irritants (e.g., removing carpeting from the home of a child sensitive to mold and dust particles) will decrease the frequency of asthma episodes. Dehumidifiers or air conditioners may control nonspecific factors that trigger an episode, such as extremes of temperature.