

Intervention: Pet allergen control measures for allergic asthma in children and adults

Finding: Insufficient evidence to determine effectiveness

Potential partners to undertake the intervention:

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| <input checked="" type="checkbox"/> Nonprofits or local coalitions | <input type="checkbox"/> Businesses or labor organizations |
| <input checked="" type="checkbox"/> Schools or universities | <input type="checkbox"/> Media |
| <input checked="" type="checkbox"/> Health care providers | <input checked="" type="checkbox"/> Local public health departments |
| <input type="checkbox"/> State public health departments | <input type="checkbox"/> Policymakers |
| <input checked="" type="checkbox"/> Hospitals, clinics or managed care organizations | <input type="checkbox"/> Other: |

Background on the intervention:

Guidelines on the management of allergic asthma recommend pet removal, but pet ownership remains high in families where one or more members have an allergy to pet dander. In those families that choose to keep the pet, techniques aimed at reducing indoor allergen load are available. Methods include washing or wiping the pet with chemical agents and those focused on removing airborne and dust allergens, such as air filtration and chemical cleaning agents.

Findings from the systematic reviews:

The one systematic review located on this topic included only two studies. One study included mildly asthmatic children (van der Heide, et al., 1999) and the other included only adults with asthma or rhinitis (Wood, et al., 1998). Both studies used air filters, with the control group receiving a high efficiency particulate air (HEPA) filter that did not have an air filter.

The available trials were too small to provide evidence for or against the use of air filtration units to reduce allergen levels in the management of pet-allergic asthma. Larger trials are needed.

There was insufficient evidence to determine effectiveness for pet allergen control measures for allergic asthma in children and adults. Practices that lack sufficient research to support effectiveness should not be confused with ineffective programs. Rather, they should be recognized as programs that have the potential to become evidence-based practices—if properly evaluated. Practitioners are encouraged to monitor the impact of these programs in their communities and report on their findings in order to build a base of knowledge sufficient to reach consensus.

Limitations/Comments:

Few studies were included in the one systematic review identified on this subject due to the lack of randomization in most trials of this nature. The review included no trials of other allergen reduction measures, such as pet washing or pet removal.

References:

Kilburn S, Lasserson TJ, McKean M. Pet allergen control measures for allergic asthma in children and adults. *Cochrane Database of Systematic Reviews*. 2003;(1):CD002989.

Van der Heide S, Van Aaldsen WMC, Kauffman HF, Dubois AEJ, De Monchy JGR. Clinical effects of air cleaners in homes of asthmatic children sensitized to pet allergen. *Journal of Allergy and Clinical Immunology* 1999; 104(2):447-51.

Wood RA, Johnson EF, van Natta ML, Hua Chen P, Eggleston PA. A placebo-controlled trial of a HEPA air cleaner in the treatment of cat allergy. *American Journal of Respiratory and Critical Care Medicine* 1998; 158:115-20.