

Title of Intervention: Dust Mite Covers for Mattress, Box Springs and Pillows of Children with Asthma

Intervention Strategies: Environments and Policies, Individual Education

Purpose of the Intervention: To reduce children with asthma's exposure to house dust mites

Population: Children of low-income families who have asthma

Setting: Homes in West Virginia; home-based

Partners: None mentioned

Intervention Description:

- Environments and Policies: The intervention group received free dust mite covers for mattresses, pillows and box springs in the children's bedroom.
- Individual Education: The participants and parents were instructed in dust mite environment control measures and were provided with educational and information handouts.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Instructors
- Training: Not mentioned
- Technology: Not mentioned
- Space: Homes
- Budget: \$40 for each family
- Intervention: Dust mite covers
- Evaluation: Questionnaire

Evaluation:

- Design: Experimental
- Methods and Measures:
 - A Parenting Stress Index measured stress related to dealing with child's asthma.
 - A Dust Mite Control Questionnaire assessed behaviors related to dust mite control.
 - Dust Mite Control Home Checklist follow-up home visits measured environmental changes made to control dust mites.

Outcomes:

- Short Term Impact: Encasing usage was significantly greater among the families who were provided the dust mite covers, however there was no significant between group differences found in adherence to dust mite control measures other than the encasings.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Providing dust mite bedding encasings at the time of asthma diagnosis significantly increases compliance at a two-month home visit. Medicaid and insurance companies should be encouraged to pay for casings as a cost effective measure to improve asthma care in children with mite allergy.

Citation(s):

Joseph, K. E., C. D. Adams, et al. (2003). "Providing dust mite-proof covers improves adherence to dust mite control measures in children with mite allergy and asthma." *Ann Allergy Asthma Immunol* 90(5): 550-3.