Title of Intervention: House Dust Mite and Smoke Reduction for High-Risk infants

Intervention Strategies: Environments and Policies, Individual Education

Purpose of the Intervention: To reduce exposure to house dust mites and tobacco smoke for children who are high risk for asthma

Population: Parents with children at high risk for asthma

Setting: Participants' homes; home-based

Partners: None mentioned

Intervention Description:

- Environments and Policies: Participants were given vapor-impermeable covers for all mattresses and box springs. Nurses applied benzyl benzoate powder to carpets and furnishings.
- Individual Education: Parents received counseling on keeping pets outside the home and smoking cessation for those that smoked. Parents were instructed to wash the bedding in hot water weekly.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Nurses
- Training: Not mentioned
- Technology: Not mentioned
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Vapor-impermeable covers for mattresses and box springs, benzyl benzoate powder
- Evaluation: Questionnaires

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
    - Questionnaires assessed home characteristics
    - Physical examinations assessed risk of possible or probable asthma

Outcomes:

- Short Term Impact: Not measured
- Long Term Impact: The intervention resulted in a modest but significant reduction in relative risk of possible or probable asthma and rhinitis without colds in high-risk infants.

Maintenance: Not mentioned

Lessons Learned: This intervention may serve as an effective primary prevention tool for children at high risk for developing asthma.

Citation(s):

Chan-Yeung, M., J. Manfreda, et al. (2000). "A randomized controlled study on the effectiveness of a multifaceted intervention program in the primary prevention of asthma in high-risk infants." Arch Pediatr Adolesc Med 154(7): 657-63.