

Early Life Exposure To Cats May Reduce Risk Of Childhood Allergies And Asthma Symptoms

ScienceDaily (May 22, 2008) — A study released by researchers at the Columbia Center for Children's Environmental Health (CCCEH) at Columbia University's Mailman School of Public Health, shows that cat ownership may have a protective effect against the development of asthma symptoms in young children at age five. The study, published by the *Journal of Allergy and Clinical Immunology*, found that children with cats in the home were more likely to have made allergy-related antibodies to cats. At three years of age, children who had made antibodies to cats early in life were more likely to have wheeze, a respiratory symptom associated with asthma. However, by age five, the same children who had grown up with a cat were then found to be less likely to have wheeze.

This finding suggests that prolonged cat ownership and early life exposure to cats may have a protective effect against early asthma indicators, such as wheeze, as children reach age five. "While the study design does not allow us to recommend early cat ownership to prevent asthma, it does seem to indicate that avoidance of cats to prevent the development of asthma is not advised. However, once a child has asthma and is allergic to cats, the recommendation would still be to find a new home for the cat," said Matthew Perzanowski, PhD, assistant professor of Environmental Health Sciences at the Mailman School of Public Health and lead author and investigator on the research.

The study is part of a broader multi-year research project started in 1998, which examines the health effects of exposure of pregnant women and babies to indoor and outdoor air pollutants, pesticides, and allergens. The Center's prior research findings have shown that exposure to multiple environmental pollutants are associated with an increase in risk for asthma symptoms among children. For this study, the investigators controlled for other exposures that might have contributed to developmental problems such as socioeconomic factors and exposure to tobacco smoke and other environmental contaminants.

"Today's findings contribute to a further understanding of how the environment impacts child health," said Rachel Miller, MD, Irving Assistant Professor of Clinical Medicine at Columbia University; director, Asthma Project; associate director and lead physician scientist, DISCOVER Initiative, Mailman School's CCCEH; and senior author on the study. "They help us comprehend the complex relationship between early exposure to cats and the risk for asthma symptoms such as wheeze. The presence of cats in the home at a very early age seems to help reduce the risk of developing asthma. This is an important finding given the high prevalence of asthma in New York City and elsewhere."

Other investigators on the study include Frederica Perera, DrPH, Ginger Chew, ScD, Inge F. Goldstein, DrPH, Robin S. Garfinkel, PhD, Lori A. Hoepner, MPH, Adnan Divjan, Alina Johnson, and Thomas A. E. Platts-Mills, MD, PhD. The study was co-authored by researchers

from the Columbia Center for Children's Environmental Health at Columbia University's Mailman School of Public Health and the Asthma and Allergic Diseases Center at the University of Virginia. The research was funded by the National Institutes of Health.