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# Parental Observation Of Environmental Exposures In The Home Of Children With Asthma

Hannah N. Neuhaus Children's Mercy Hospital

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### Parental Observation Of Environmental Exposures In The Home Of Children With Asthma

Submitting/Presenting Author (must be a trainee): Dr. Hannah Neuhaus Primary Email Address: hnneuhaus@cmh.edu

X Resident/Psychology Intern □Fellow

Primary Mentor (one name only): Dr. Bridgette Jones Other authors/contributors involved in project:

#### **IRB Number:**

**Describe role of Submitting/Presenting Trainee in this project (limit 150 words):** Gathered and summarized data from a parental questionnaire regarding in-home environmental exposures that are known to trigger asthma, and juxtaposed this data with information gathered from a literature search regarding the presence of in-home environmental asthma triggers as determined by formal environmental inspection.

#### Background, Objectives/Goal, Methods/Design, Results, Conclusions limited to 500 words

**Background:** Asthma is among the most common chronic diseases of childhood. Environmental exposures are common triggers for asthma. Rodents, cockroaches and mold have been reported in 55%, 40% and 48%, respectively, in homes of patients with asthma upon professional inspection. Carpeting, smoke exposure, and furry pets were also reported in 83%, 30%, and 57% of homes, respectively.

**Objectives/Goal:** We aimed to characterize environmental exposures recognized by parents/caretakers in the homes of children with asthma.

**Methods/Design:** Convenience sampling was utilized to enroll children who presented to the Allergy/Asthma/Immunology and Pulmonology Clinics at Children's Mercy. Participants completed a questionnaire regarding their asthma and home environmental exposures and a descriptive analysis was performed.

**Results:** Parents/caretakers (n=119) of children (mean/SD age  $9.3 \pm 4.1$  years) with asthma completed the questionnaire. Seventy-five percent had persistent asthma and 70% were classified as poor/uncontrolled. Carpeting was present in more than 4 rooms in 43% of homes. Water leaks and/or mold, cockroaches and/or rodents in the home in the past 6 months were reported in 21% of respondents. Smoke exposure in the car/home during the last 6 months was reported in 16% of respondents and 59% reported cats and/or dogs in the home.

**Conclusions:** Carpeting and pets are commonly reported environmental exposures by parents of children with asthma. However, relatively few parents reported rodent/cockroach, water leak/mold, or smoke exposure. These potential triggers may be under-recognized in the homes of children with persistent and uncontrolled asthma. Interventions to improve layperson recognition may be useful in management.