

ASTHMA CALL-BACK SURVEY: CHILDREN

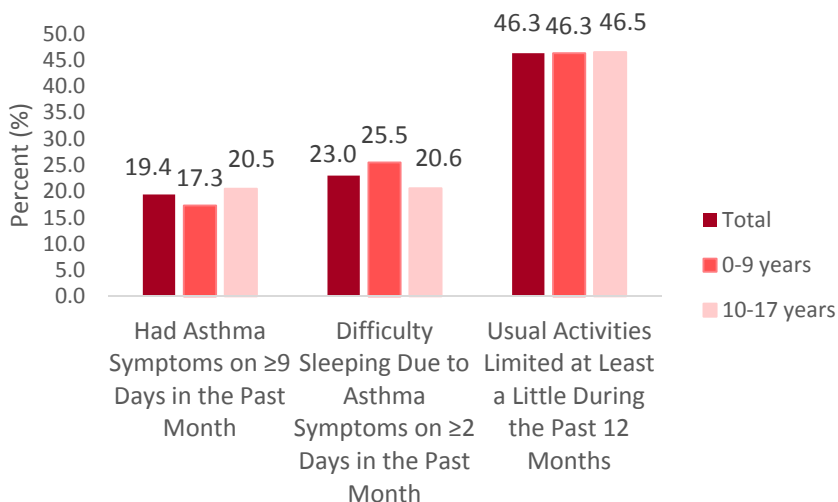
The Michigan Asthma Call-Back Survey (ACBS) is an annual survey in conjunction with the Michigan Behavioral Risk Factor Survey (MiBRFS). Respondents to the MiBRFS whose randomly selected child had ever been diagnosed with asthma are asked if they would be willing to participate in the ACBS and answer questions about their child's asthma. The survey asks detailed questions on asthma-related symptoms, health care, medication, and management for children less than 18 years of age. This report summarizes some of the findings from the 2011-2013 ACBS for children with current asthma.

Asthma Control among Children with Current Asthma

Uncontrolled Asthma

- In the past month, 19.4% of children had asthma symptoms on nine or more days. Females (25.2%) reported a higher prevalence compared to males (14.9%) (Data not shown).
- 23.0% of children had difficulty sleeping due to asthma on two or more days in the past month. Children between the ages of zero and nine (25.5%) reported a higher prevalence of this compared to children ages 10-17 (20.6%).
- 46.3% of children had their usual activities limited due to asthma in the past 12 months.

Prevalence of Asthma Symptoms among Michigan Children with Current Asthma, 2011-2013

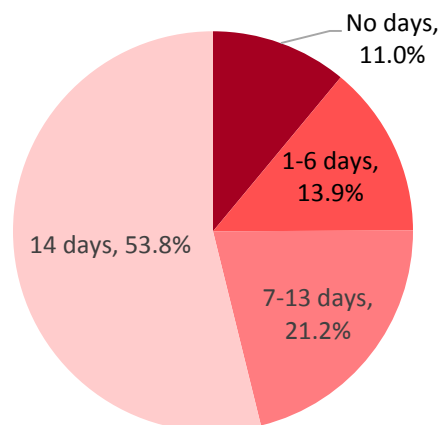


Data source: Michigan Asthma Call-Back Survey, 2011-2013

Symptom-Free Days

- 53.8% of children had no asthma symptoms in the past two weeks. Children who lived in a household with an income of \$50,000 or more reported a significantly higher prevalence of being symptom free (61.8%) compared to children who lived in a household with an income of less than \$50,000 (43.4%) (Data not shown).
- 11.0% of children had asthma symptoms everyday in the past two weeks. Males (14.6%) were more likely to report this than females (6.7%) (Data not shown).

Number of Asthma Symptom-Free Days in the Past Two Weeks among Michigan Children with Current Asthma, 2011-2013

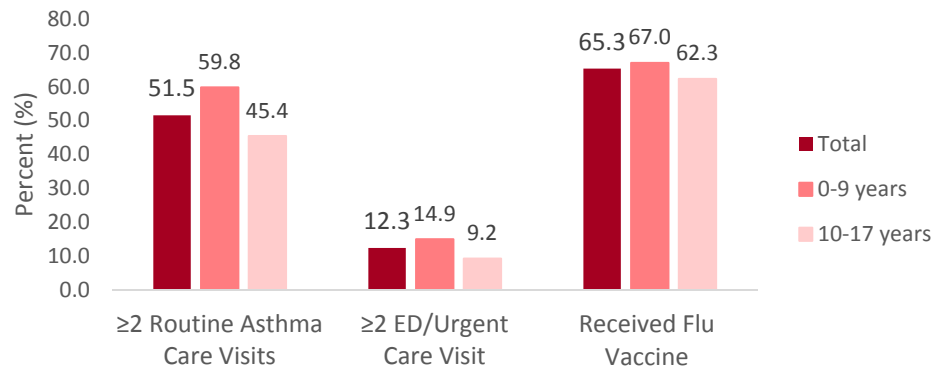


Data source: Michigan Asthma Call-Back Survey, 2011-2013

Health Care Utilization among Children with Current Asthma

- 51.5% of children had two or more routine asthma care visits in the past 12 months. The prevalence of this was significantly higher among children between the ages of 0-9 (59.8%) compared to children between the ages 10-17 (45.4%).
- 12.3% of children visited the Emergency Department (ED) two or more times in the past 12 months.
- 65.3% of children received a flu vaccine in the past 12 months.

Prevalence of Asthma Health Care Utilization in the Past 12 Months among Michigan Children with Current Asthma, 2011-2013

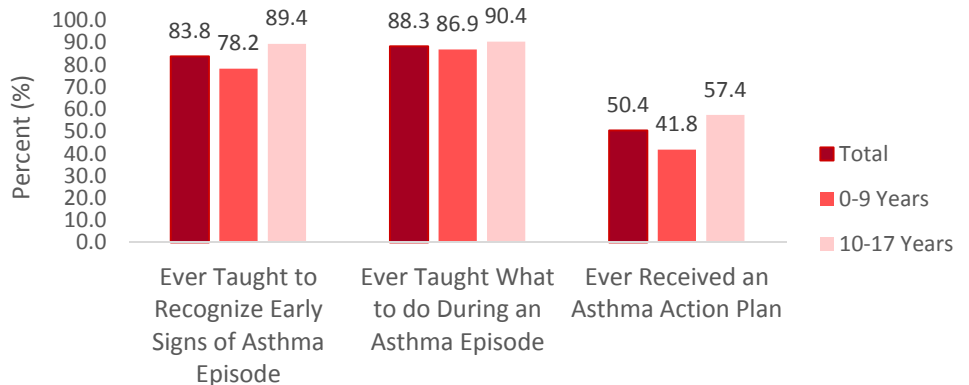


Data source: Michigan Asthma Call-Back Survey, 2011-2013

Asthma Management among Children with Current Asthma

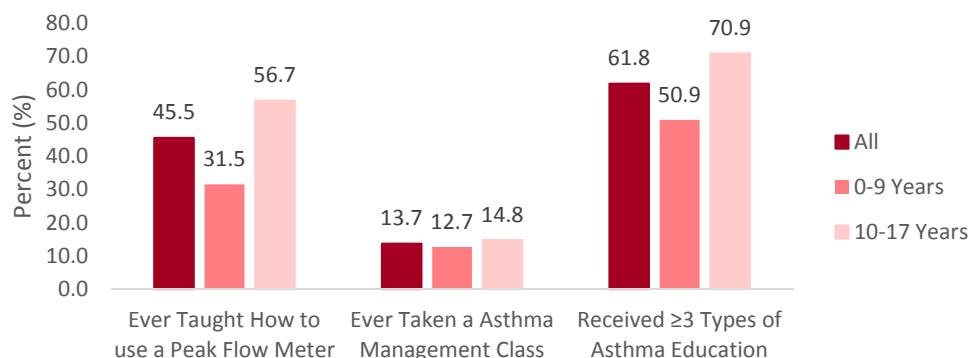
- The prevalence of ever being taught how to recognize the signs of an asthma episode was significantly higher among children between the ages of 10-17 (89.4%) than children between the ages 0-9 (78.2%).
- 88.3% of children have ever been taught what to do during an asthma episode. Females (94.5%) were more likely to report this compared to males (83.3%) (Data not shown).
- 50.4% of children reported having an Asthma Action Plan. The prevalence of this was significantly higher among children between the ages of 10-17 (57.4%) compared to children between the ages of 0-9 (41.8%).
- 45.5% of children reported ever being taught how to use a peak flow meter. The prevalence of this was significantly higher among children between the ages of 10-17 (56.7%) than children between the ages of 0-9 (31.5%).
- 13.7% of children have ever taken an asthma management class.
- 61.8% of children received three or more types of asthma education.

Prevalence of Knowledge Indicators Related to Asthma Management among Michigan Children with Current Asthma, 2011-2013



Data source: Michigan Asthma Call-Back Survey, 2011-2013

Prevalence of Knowledge Indicators Related to Asthma Management among Michigan Children with Current Asthma, 2011-2013 (cont.)



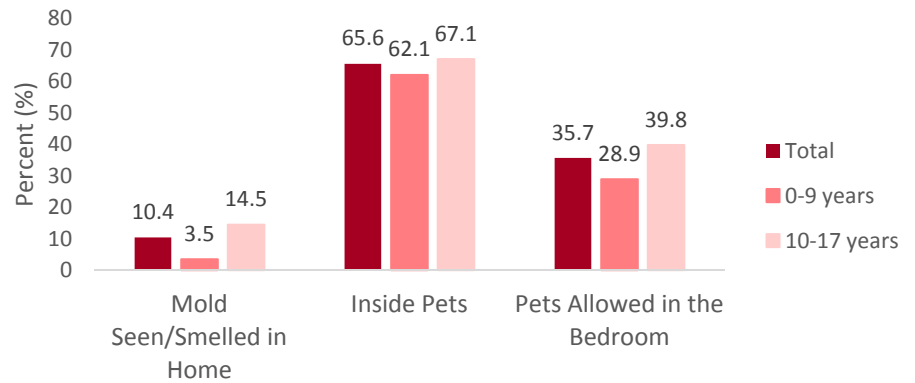
Data source: Michigan Asthma Call-Back Survey, 2011-2013

Indoor Environmental Indicators Related to Asthma among Children

Asthma Triggers

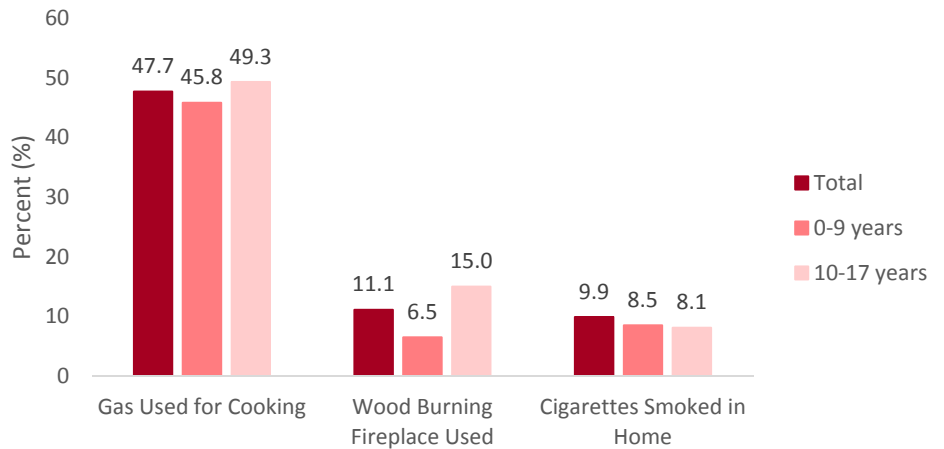
- The prevalence of having seen or smelled mold in the child’s home was 10.4%.
- 65.6% of children have indoor pets and 35.7% of children have pets allowed in their bedroom.
- The prevalence of using gas for cooking in the child’s home was 47.7%, and 11.1% have a wood burning stove or fireplace.
- 9.9% of children reported cigarette smoking in their homes. The prevalence of exposure was significantly lower among children whose parents were college graduates (2.0%) compared to children whose parents either had some college education (12.8%) or were high school graduates (18.9%) (Data not shown).

Prevalence of Indoor Asthma Triggers in the Home among Michigan Children with Current Asthma, 2011-2013



Data source: Michigan Asthma Call-Back Survey, 2011-2013

Prevalence of Indoor Asthma Triggers in the Home among Michigan Children with Current Asthma, 2011-2013 (cont.)

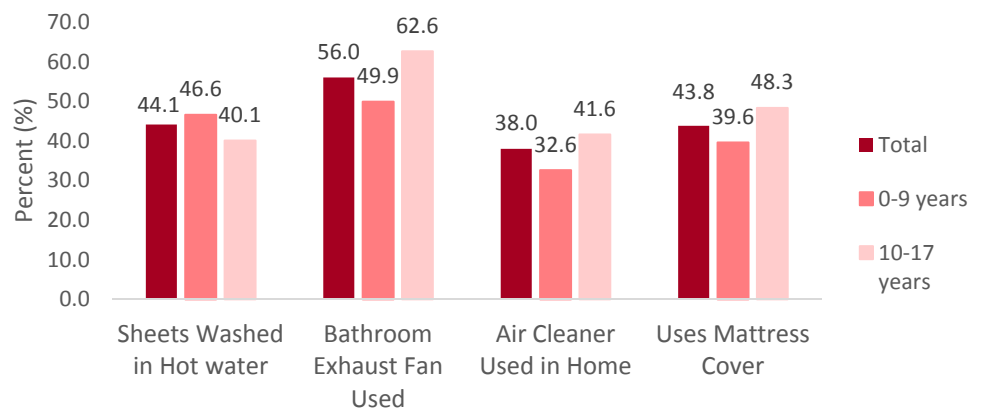


Data source: Michigan Asthma Call-Back Survey, 2011-2013

Asthma Trigger Avoidance

- The prevalence of washing the child’s sheets in hot water was 44.1%.
- The prevalence of using the bathroom exhaust fan was 56.0%. This was significantly higher among children between the ages of 10-17 (62.6%) compared to children between the ages 0-9 (49.9%).
- The prevalence of using an air cleaner in the home was 38.0%. This was significantly higher among children between the ages of 10-17 (41.6%) compared to children between the ages of 0-9 (32.6%).
- The prevalence of using a mattress cover was 43.8%. This was significantly higher among children between the ages of 10-17 (48.3%) compared to children between the ages of 0-9 (39.6%).

Prevalence of Asthma Trigger Avoidance Behaviors in the Home among Michigan Children with Current Asthma, 2011-2013



Data source: Michigan Asthma Call-Back Survey, 2011-2013

Asthma in School

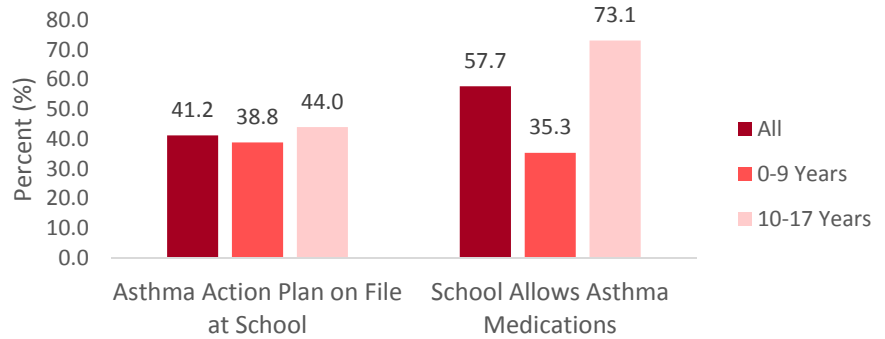
School-Related Indicators

- 41.2% of children reported having an asthma action plan on file at school.
- Over half of the children (57.7%) reported being allowed to self-carry their asthma medication in school. It was significantly higher among children between the ages of 10-17 (73.1%) compared to children between the ages of 0-9 (35.3%).
- Respondents who were college graduates (65.0%) were more likely to report having their child in a school that allows students to self-carry their asthma medication than respondents whose highest level of education was a high school diploma (55.0%) (Data not shown).

Missed School Days

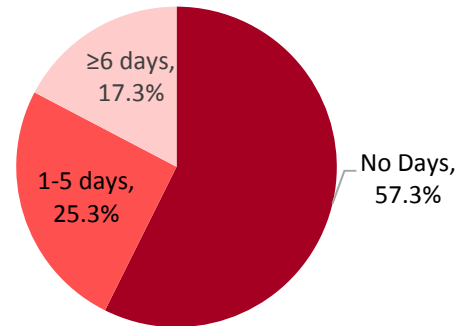
- 57.3% of children did not miss school due to asthma.
- 17.3% of children missed six or more days of school in the past year. The prevalence of this was significantly higher among children between the ages of 0-9 (24.6%) compared to children between the ages of 10-17 (13.6%) (Data not shown).

Prevalence of School-Related Asthma Indicators among Michigan Children with Current Asthma, 2011-2013



Data source: Michigan Asthma Call-Back Survey, 2011-2013

Days of Missed School Due to Asthma in the Past Year among Michigan Children with Current Asthma, 2011-2013



Data source: Michigan Asthma Call-Back Survey, 2011-2013

Notes

Definitions:

- Current asthma is defined as a “yes” response to both of the following questions: “Have you ever been told by a doctor or other health professional that you have asthma?” and “Do you still have asthma?”

Methods:

- The total 3-year sample size of completed interviews for children less than 18 years was 435, with 148 from 2011, 147 from 2012, and 140 from 2013. Estimates were weighted to adjust for the probabilities of selection and a raking adjustment factor that adjusted for the distribution of Michigan adults by telephone source, detailed race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity and renter/owner status all at the state level. Analyses were performed in SAS-Callable SUDAAN, a statistical computing program that was designed for complex sample surveys. The prevalence estimates shown in the graphs within this report are restricted to children with current asthma (N=310).

Data Source:

- Michigan Asthma Call-Back Survey, 2011-2013, Lifecourse Epidemiology and Genomics Division, Michigan Department of Health and Human Services.

For More Information:

Visit www.michigan.gov/asthma or www.michigan.gov/asthmaepi to view more data from the asthma call-back survey and other information on asthma.

Suggested Citation:

Seaton T, Anderson B, and Wahl R. Asthma Call-Back Survey: Children. Lansing, Michigan: Bureau of Epidemiology and Population Health, Michigan Department of Health and Human Services, 2017.

