

# National Asthma Survey— New York State Summary Report

Public Health Information Group  
Center for Community Health  
**New York State Department of Health**

# Table of Contents

7	<b>Executive Summary</b>
7	Lifetime and Current Asthma Prevalence
8	Detailed Asthma Interview
9	<b>Introduction</b>
9	Asthma Burden in New York State
13	The National Asthma Survey-New York State
14	<b>Methodology for Report</b>
16	<b>Results</b>
16	Lifetime and Current Asthma Prevalence
17	• <i>Total Asthma Prevalence</i>
19	• <i>Asthma Prevalence by Age Group</i>
21	• <i>Asthma Prevalence by Gender</i>
23	• <i>Asthma Prevalence by Age and Gender</i>
27	• <i>Asthma Prevalence by Race</i>
29	• <i>Asthma Prevalence by Ethnicity</i>
31	• <i>Asthma Prevalence by Region</i>
33	• <i>Asthma Prevalence by Federal Poverty Level</i>
35	• <i>Asthma Prevalence by Highest Level of Household Educational Attainment</i>
37	• <i>Asthma Prevalence by Body Mass Index</i>
39	<b>Detailed Asthma Interview</b>
40	• <i>Asthma Daytime Symptoms</i>
43	• <i>Asthma Nighttime Symptoms</i>
46	• <i>Asthma Episodes/Attacks</i>
49	• <i>Health Care Coverage</i>
52	• <i>Continuous Health Insurance or Coverage</i>
55	• <i>Asthma Routine Visits</i>
58	• <i>Asthma Urgent Visits</i>
61	• <i>Asthma Emergency Room Visits</i>
64	• <i>Asthma Hospitalizations</i>
67	• <i>Asthma Patients Who Were Taught to Recognize Early Symptoms of an Asthma Episode</i>
70	• <i>Asthma Patients Who Were Taught What to Do During an Asthma Attack</i>
73	• <i>Asthma Patients Who Were Given an Asthma Management Plan</i>
76	• <i>Days Missed School, Children (0–17 Years)</i>
80	• <i>Days Missed Work, Adults (18+ Years)</i>
81	• <i>Quality of Life</i>
84	<b>References</b>
85	<b>Data Sources</b>
86	<b>Acknowledgments</b>

# List of Figures

- 9 **Figure 1**  
Prevalence of Adult Current Asthma by Survey Year, New York State and Nationwide, 1996–2004 (BRFSS)
- 10 **Figure 2**  
Current Asthma Diagnosed by a Medical Professional, New York State County Groupings, 2003 (Expanded BRFSS)
- 10 **Figure 3**  
Asthma Mortality Rate Per 1,000,000 Residents: New York State, United States and Healthy People 2010 Objectives
- 11 **Figure 4**  
Asthma Mortality Crude and Age-Adjusted Rates Per 1,000,000 Residents by Race/Ethnicity, New York State, 2001–2003
- 11 **Figure 5**  
Asthma Hospital Discharge Rates Per 10,000 Residents, New York State, 1995–2004
- 12 **Figure 6**  
Asthma Hospitalization Rate Per 10,000 Residents: New York State, United States and Healthy People 2010 Objectives
- 12 **Figure 7**  
Asthma Hospitalization Crude and Age-Adjusted Rates Per 10,000 Residents by Race/Ethnicity, New York State, 2001–2003
- 17 **Figure 8**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years), New York State, July 2002–August 2003
- 18 **Figure 9**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years), New York State, July 2002–August 2003
- 19 **Figure 10**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Age Group, New York State, July 2002–August 2003
- 20 **Figure 11**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Age Group, New York State, July 2002–August 2003
- 21 **Figure 12**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Gender, New York State, July 2002–August 2003
- 22 **Figure 13**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Gender, New York State, July 2002–August 2003

- 23 **Figure 14**  
Self-reported Lifetime Asthma Prevalence in Children (0–17 Years) by Age and Gender, New York State, July 2002–August 2003
- 24 **Figure 15**  
Self-reported Lifetime Asthma Prevalence in Adults (18+ Years) by Age and Gender, New York State, July 2002–August 2003
- 25 **Figure 16**  
Self-reported Current Asthma Prevalence in Children (0–17 Years) by Age and Gender, New York State, July 2002–August 2003
- 26 **Figure 17**  
Self-reported Current Asthma Prevalence in Adults (18+ Years) by Age and Gender, New York State, July 2002–August 2003
- 27 **Figure 18**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Race, New York State, July 2002–August 2003
- 28 **Figure 19**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Race, New York State, July 2002–August 2003
- 29 **Figure 20**  
Self-reported Asthma Prevalence in Children (0–17 Years) by Ethnicity, New York State, July 2002–August 2003
- 30 **Figure 21**  
Self-reported Asthma Prevalence in Adults (18+ Years) by Ethnicity, New York State, July 2002–August 2003
- 31 **Figure 22**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Region, New York State, July 2002–August 2003
- 32 **Figure 23**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Region, New York State, July 2002–August 2003
- 33 **Figure 24**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Federal Poverty Level (FPL), New York State, July 2002–August 2003
- 34 **Figure 25**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Federal Poverty Level (FPL), New York State, July 2002–August 2003
- 35 **Figure 26**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Highest Level of Household Educational Attainment, New York State, July 2002–August 2003
- 36 **Figure 27**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Highest Level of Educational Attainment, New York State, July 2002–August 2003
- 37 **Figure 28**  
Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years) by Body Mass Index (BMI), New York State, July 2002–August 2003

- 38 **Figure 29**  
Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Body Mass Index (BMI), New York State, July 2002–August 2003
- 40 **Figure 30**  
Asthma Daytime Symptoms in the Past 30 Days Among Individuals, New York State, July 2002–August 2003
- 41 **Figure 31**  
Asthma Daytime Symptoms in the Past 30 Days in Children (0–17 Years), New York State, July 2002–August 2003
- 42 **Figure 32**  
Asthma Daytime Symptoms in the Past 30 Days in Adults (18+ Years), New York State, July 2002–August 2003
- 43 **Figure 33**  
Asthma Nighttime Symptoms in the Past 30 Days Among Individuals, New York State, July 2002–August 2003
- 44 **Figure 34**  
Asthma Nighttime Symptoms in the Past 30 Days in Children (0–17 Years), New York State, July 2002–August 2003
- 45 **Figure 35**  
Asthma Nighttime Symptoms in the Past 30 Days in Adults (18+ Years), New York State, July 2002–August 2003
- 46 **Figure 36**  
Asthma Episodes/Attacks in the Past 12 Months Among Individuals, New York State, July 2002–August 2003
- 47 **Figure 37**  
Asthma Episodes/Attacks in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 48 **Figure 38**  
Asthma Episodes/Attacks in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003
- 49 **Figure 39**  
Health Care Coverage Among Asthma Patients, New York State, July 2002–August 2003
- 50 **Figure 40**  
Health Care Coverage Among Pediatric Asthma Patients (0–17 Years), New York State, July 2002–August 2003
- 51 **Figure 41**  
Health Care Coverage Among Adult Asthma Patients (18+ Years), New York State, July 2002–August 2003
- 52 **Figure 42**  
Continuity of Health Insurance or Coverage Among Asthma Patients in the Past 12 Months, New York State, July 2002–August 2003
- 53 **Figure 43**  
Continuity of Health Insurance or Coverage Among Pediatric Asthma Patients (0–17 Years) in the Past 12 Months, New York State, July 2002–August 2003

- 54 **Figure 44**  
Continuity of Health Insurance or Coverage Among Adult Asthma Patients (18+ Years) in the Past 12 Months, New York State, July 2002–August 2003
- 55 **Figure 45**  
Asthma Routine Visits in the Past 12 Months Among Individuals, New York State, July 2002–August 2003
- 56 **Figure 46**  
Asthma Routine Visits in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 57 **Figure 47**  
Asthma Routine Visits in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003
- 58 **Figure 48**  
Asthma Urgent Visits in the Past 12 Months Among Individuals, New York State, July 2002–August 2003
- 59 **Figure 49**  
Asthma Urgent Visits in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 60 **Figure 50**  
Asthma Urgent Visits in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003
- 61 **Figure 51**  
Asthma Emergency Room Visits in the Past 12 Months, New York State, July 2002–August 2003
- 62 **Figure 52**  
Asthma Emergency Room Visits in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 63 **Figure 53**  
Asthma Emergency Room Visits in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003
- 64 **Figure 54**  
Asthma Hospitalizations in the Past 12 Months, New York State, July 2002–August 2003
- 65 **Figure 55**  
Asthma Hospitalizations in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 66 **Figure 56**  
Asthma Hospitalizations in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003
- 67 **Figure 57**  
Asthma Patients Who Were Taught to Recognize Early Symptoms of an Asthma Episode, New York State, July 2002–August 2003
- 68 **Figure 58**  
Children (0–17 Years) With Asthma Who Were Taught to Recognize Early Symptoms of an Asthma Episode, New York State, July 2002–August 2003

- 69 **Figure 59**  
Adults (18+ Years) With Asthma Who Were Taught to Recognize Early Symptoms of an Asthma Episode, New York State, July 2002–August 2003
- 70 **Figure 60**  
Asthma Patients Who Were Taught What to Do During an Asthma Attack, New York State, July 2002–August 2003
- 71 **Figure 61**  
Children (0–17 Years) With Asthma Who Were Taught What to Do During an Asthma Attack, New York State, July 2002–August 2003
- 72 **Figure 62**  
Adults (18+ Years) With Asthma Who Were Taught What to Do During an Asthma Attack, New York State, July 2002–August 2003
- 73 **Figure 63**  
Asthma Patients Who Were Given an Asthma Management Plan, New York State, July 2002–August 2003
- 74 **Figure 64**  
Children (0–17 Years) With Asthma Who Were Given an Asthma Management Plan, New York State, July 2002–August 2003
- 75 **Figure 65**  
Adults (18+ Years) With Asthma Who Were Given an Asthma Management Plan, New York State, July 2002–August 2003
- 76 **Figure 66**  
Days Missed School in the Past 12 Months in Children (0–17 Years) Due to Asthma, New York State, July 2002–August 2003
- 77 **Figure 67**  
Days Missed Daycare or Preschool in the Past 12 Months in Children (0–4 Years) Due to Asthma, New York State, July 2002–August 2003
- 78 **Figure 68**  
Days Missed School in the Past 12 Months in Children (5–13 Years) Due to Asthma, New York State, July 2002–August 2003
- 79 **Figure 69**  
Days Missed School or Work in the Past 12 Months in Children (14–17 Years) Due to Asthma, New York State, July 2002–August 2003
- 80 **Figure 70**  
Days Missed Work or Unable to Carry out Usual Activities in the Past 12 Months in Adults (18+ Years) Due to Asthma, New York State, July 2002–August 2003
- 81 **Figure 71**  
Quality of Life Due to Asthma in the Past 12 Months, New York State, July 2002–August 2003
- 82 **Figure 72**  
Quality of Life Due to Asthma in the Past 12 Months in Children (0–17 Years), New York State, July 2002–August 2003
- 83 **Figure 73**  
Quality of Life Due to Asthma in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003

# Executive Summary

The National Asthma Survey-New York State (NAS-NYS) Summary Report presents information collected from July 2002 through August 2003 for New York State children and adults.

The survey provides comprehensive information on asthma that are not available from other existing NYS data sources.

The NAS-NYS was a random digit dialing (RDD) telephone survey that screened for the

presence of asthma in the household. A maximum of one adult and one child who ever had asthma were randomly selected for a detailed interview. Overall, 31,090 individuals from 11,713 households were screened for asthma. Of these households, 1,970 detailed asthma interviews were completed; 1,323 were adults and 647 were children.

## Lifetime and Current Asthma Prevalence

The following are highlights from the results:

- Prevalence was generated for “lifetime” and “current” asthma based on the following questions:

Lifetime: *“Have you ever been told by a doctor or other health care professional that you have asthma?”*

Current: If “yes,” *“Do you still have asthma?”*

- Approximately 467,000 children 0–17 years (10.6% of the NYS child population) were told by a health professional that they ever had asthma and 368,000 children (8.4%) had current diagnosed asthma. Among adults 18+ years, 1,480,000 (10.6%) had lifetime asthma and 1,087,000 (7.6%) had current asthma.
- Current asthma prevalence varied slightly by age for children (0–4 years, 6.7%; 5–9 years, 9.4%; 10–14 years, 8.8%; 15–17 years, 8.3%). For adults, the 18–24 year age group had the highest current asthma prevalence (9.8%) and the 65+ year age group had the lowest (6.0%).
- Current asthma prevalence was significantly higher for male children (9.8%) compared to female children (6.8%). The reverse is true for adults; the current asthma prevalence for female adults (9.0%) was significantly higher than for male adults (6.0%).
- Current asthma prevalence varied by race, with black children having the highest prevalence at 10.0% compared to white (7.2%) and Asian (4.3%) children. Similarly, black adults had the highest current asthma prevalence (8.3%) compared to the white (6.6%) and Asian (1.8%) populations.
- Hispanic New Yorkers had higher current asthma prevalence than non-Hispanics for both children (10.9% vs. 7.4%) and adults (9.0% vs. 6.3%).
- Current asthma prevalence varied by region. New York City children had higher prevalence (9.7%) compared to children residing in the Rest of State (7.4%). The reverse is true for adults; the current asthma prevalence for New York City residents (7.1%) was lower than adults residing in the Rest of State (8.0%).
- Both children and adults living below the federal poverty level had higher current asthma prevalence compared to those living above the federal poverty level (children, 10.1% vs. 8.7%; adults, 9.2% vs. 7.2%).
- Current asthma prevalence increased as body mass index (BMI) increased; underweight children had the lowest asthma prevalence of 7.4%, while obese children had the highest prevalence of 10.1%.
- Obese adults had the highest asthma prevalence of 12.3%; this was significantly higher than the other BMI groups.



## Detailed Asthma Interview

Detailed asthma interviews included questions concerning: a history of asthma symptoms and attacks; health care utilization; knowledge of asthma; and the effect of asthma on usual activities.

The following are highlights from the results:

- For individuals with asthma, 10.9% had continual daytime symptoms while 72.5% had fewer than three daytime symptoms per week in the past month. Children were more likely to have mild daytime symptoms (< three days per week) compared to adults (86.0% vs. 67.6%); adults were more likely to have continual daytime symptoms (13.1% vs. 4.7%).
- Among individuals with asthma, 14.0% experienced nighttime symptoms more than one night a week, while 81.2% had nighttime symptoms fewer than three times in the past month. Adults were more likely to have nighttime symptoms more than one night a week (14.7%) as compared to children (11.5%).
- Among New Yorkers with asthma, 4.7% had seven or more asthma episodes/attacks in the last three months, while 55.1% had no asthma episodes/attacks in the past year. A lower percentage of children experienced no asthma episodes/attacks in the past year (45.8%) compared to adults (58.3%). Adults were more likely to have experienced seven or more asthma episodes/attacks in the past three months (5.3%) as compared to children (3.1%).
- Almost 90% of New Yorkers with asthma were covered by health insurance. A larger proportion of children with asthma had health insurance (96.1%) compared to adults (87.1%).
- For New Yorkers with asthma, 38.6% did not have a routine asthma checkup in the past year. Adults were more likely not to have a routine asthma checkup (42.0%) as compared to children (28.8%).
- Among New Yorkers with asthma, 12.8% had three or more urgent outpatient visits for asthma in the past year; 68.3% did not have an urgent outpatient visit. Children were more likely to have three or more urgent outpatient visits due to asthma (17.8%) compared to adults with asthma (11.1%) and were also more likely to have at least one urgent visit due to asthma in the past year (41.3%) as compared to adults (28.3%).
- Among individuals with asthma, 16.1% utilized the emergency room (ER) due to asthma and 8.2% visited the ER two or more times in the past year. Compared to adults, children were more likely to visit an ER at least once (23.4% vs. 13.6%) as well as two or more times (14.3% vs. 6.2%).
- Of New Yorkers with asthma, 4.3% had at least one hospitalization due to asthma in the past year. A higher percentage of children were hospitalized for asthma in the past year than adults (6.7% vs. 3.6%).
- Almost 70% of New Yorkers with asthma were taught to recognize the early symptoms of an asthma attack and 78.6% were taught what to do during an asthma attack. Compared to adults, children were more likely to be taught to recognize the early symptoms of an asthma attack (80.3% vs. 66.1%) and to know what to do during an asthma attack (84.3% vs. 76.6%).
- Only 30.4% of New Yorkers with asthma were given an asthma management plan. Children were more likely to receive an asthma management plan (42.3%) as compared to adults (26.2%).
- Among New York children with asthma, 19.0% missed greater than a week of school, daycare, or pre-school in the past year due to asthma; 42.6% of the children with asthma did not miss any school/daycare/pre-school due to asthma. An estimated annual total of 1.9 million school/daycare/pre-school days were missed due to asthma.
- Among New York adults with asthma, 9.8% missed 8 or more days of work or were unable to carry out their usual activities due to asthma in the past year; 72.6% did not miss any work or had no days where they were unable to carry out their normal activities. Adults missed an estimated total of 7.6 million days when they were unable to work or otherwise carry out their usual activities due to asthma.
- Of New Yorkers with asthma, 8.3% reported that asthma limited their usual activities a lot in the past year, while 38.9% indicated that they were not limited at all by asthma. More adults (9.3%) than children (5.4%) thought that asthma limited their usual activities a lot, while more children were not limited at all by asthma (41.6%) as compared to adults (38.0%).

# Introduction

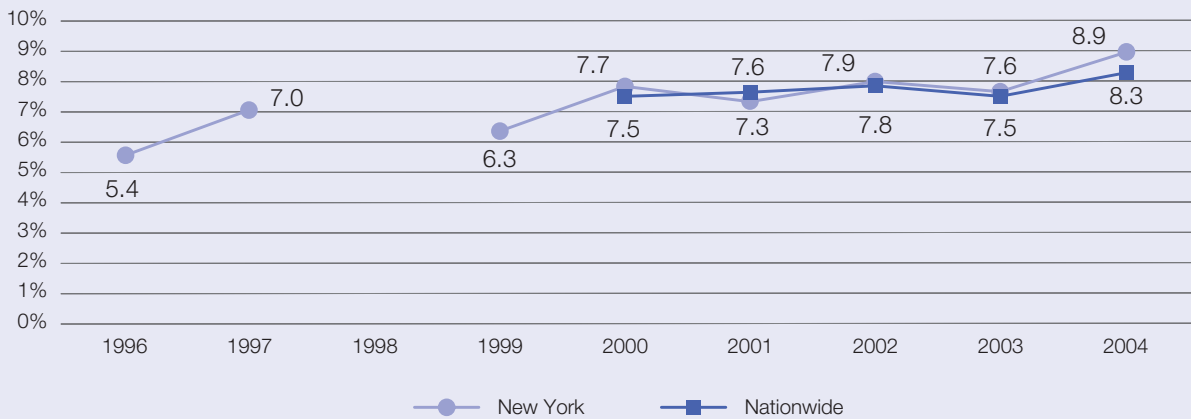
## Asthma Burden in New York State

Existing data, both nationally and in New York State (NYS), present asthma as a highly prevalent health problem with significant impact. In 2002, an estimated 30.8 million people in the United States had been diagnosed with asthma in their lifetime, 20.0 million currently were diagnosed with asthma and 11.9 million had experienced an asthma attack in the previous year.<sup>1</sup> In 2002, asthma accounted for 13.9 million outpatient visits, 1.9 million emergency room visits and 484,000 hospitalizations. Children 5–17 years of age missed 14.7 million school days due to asthma. Adults

18 years of age and older who were currently employed missed 11.8 million workdays due to asthma. There were 4,261 deaths in the United States caused by asthma in 2002.<sup>2</sup> The economic impact of asthma for the nation was estimated at \$14 billion in 2001.<sup>1</sup>

The picture is equally alarming in NYS. Among adult New Yorkers, current asthma prevalence has shown a general increase from 1999 to 2004. The 2004 NYS asthma prevalence of 8.9% is higher than the comparable national rate of 8.3% (Figure 1).<sup>4</sup>

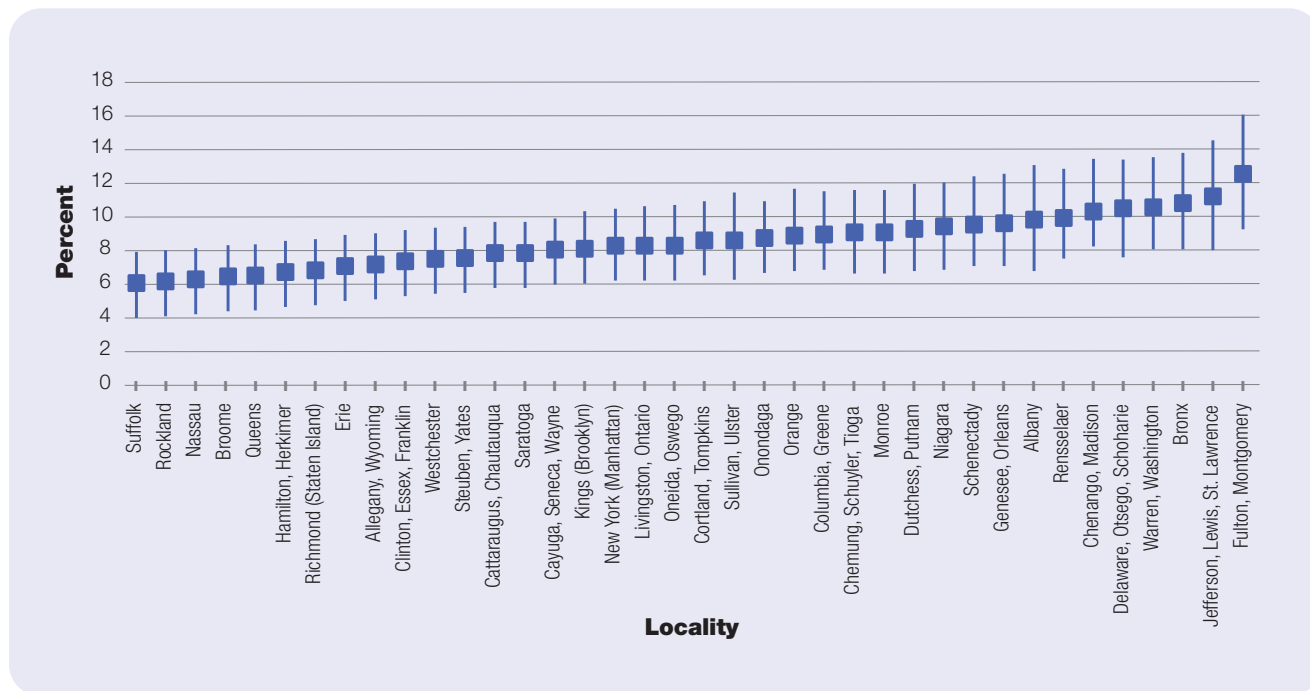
**Figure 1**  
Prevalence of Adult Current Asthma by Survey Year,  
New York State and Nationwide, 1996–2004 (BRFSS)



The 2004 asthma prevalence for New York adults was higher for females (10.4%) than for males (7.2%). Adult Hispanics had a higher prevalence of current asthma (10.2%) compared to non-Hispanic black (8.1%) or non-Hispanic white (8.7%) New

Yorkers.<sup>a</sup> Asthma prevalence rates in 2003 varied at the local level from a low of 5.9% for Suffolk County, to a high of 12.7% for Fulton/Montgomery Counties (Figure 2).<sup>b</sup>

**Figure 2**  
Current Asthma Diagnosed by a Medical Professional,  
New York State County Groupings, 2003 (Expanded BRFSS)



During 2001–2003, an average of 333 deaths occurred per year due to asthma in NYS, resulting in an asthma mortality rate of 17.4 per 1,000,000 residents. Children 0–14 years averaged 19 deaths per year. NYS had higher asthma mortality rates than the nation among all age groups, except the

65+ year age group. While NYS is close to meeting the Healthy People 2010 objective for the 65+ year age group, for all other age groups, NYS is 2 to 5 times higher than the national objectives (Figure 3).<sup>c</sup>

**Figure 3**  
Asthma Mortality Rate Per 1,000,000 Residents:  
New York State, United States and Healthy People 2010 Objectives

Age	NY 99–01	NY 02–04	US 2003	HP 2010
0–4	1.6	3.0	2.2	0.9
5–14	4.7	5.0	2.7	0.9
15–34	7.0	5.6	4.7	1.9
35–64	22.6	19.1	14.2	8.0
65+	55.1	49.3	54.4	47.0

Black non-Hispanic New Yorkers had a 2001–2003 age-adjusted mortality rate (44.9 per 1,000,000 residents) which was about 3 times higher than the white, non-Hispanic mortality rate

(14.7 per 1,000,000 residents). Hispanic New Yorkers’ age-adjusted mortality rate (32.3 per 1,000,000 residents) was 2.2 times higher than white non-Hispanic residents (Figure 4).<sup>c</sup>

**Figure 4**

Asthma Mortality Crude and Age-Adjusted\* Rates Per 1,000,000 Residents by Race/Ethnicity, New York State, 2001–2003

	Crude	Adjusted
White/Non-Hispanic	17.3	14.7
Black/Non-Hispanic	40.3	44.9
Hispanic	35.0	32.3
Asian-Pacific Islander/Non-Hispanic	9.4	12.4

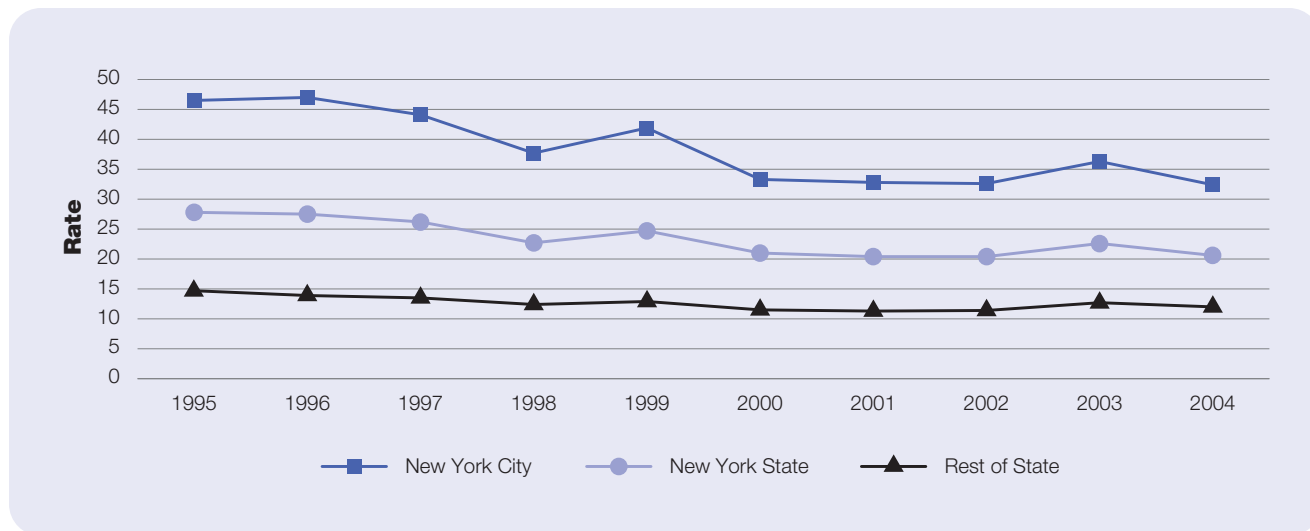
\*Age-adjusted to 2000 U.S. population.

There were 42,136 hospitalizations due to asthma in NYS during 2004 (21.9 per 10,000 residents). Of these, 14,888 were 0–14 years of age (39.3 per 10,000 residents). While asthma hospitalization rates have shown a 27% decline

from 27.8 per 10,000 residents in 1995 to a ten-year low of 20.4 per 10,000 residents in 2002, the asthma hospitalization rates have since increased to 21.9 per 10,000 residents in 2004 (Figure 5).<sup>d</sup>

**Figure 5**

Asthma Hospital Discharge Rates Per 10,000 Residents, New York State, 1995–2004



Compared to the nation, New York has higher asthma hospitalization rates for all age groups. New York State's (NYS) rates are roughly two

times higher than the levels targeted in Healthy People 2010 (Figure 6).<sup>d</sup>

**Figure 6**

Asthma Hospitalization Rate Per 10,000 Residents: New York State, United States and Healthy People 2010 Objectives

Age	NY 99-01	NY 01-03	US 2001	HP 2010
0-4	71.1	68.8	56.2	25.0
5-14	24.4	23.2	—	—
0-17	34.6	33.3	21.4	17.3
5-64	17.5	16.7	11.8	7.7
65+	25.0	26.2	21.4	11.0

Female New Yorkers had higher age-adjusted asthma hospitalization rates compared to males (23.7 per 10,000 vs. 18.5 per 10,000 for 2001–2003).<sup>d</sup> Black non-Hispanic New Yorkers had a 2001–2003 age-adjusted asthma hospitalization rate of 47.6 per 10,000, which was 3.7 times

higher than the white non-Hispanic rate of 12.8 per 10,000. Hispanic New Yorkers had an age-adjusted asthma hospitalization rate of 31.4 per 10,000, almost 2½ times higher than for white non-Hispanic residents (Figure 7).<sup>d</sup>

**Figure 7**

Asthma Hospitalization Crude and Age-Adjusted\* Rates Per 10,000 Residents by Race/Ethnicity, New York State, 2001–2003

	Crude	Adjusted
White/Non-Hispanic	12.6	12.8
Black/Non-Hispanic	47.3	47.6
Hispanic	28.9	31.4
Asian-Pacific Islander/Non-Hispanic	5.2	6.7

\*Age-adjusted to 2000 U.S. population.

New York City's 2002–2004 asthma hospitalization rate of 34.5 per 10,000 was higher than the comparable NYS rate of 21.5 per 10,000. Neighborhoods in East Harlem, the South Bronx and Northeast Brooklyn exhibited the highest asthma hospitalization rates statewide. Pediatric asthma hospitalization rates showed similar disparities. The total asthma hospitalization rates for children ages 0–14 in 2002–2004 were 64.8 per 10,000 for New York City, compared to 38.6 per 10,000 for NYS. Pediatric asthma hospitalization rates were especially high for the following New York City neighborhoods: East Harlem–126.1 per 10,000; Central Harlem/Morningside Heights–123.8 per

10,000; Crontona/Tremont–120.5 per 10,000; Williamsburgh/Bushwick–117.2 per 10,000 and Highbridge/Morrisania–108.2 per 10,000.<sup>d</sup>

The total billing cost of asthma hospitalizations in NYS for 2004 was approximately \$384 million, a 44% increase in cost since 1995. The average cost per asthma hospitalization was \$9,870 in 2004, an 87% increase from 1995. This occurred despite a decrease in average length of stay for asthma hospitalizations from 4 days in 1995 to 3.3 days in 2004.<sup>d</sup> Among New York's Medicaid fee-for-service asthma population aged 0–64 years, more than \$132.3 million were spent for asthma-related services; the average cost was \$1,273 per recipient

in 2003. Of the total asthma costs, \$70 million (53% of total asthma costs) were for pharmacy-related services and \$49 million (37%) were for inpatient services.<sup>c</sup>

During 2003, approximately 90,000 adults with asthma in NYS indicated that either a health professional had told them they had work-related asthma, or they had informed a health professional of such. During 1996 to 2004, work-related asthma

hospitalizations ranged from 45 to 70 per year in NYS. The mean length of stay decreased over time from 5.1 to 3.9 days while the average annual cost increased from \$6,506 to \$11,822. The 2004 total work-related hospitalization cost was approximately \$545,000.<sup>3</sup> In 2004, there were 564 individuals reported to the Occupational Lung Disease Registry and an additional 502 individuals were seen by the NYS Occupational Health Clinic Network.

## The National Asthma Survey–New York State

The National Asthma Survey–New York State (NAS–NYS), conducted in 2002–2003, was sponsored by the Centers for Disease Control and Prevention to further assist in understanding the burden of asthma in NYS. This survey was designed to produce state-specific prevalence estimates for adults and children with asthma and to describe the health, socioeconomic, behavioral, and environmental predictors associated with better control of asthma.

The NAS–NYS followed the State and Local Area Integrated Telephone Survey (SLAITS) methodology using the same sampling frame as the National Center for Health Statistics's National Immunization Survey (NIS). The NIS is a large-scale random-digit-dialing (RDD) telephone survey that screens for the presence of young children in sampled households. The NAS–NYS questionnaire was designed to immediately follow a completed NIS interview in households with an NIS-eligible child, or the NIS screener in households without an NIS-eligible child.

In each household, a maximum of one adult and one child with lifetime asthma were randomly selected for a detailed interview. Therefore, eligible households could have either one adult, one child, or one adult and one child selected for an interview, depending on the asthma status of the household members.

Data were collected from July 24, 2002 to August 2, 2003. Overall, a total of 31,090 individuals from 11,713 households were screened for asthma. Of these households, 1,970 individual detailed interviews about asthma were completed

for sampled household members with a history of asthma. Of 1,970 detailed interviews, there were 647 children (0–17 years old) and 1,323 adults (18 years old and above). Of the 11,713 households screened for asthma, 1,647 households with at least one person with asthma and 2,290 households without any persons with asthma were sub-sampled and asked household environment questions.

CASRO (Council of American Survey Research Organizations) rates, which provide an overall measure of response, were produced for each type of interview and were calculated in accordance with the American Association for Public Opinion Research's *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for RDD Telephone Surveys and In-Person Household Surveys* (American Association for Public Opinion Research, 1998).

*Screening Interview Response Rates:* For the screening interview, the CASRO rate was calculated as the product of the following: the household-level resolution rate, which measures the proportion of sampled telephone numbers that could be identified as residential or non-residential, and the household-level screener completion rate. The CASRO response rate for the screening interview to produce asthma prevalence estimates was 45.8%.

*Detailed Asthma Interview Response Rates:* The detailed asthma interview CASRO rate was calculated as the product of the following: the household-level resolution rate, the household-level screener completion rate, and the person-level interview completion rate. The CASRO response rate for the detailed asthma interview was 40.8%.

# Methodology for Report

The National Asthma Survey-New York State Summary Report describes asthma-related information on a statewide basis to assist public health programs, policy makers, and other healthcare providers in their efforts to identify important issues and design solutions to reduce the burden of asthma.

This report includes lifetime and current asthma prevalence for New York State and by selected sociodemographic characteristics for children (0–17 years old) and adults (18+ years old). In addition, detailed asthma interview data were analyzed for asthma symptoms, asthma attacks, health care utilizations, missed school and work days due to asthma, quality of life, and knowledge of asthma management.

Lifetime and current asthma prevalence were generated from the following questions:

- Lifetime: *“Have you ever been told by a doctor or other health professional that you have asthma?”*
- Current: *If “yes,” “Do you still have asthma?”*

Overall, a total of 31,090 individuals were screened for asthma and prevalence rates were generated using this sample. Asthma prevalence was determined for the total population, and children/adults separately, by age group (0–4, 5–9, 10–14, 15–17, 18–24, 25–34, 35–44, 45–54, 55–64, and 65+ years); gender; race (white, black, Asian, and other); ethnicity (Hispanic and non-Hispanic); region (New York City and Rest of State); federal poverty level (FPL) (0–<100% FPL, 100%–200% FPL, >200% FPL); education (less than high school, high school, greater than high school); and body mass index (BMI) (underweight, normal, overweight, and obese).

Poverty levels were established based on poverty thresholds for 2003. Poverty thresholds are the dollar amounts the Census Bureau uses to determine poverty status. Poverty thresholds for 2003 were determined by size of family and number of related children under 18 years old.<sup>4</sup>

BMI is a number that represents body weight adjusted for height. For adults aged 18 years and older, BMI was calculated<sup>5</sup> in the following way:

$$\text{BMI} = \left\{ \frac{\text{Weight (pounds)}}{[\text{Height (inches)}]^2} \right\} \times 703$$

For adults aged 18 years and older, BMI falls into one of four categories: underweight (below 18.5), normal (18.5–24.9), overweight (25.0–29.9), or obese (30.0 and above).<sup>5</sup>

BMI in children, also referred to as BMI-for-age, is gender- and age-specific. BMI-for-age is plotted on gender-specific growth charts. These charts are used for children and teens 2–17 years of age.<sup>6</sup>

Weighted prevalence is presented as a percent (%) with the 95% confidence interval\* (95% CI) for the estimate. In addition, sample sizes and proportions are displayed for each category as well as the overall total. Unknown or missing values are not included in the sample size. Estimates are considered “significantly different” from each other when they do not have overlapping confidence intervals.

Detailed asthma interviews were conducted with 1,970 individuals who represented a sub-sample of all individuals with asthma from the screening interview. These questions included history of asthma (daytime and night symptoms, and episodes/attacks); health care coverage (having insurance coverage, continuation of health insurance); health care utilization (asthma routine visits, asthma urgent visits, asthma emergency room visits, and asthma hospitalizations); knowledge of

\*If samples of the same size are drawn repeatedly from a population, and a confidence interval is calculated from each sample, then 95% of these intervals should contain the true prevalence in the population.

asthma/management plan (taught by a doctor or another health care professional to recognize early asthma symptoms, what to do during an asthma episode or attack, and receipt of an asthma management plan); and asthma's impact on usual activities (days missed school/work) and quality of life.

Of these 1,970 individuals who were asked detailed interview questions, 647 were children between the ages of 0 to 17 years and 1,323 were adults 18 years and older. The analyses of detailed questions about asthma were conducted for individuals who had met at least one of the following behavioral criteria within the past three years: (1) having seen a healthcare professional for asthma; (2) having taken asthma medications; or (3) having symptoms of asthma. There were 1,737 individuals who met these criteria including 606 children and 1,131 adults. The analyses were conducted for all individuals with asthma and separately for children and adults.

To produce population-based estimates, each respondent household and individual with asthma for which complete data were available, was assigned a sampling weight. These sampling weights account for varying probabilities of selection of households and individuals with asthma

because of stratification by geographic area and clustering of individuals with asthma within households. Also, the weights are needed to account for nonresponding households and for noncoverage of households without telephones (i.e., only households with telephones were included in the sampling frame). The sampling weight combines (1) the base weight, which reflects the probability of selecting the household telephone number; (2) an adjustment for households with multiple telephone numbers; and (3) adjustments for unit nonresponse at various phases of identification and data collection. Several sampling weights were produced for the NAS-NYS: a household screener weight, a person screener weight for screened adults, a person screener weight for screened children, a person interview weight for sampled adults, and a person interview weight for sampled children. Weights were calculated separately for New York City and for the Rest of State. The calculation allows for separate estimates for the two geographic areas as well as for the state as a whole.

The weighted percent of the response for these questions and 95% CI\* are provided. All estimates were produced by a weighted analyses using SAS 9.1.



# Results

The results include two parts: lifetime and current asthma prevalence by socio-demographic characteristics; and asthma indicators from the

detailed asthma interview for the total population and for children/adults separately.

## Lifetime and Current Asthma Prevalence

Overall, 31,090 individuals were screened for asthma and prevalence rates were generated using this sample. Of the total, there were 7,714 children 0–17 years of age and 23,376 adults aged 18 years and older. Asthma prevalence was analyzed for the total population, and children/adults separately, by age group; gender; race; ethnicity; region; federal poverty level (FPL); education (less than high school, high school, greater than high school); and BMI.

Results are presented in bar graph and table formats. Weighted prevalence is presented as a percent (%) with the 95% confidence interval (95% CI) for the estimate. In addition, sample sizes and proportions are displayed for each category as well as the overall total. Unknown or missing values are not included in the sample size. Estimates are considered “significantly different” from each other when they do not have overlapping confidence intervals.

## Total Asthma Prevalence

**Figure 8**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years),\*  
New York State, July 2002–August 2003



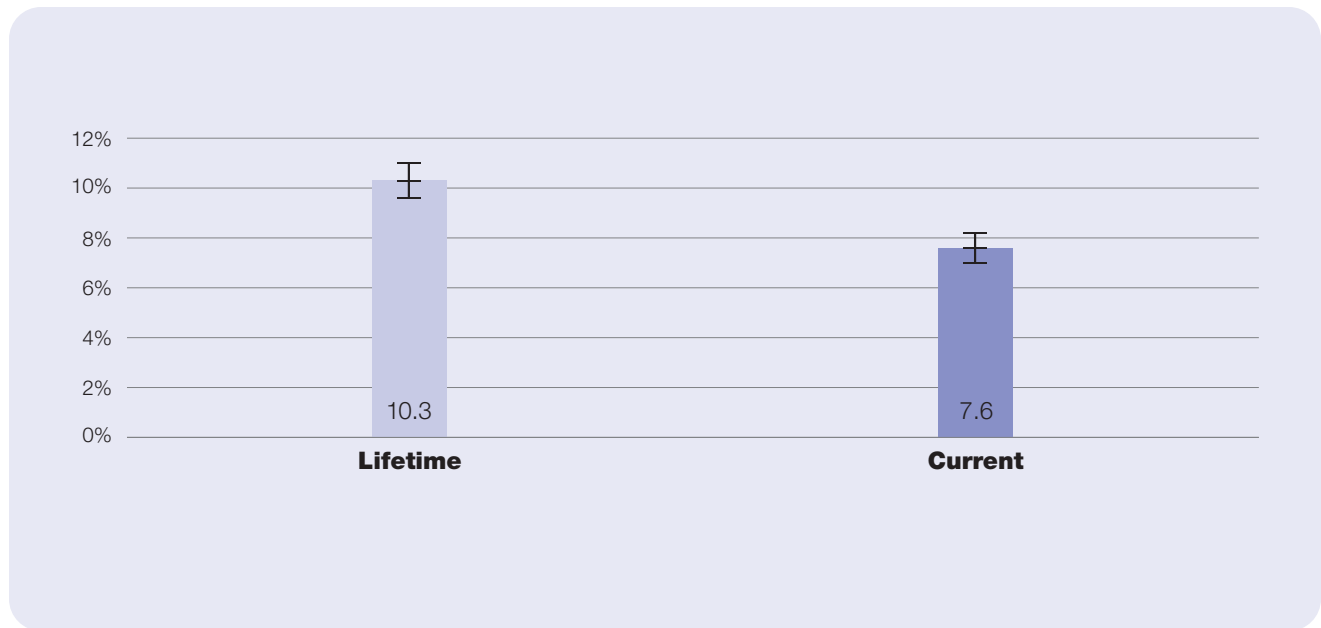
Asthma	Total Sample Size	Weighted Prevalence (%)	95% CI
Lifetime	7,714	10.6	9.7–11.5
Current	7,699	8.4	7.6–9.2

\*Parent/Guardian is self-reported proxy for children.

- Lifetime asthma prevalence in children was 10.6%.
- Current asthma prevalence in children was 8.4%.

**Figure 9**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years),  
New York State, July 2002–August 2003



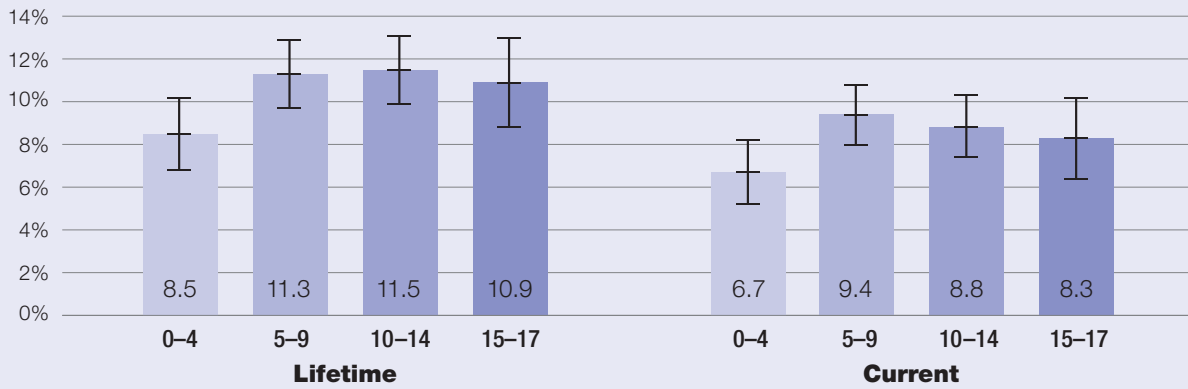
Asthma	Total Sample Size	Weighted Prevalence (%)	95% CI
Lifetime	23,376	10.3	9.6–11.0
Current	23,341	7.6	7.0–8.2

- The data in Figure 8 and Figure 9 reveal that children had higher reported lifetime asthma prevalence compared to adults. They also had higher reported current asthma prevalence.
- Lifetime asthma prevalence in adults was 10.3%.
- Current asthma prevalence in adults was 7.6%.

## Asthma Prevalence by Age Group

**Figure 10**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Age Group, New York State, July 2002–August 2003



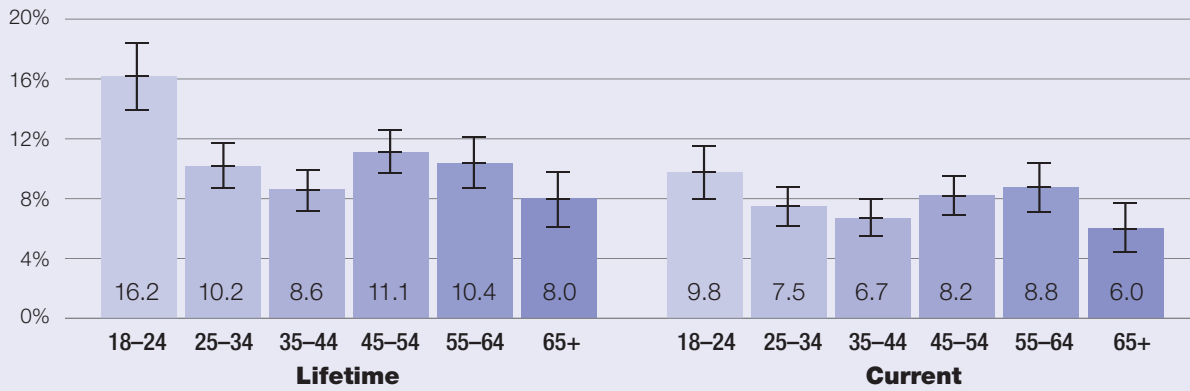
Asthma	Age Group	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	0–4	1,726 (22%)	8.5	6.8–10.2
	5–9	2,244 (29%)	11.3	9.7–12.9
	10–14	2,363 (31%)	11.5	9.9–13.1
	15–17	1,381 (18%)	10.9	8.8–13.0
Current	0–4	1,721 (22%)	6.7	5.2–8.2
	5–9	2,241 (29%)	9.4	8.0–10.8
	10–14	2,358 (31%)	8.8	7.4–10.3
	15–17	1,379 (18%)	8.3	6.4–10.2

\*Parent/Guardian is self-reported proxy for children.

- Lifetime and current asthma prevalence varied slightly by age in children. Children aged 0–4 had the lowest lifetime asthma prevalence at 8.5%, while children aged 10–14 had the highest lifetime asthma prevalence at 11.5%.
- Children aged 0–4 also had the lowest current asthma prevalence at 6.7%, while children aged 5–9 had the highest current asthma prevalence at 9.4%.

**Figure 11**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Age Group, New York State, July 2002–August 2003



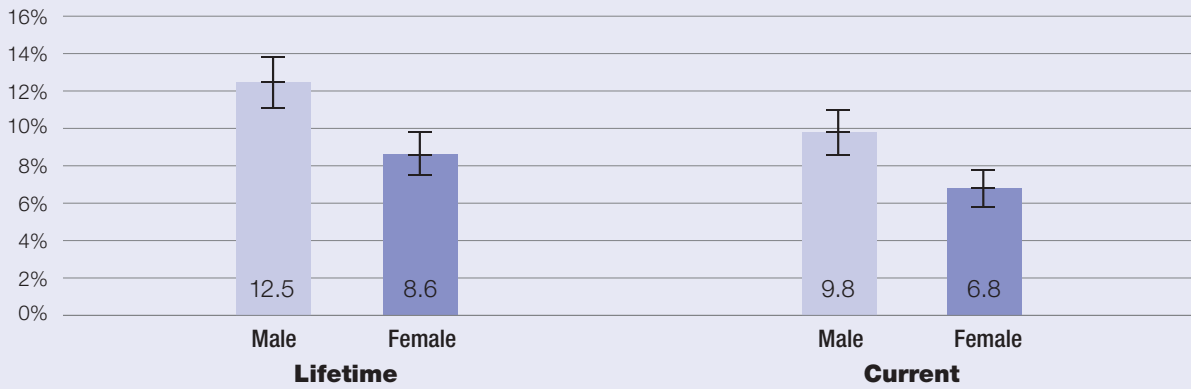
Asthma	Age Group	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	18–24	3,175 (14%)	16.2	13.9–18.4
	25–34	4,220 (18%)	10.2	8.7–11.7
	35–44	4,977 (21%)	8.6	7.2–9.9
	45–54	4,782 (20%)	11.1	9.7–12.6
	55–64	3,064 (13%)	10.4	8.7–12.1
	65+	3,158 (14%)	8.0	6.1–9.8
Current	18–24	3,167 (14%)	9.8	8.0–11.5
	25–34	4,215 (18%)	7.5	6.2–8.8
	35–44	4,971 (21%)	6.7	5.5–8.0
	45–54	4,774 (20%)	8.2	6.9–9.5
	55–64	3,061 (13%)	8.8	7.1–10.4
	65+	3,153 (14%)	6.0	4.3–7.7

- Lifetime and current adult asthma prevalence varied by age.
- Adults aged 65+ had the lowest lifetime asthma prevalence at 8.0%, while young adults aged 18–24 had the highest lifetime asthma prevalence at 16.2%, a rate significantly higher than all other age groups.
- Adults aged 65+ had the lowest current asthma prevalence at 6.0%, while young adults aged 18–24 had the highest current asthma prevalence at 9.8%.

## Asthma Prevalence by Gender

**Figure 12**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Gender, New York State, July 2002–August 2003



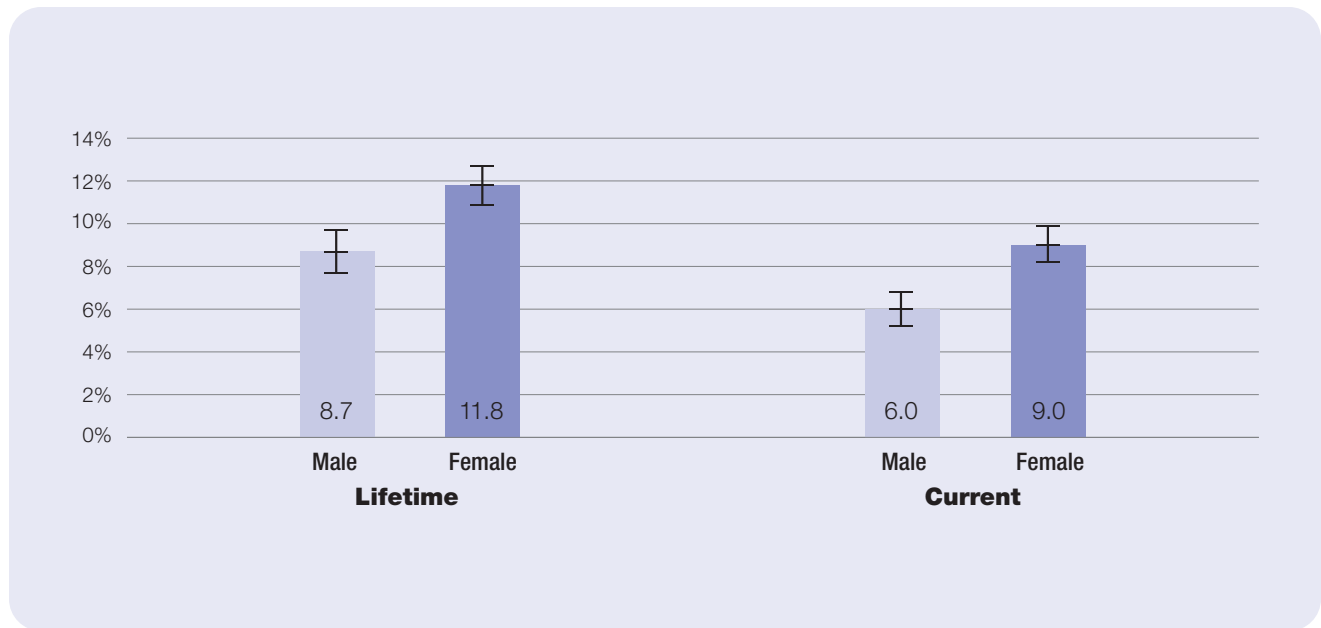
Asthma	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Male	4,036 (52%)	12.5	11.1–13.8
	Female	3,663 (48%)	8.6	7.5–9.8
Current	Male	4,031 (52%)	9.8	8.6–11.0
	Female	3,653 (48%)	6.8	5.8–7.8

\*Parent/Guardian is self-reported proxy for children.

- Overall, the asthma prevalence was higher for male children than female children.
- The lifetime asthma prevalence was 12.5% for male children and 8.6% for female children.
- The current asthma prevalence was 9.8% for male children and 6.8% for female children.
- Differences between male and female children for both lifetime and current asthma were statistically significant.

**Figure 13**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Gender, New York State, July 2002–August 2003



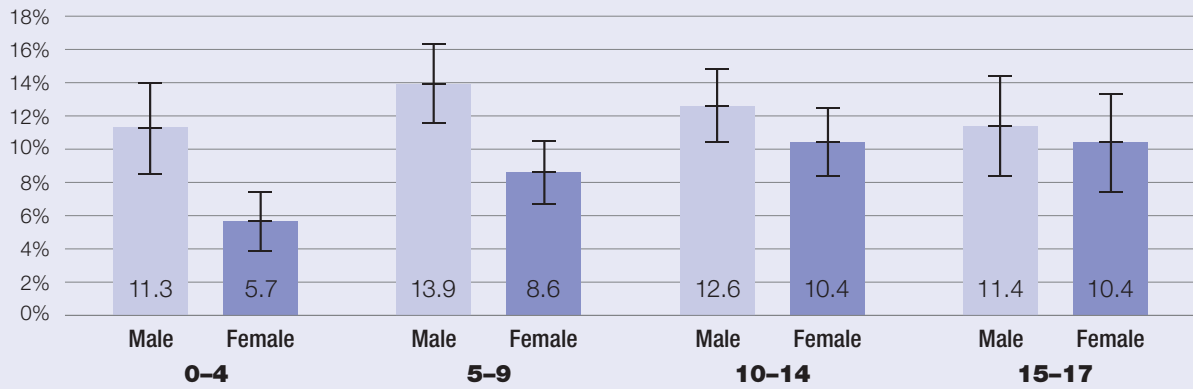
Asthma	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Male	10,786 (46%)	8.7	7.7–9.7
	Female	12,577 (54%)	11.8	10.9–12.7
Current	Male	10,774 (46%)	6.0	5.2–6.8
	Female	12,554 (54%)	9.0	8.2–9.9

- A reverse of the gender pattern was seen in adults. The lifetime and current asthma prevalence was higher for adult females than in males.
- The lifetime asthma prevalence was 11.8% for adult females compared to 8.7% for adult males.
- Current asthma prevalence was 9.0% for adult females compared to 6.0% for adult males.
- These differences were statistically significant.

## Asthma Prevalence by Age and Gender

**Figure 14**

Self-reported Lifetime Asthma Prevalence in Children (0–17 Years)\* by Age and Gender, New York State, July 2002–August 2003



Age Group	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
0–4	Male	899 (12%)	11.3	8.5–14.0
	Female	822 (11%)	5.7	3.9–7.4
5–9	Male	1,166 (15%)	13.9	11.6–16.3
	Female	1,076 (14%)	8.6	6.7–10.5
10–14	Male	1,229 (16%)	12.6	10.4–14.8
	Female	1,127 (15%)	10.4	8.4–12.5
15–17	Male	742 (10%)	11.4	8.4–14.4
	Female	638 (8%)	10.4	7.4–13.3

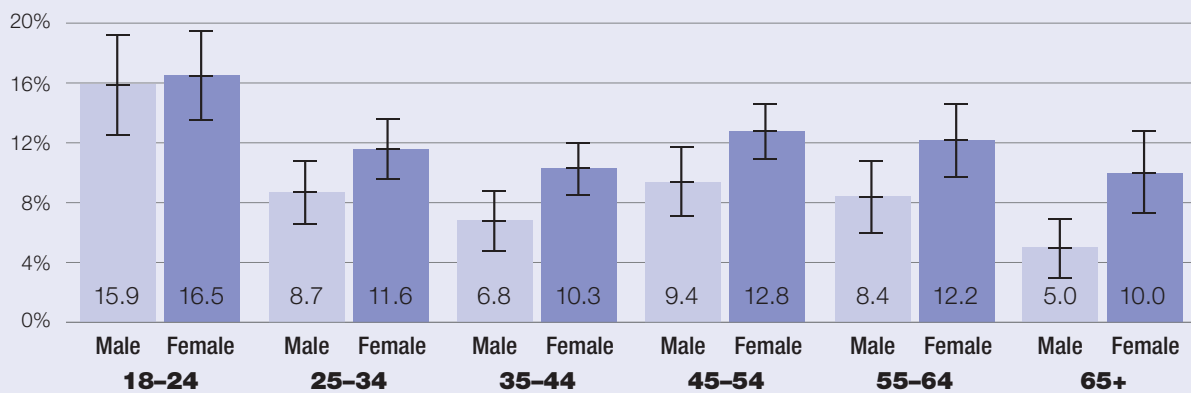
\*Parent/Guardian is self-reported proxy for children.

- Lifetime asthma prevalence in children was higher in males than in females for all age groups.
- Lifetime asthma prevalence generally increased with age for female children.
- Males had statistically higher prevalence compared to females in the 0–4 and 5–9 age groups.
- Lifetime asthma prevalence estimates were not significantly different by gender for the 10–14 and 15–17 age groups.



**Figure 15**

Self-reported Lifetime Asthma Prevalence in Adults (18+ Years) by Age and Gender, New York State, July 2002–August 2003

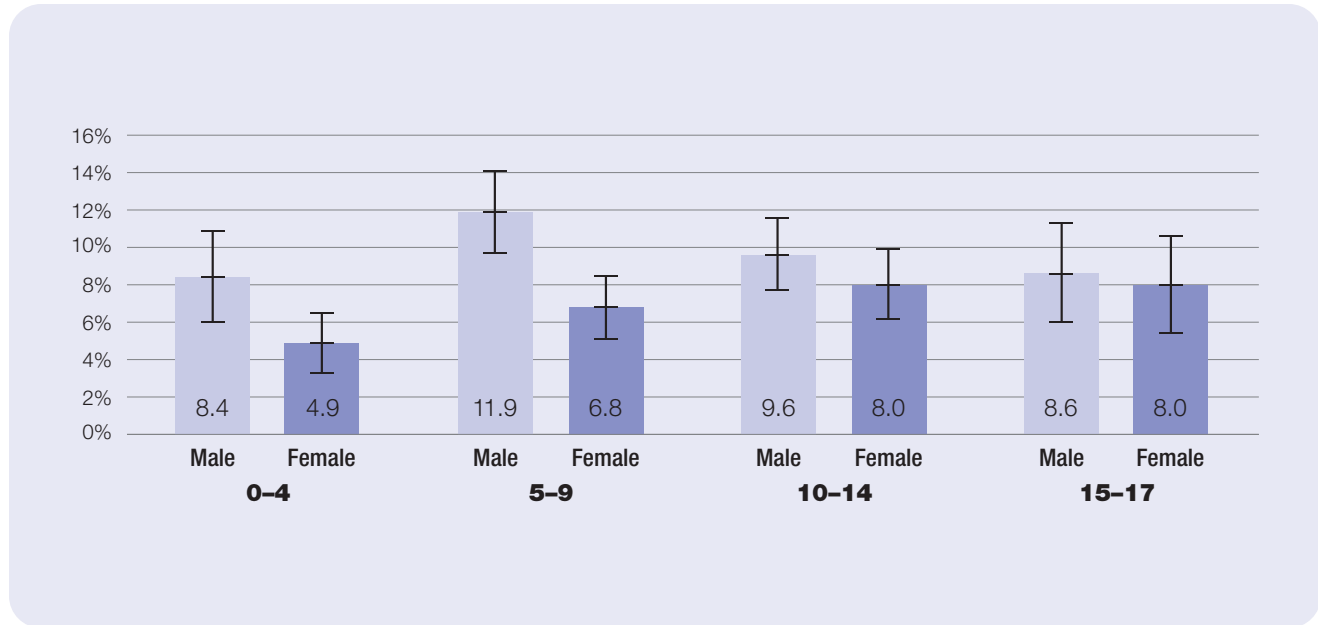


Age Group	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
18-24	Male	1,614 (7%)	15.9	12.5–19.2
	Female	1,558 (7%)	16.5	13.5–19.5
25-34	Male	1,981 (8%)	8.7	6.6–10.8
	Female	2,237 (10%)	11.6	9.6–13.6
35-44	Male	2,272 (10%)	6.8	4.8–8.8
	Female	2,702 (9%)	10.3	8.5–12.0
45-54	Male	2,170 (10%)	9.4	7.1–11.7
	Female	2,610 (11%)	12.8	10.9–14.6
55-64	Male	1,395 (6%)	8.4	6.0–10.8
	Female	1,667 (7%)	12.2	9.7–14.6
65+	Male	1,354 (6%)	5.0	3.0–6.9
	Female	1,803 (8%)	10.0	7.3–12.8

- Lifetime asthma prevalence in adult females was consistently higher than in males for all age groups.
- In the 65 and older age group the lifetime asthma prevalence was statistically higher in females (10%) compared to males (5%).
- Individuals 18–24 years had the highest prevalence for both males and females; the 65+ age group had the lowest prevalence.

**Figure 16**

Self-reported Current Asthma Prevalence in Children (0–17 Years) by Age and Gender,\*  
New York State, July 2002–August 2003



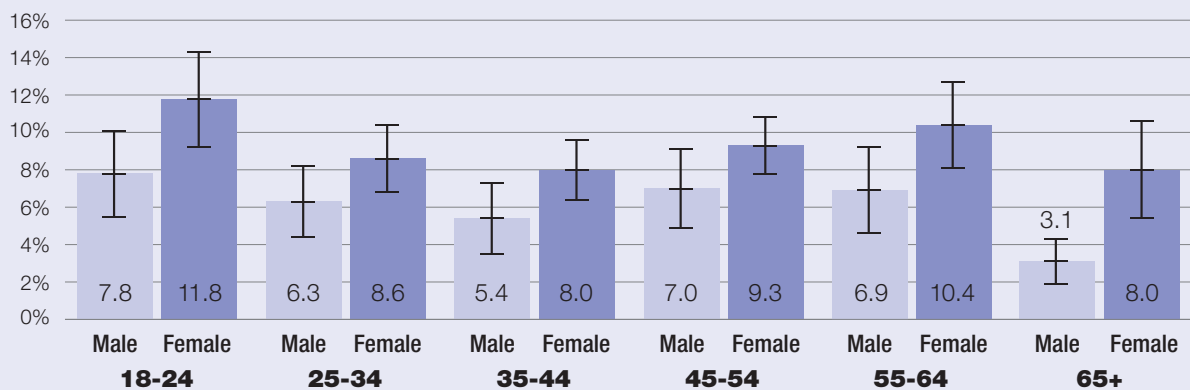
Age Group	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
0-4	Male	895 (12%)	8.4	6.0-10.9
	Female	821 (11%)	4.9	3.3-6.5
5-9	Male	1,165 (15%)	11.9	9.7-14.1
	Female	1,074 (14%)	6.8	5.1-8.5
10-14	Male	1,229 (16%)	9.6	7.7-11.6
	Female	1,122 (15%)	8.0	6.2-9.9
15-17	Male	742 (10%)	8.6	6.0-11.3
	Female	636 (8%)	8.0	5.4-10.6

\*Parent/Guardian is self-reported proxy for children.

- Current asthma prevalence in children was higher in males than in females for all age groups.
- Current asthma prevalence generally increased with age for female children.
- Females ages 0–4 years had the lowest current asthma prevalence at 4.9%, while the 10–14 and 15–17 age groups had the highest prevalence at 8%.
- For males the highest current asthma prevalence was 11.9% for the 5–9 age group.
- The current asthma prevalence for children in the 5–9 age group was significantly higher for males than females.

**Figure 17**

Self-reported Current Asthma Prevalence in Adults (18+ Years) by Age and Gender, New York State, July 2002–August 2003



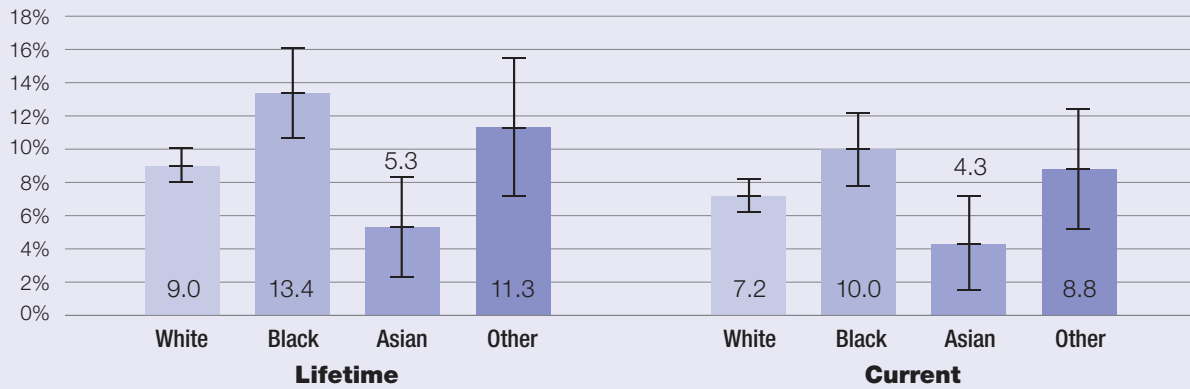
Age Group	Gender	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
18-24	Male	1,612 (7%)	7.8	5.5-10.1
	Female	1,552 (7%)	11.8	9.2-14.3
25-34	Male	1,980 (8%)	6.3	4.4-8.2
	Female	2,233 (10%)	8.6	6.8-10.4
35-44	Male	2,268 (10%)	5.4	3.5-7.3
	Female	2,700 (12%)	8.0	6.4-9.6
45-54	Male	2,165 (9%)	7.0	4.9-9.1
	Female	2,607 (11%)	9.3	7.8-10.8
55-64	Male	1,395 (6%)	6.9	4.6-9.2
	Female	1,664 (7%)	10.4	8.1-12.6
65+	Male	1,354 (6%)	3.1	1.9-4.3
	Female	1,798 (8%)	8.0	5.4-10.6

- Current asthma prevalence was higher in adult females compared to males for all age groups.
- However, in the 65 and older age group, the current asthma prevalence was significantly higher for females (8.0%) compared to males (3.1%).
- The 18–24 year age group had the highest current asthma prevalence for both males and females, while the 65 and older age group had the lowest prevalence.

## Asthma Prevalence by Race

**Figure 18**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Race, New York State, July 2002–August 2003



Asthma	Race	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	White	4,564 (72%)	9.0	8.0–10.1
	Black	1,189 (19%)	13.4	10.7–16.1
	Asian	288 (5%)	5.3	2.3–8.3
	Other**	316 (5%)	11.3	7.2–15.5
Current	White	4,556 (72%)	7.2	6.2–8.2
	Black	1,186 (19%)	10.0	7.8–12.2
	Asian	288 (5%)	4.3	1.5–7.2
	Other**	316 (5%)	8.8	5.2–12.4

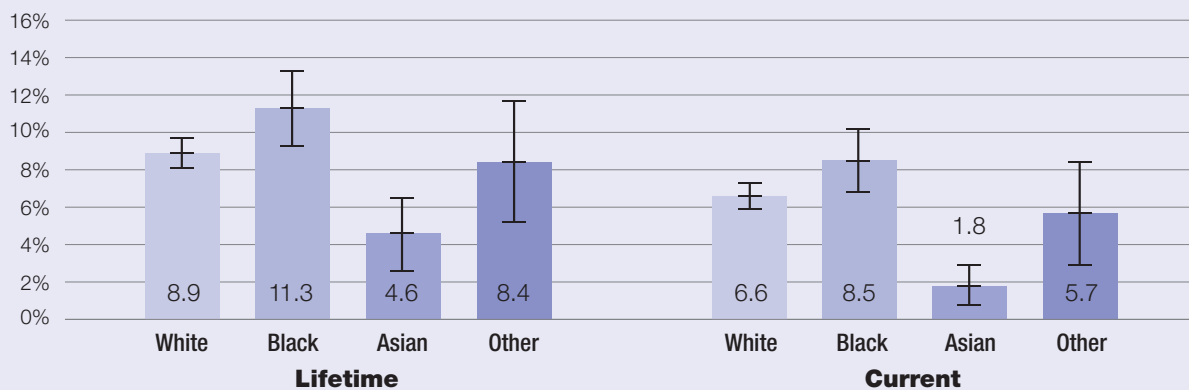
\*Parent/Guardian is self-reported proxy for children.

\*\*Other race included American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, and multiple races.

- Asian children had the lowest lifetime and current asthma prevalence at 5.3% and 4.3%, respectively.
- Black children had the highest lifetime and current asthma prevalence at 13.4% and 10.0%, respectively.
- The lifetime asthma prevalence for children was significantly higher for blacks than for whites or Asians.
- Current asthma prevalence for children was significantly higher for blacks than for Asians.

**Figure 19**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Race, New York State, July 2002–August 2003



Asthma	Race	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	White	15,048 (77%)	8.9	8.1–9.7
	Black	2,958 (15%)	11.3	9.3–13.3
	Asian	918 (5%)	4.6	2.6–6.5
	Other*	554 (3%)	8.4	5.2–11.6
Current	White	15,031 (77%)	6.6	5.9–7.3
	Black	2,958 (15%)	8.5	6.8–10.2
	Asian	917 (5%)	1.8	0.8–2.9
	Other*	552 (3%)	5.7	2.9–8.4

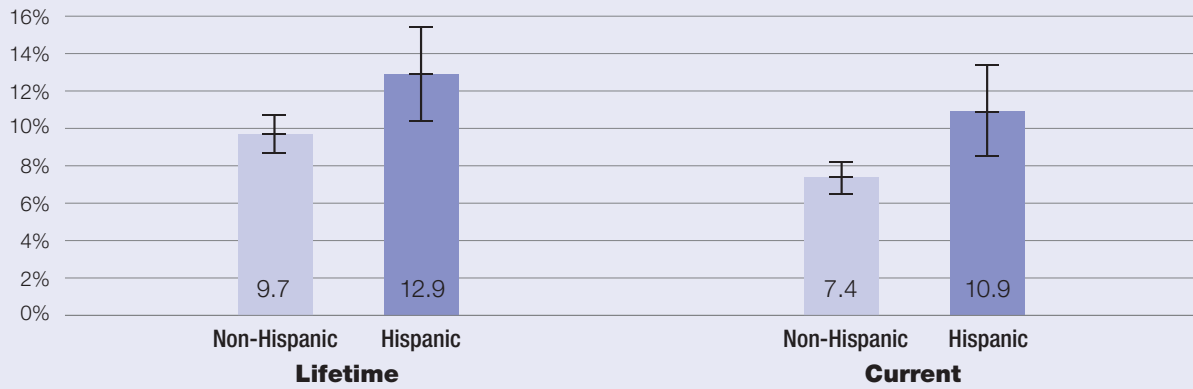
\*Other race included American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, and multiple races.

- Asian adults had the lowest lifetime and current asthma prevalence at 4.6% and 1.8%, respectively.
- Black adults had the highest lifetime and current asthma prevalence at 11.3% and 8.5%, respectively.
- The lifetime and current asthma prevalence estimates for adults were significantly higher for blacks and whites than for Asians.

## Asthma Prevalence by Ethnicity

**Figure 20**

Self-reported Asthma Prevalence in Children (0–17 Years)\* by Ethnicity, New York State, July 2002–August 2003

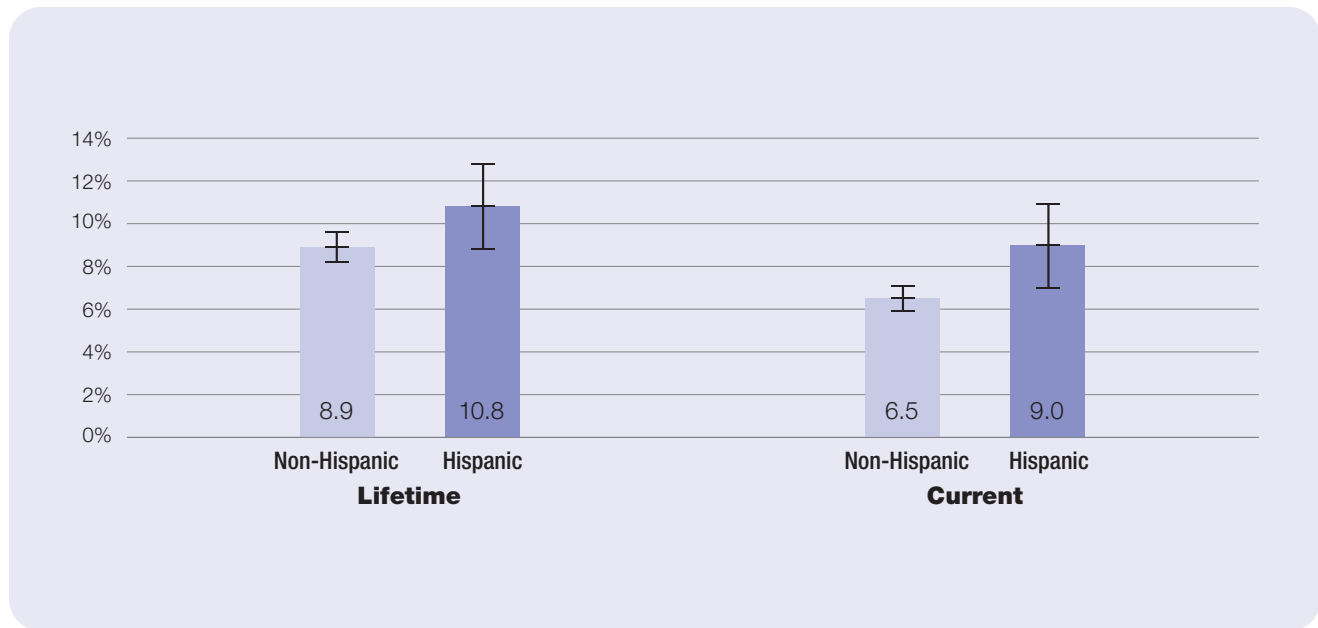


Asthma	Age Group	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Non-Hispanic	5,688 (77%)	9.7	8.7–10.7
	Hispanic	1,677 (23%)	12.9	10.4–15.4
Current	Non-Hispanic	5,677 (77%)	7.4	6.5–8.2
	Hispanic	1,676 (23%)	10.9	8.5–13.4

\*Parent/Guardian is self-reported proxy for children.

- Overall, Hispanic children had higher lifetime and current asthma prevalence than non-Hispanic children.
- Lifetime asthma prevalence was 12.9% for Hispanic children and 9.7% for non-Hispanic children.
- Current asthma prevalence was 10.9% for Hispanic children and 7.4% for non-Hispanic children.
- This difference was statistically significant.

**Figure 21**  
 Self-reported Asthma Prevalence in Adults (18+ Years) by Ethnicity,  
 New York State, July 2002–August 2003



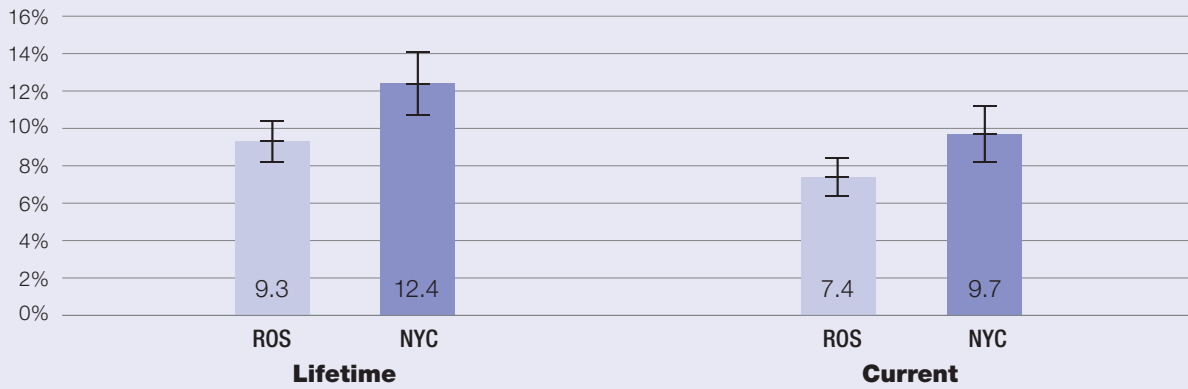
Asthma	Ethnicity	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Non-Hispanic	18,379 (83%)	8.9	8.1–9.7
	Hispanic	3,726 (17%)	10.8	8.8–12.8
Current	Non-Hispanic	18,358 (83%)	6.5	5.8–7.2
	Hispanic	3,725 (17%)	9.0	7.0–10.9

- Overall, Hispanic adults had higher lifetime and current asthma prevalence than non-Hispanic adults.
- Lifetime asthma prevalence was 10.8% for Hispanic adults and 8.9% for non-Hispanic adults.
- Current asthma prevalence was 9.0% for Hispanic adults and 6.5% for non-Hispanic adults.

## Asthma Prevalence by Region

**Figure 22**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Region, New York State, July 2002–August 2003



Asthma	Region	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Rest of State (ROS)	4,355 (56%)	9.3	8.2–10.4
	New York City (NYC)	3,359 (44%)	12.4	10.7–14.1
Current	Rest of State (ROS)	4,346 (56%)	7.4	6.4–8.4
	New York City (NYC)	3,353 (44%)	9.7	8.2–11.2

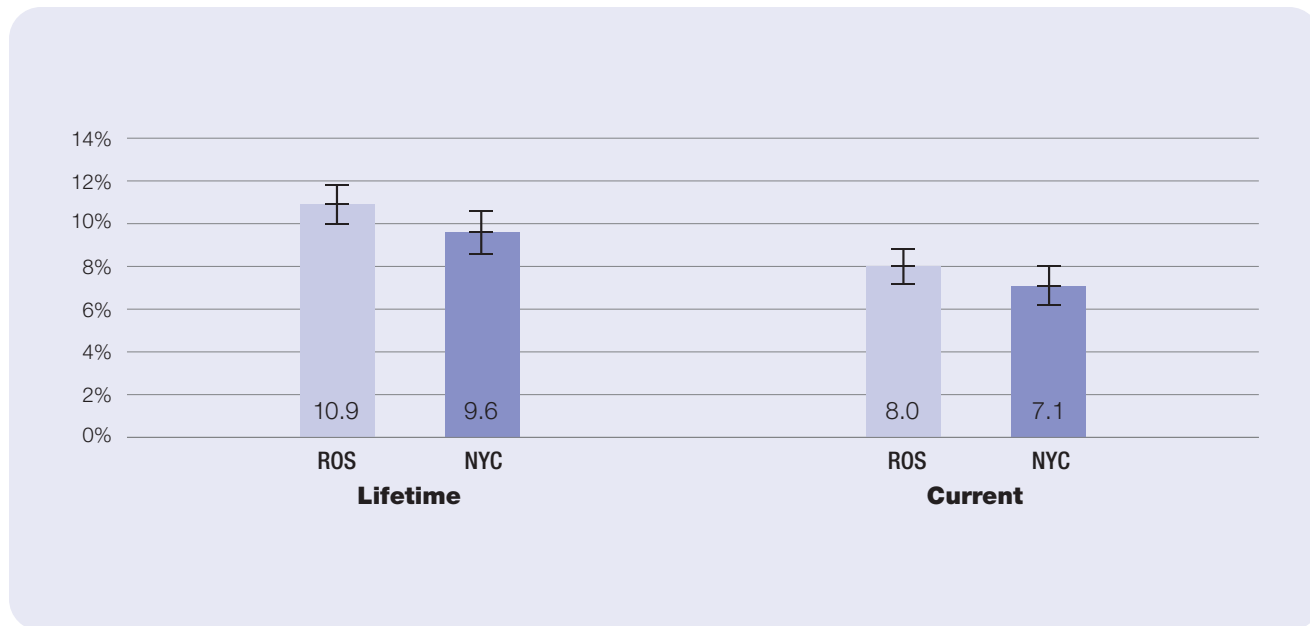
\*Parent/Guardian is self-reported proxy for children.

- Overall, children who reside in New York City had higher lifetime and current asthma prevalence than children in the Rest of State.
- Lifetime asthma prevalence was 12.4% for children who reside in New York City and 9.3% for children in the Rest of State. This difference was statistically significant.
- Current asthma prevalence was 9.7% for children who reside in New York City and 7.4% for children who reside in the Rest of State.



**Figure 23**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Region, New York State, July 2002–August 2003



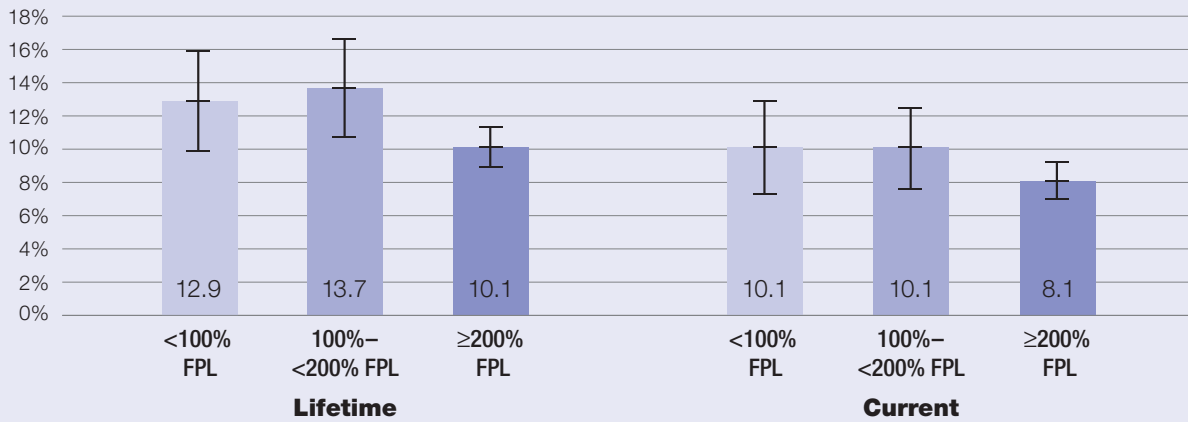
Asthma	Region	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Rest of State (ROS)	12,922 (55%)	10.9	10.0–11.8
	New York City (NYC)	10,454 (45%)	9.6	8.6–10.6
Current	Rest of State (ROS)	12,902 (55%)	8.0	7.2–8.8
	New York City (NYC)	10,439 (45%)	7.1	6.2–8.0

- In contrast to childhood prevalence, where New York City residents had higher lifetime and current asthma prevalence rates, adults in the Rest of State had higher lifetime and current asthma prevalence than adults who reside in New York City.
- Lifetime asthma prevalence was 9.6% for adults who reside in New York City compared to 10.9% for adults who reside in the Rest of State.
- Current asthma prevalence was 7.1% for adults who reside in New York City compared to 8.0% for adults who reside in the Rest of State.

## Asthma Prevalence by Federal Poverty Level (FPL)

**Figure 24**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Federal Poverty Level (FPL), New York State, July 2002–August 2003



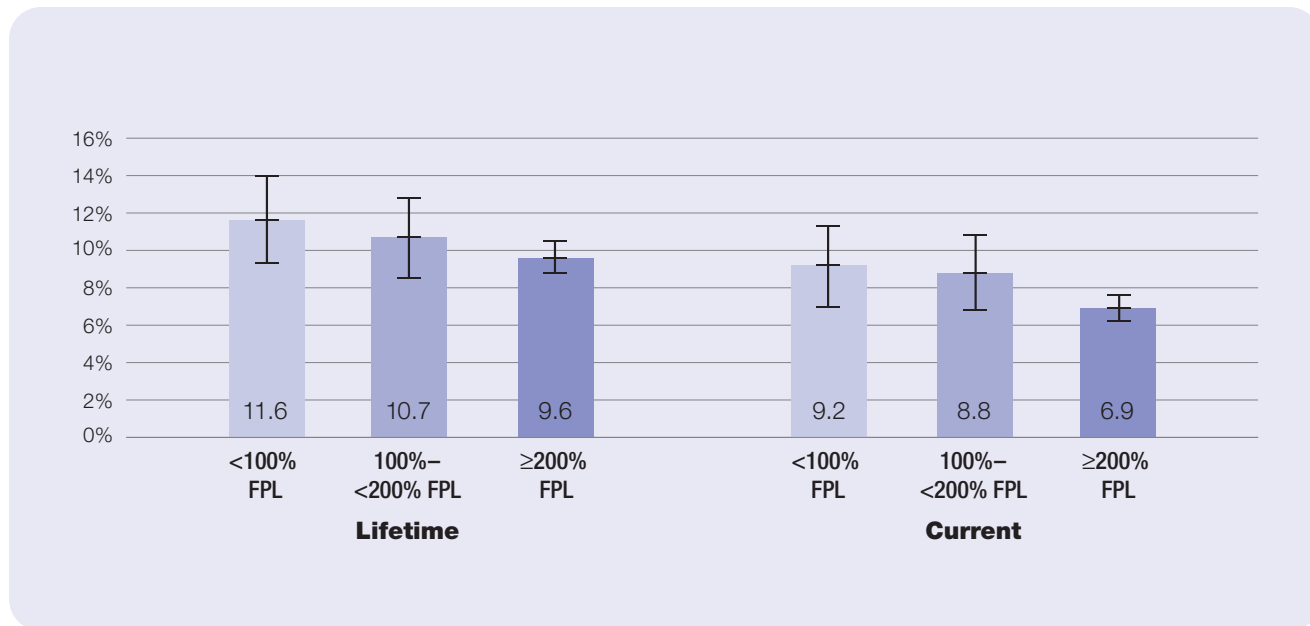
Asthma	Federal Poverty Level	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	<100% FPL	941 (17%)	12.9	9.9–15.9
	100%–<200% FPL	1,160 (20%)	13.7	10.7–16.6
	≥200% FPL	3,585 (63%)	10.1	8.9–11.3
Current	<100% FPL	940 (17%)	10.1	7.3–12.9
	100%–<200% FPL	1,157 (20%)	10.1	7.6–12.5
	≥200% FPL	3,578 (63%)	8.1	7.0–9.2

\*Parent/Guardian is self-reported proxy for children.

- Children living at 100%–200% of the federal poverty level had the highest lifetime asthma prevalence.
- Lifetime asthma prevalence was 12.9% for children living at or below the federal poverty level; 13.7% for children living between 100% and 200% of the federal poverty level; and 10.1% for children living above 200% of the federal poverty level.
- Current asthma prevalence was 10.1% for children living at or below the federal poverty level; 10.1% for children living between 100% and 200% of the federal poverty level; and 8.1% for children living above 200% of the federal poverty level.

**Figure 25**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Federal Poverty Level (FPL), New York State, July 2002–August 2003



Asthma	Federal Poverty Level	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	<100% FPL	1,779 (12%)	11.6	9.3–14.0
	100%–<200% FPL	2,188 (14%)	10.7	8.5–12.8
	≥200% FPL	11,491 (74%)	9.6	8.8–10.5
Current	<100% FPL	1,777 (12%)	9.2	7.0–11.3
	100%–<200% FPL	2,184 (14%)	8.8	6.8–10.8
	≥200% FPL	11,477 (74%)	6.9	6.2–7.6

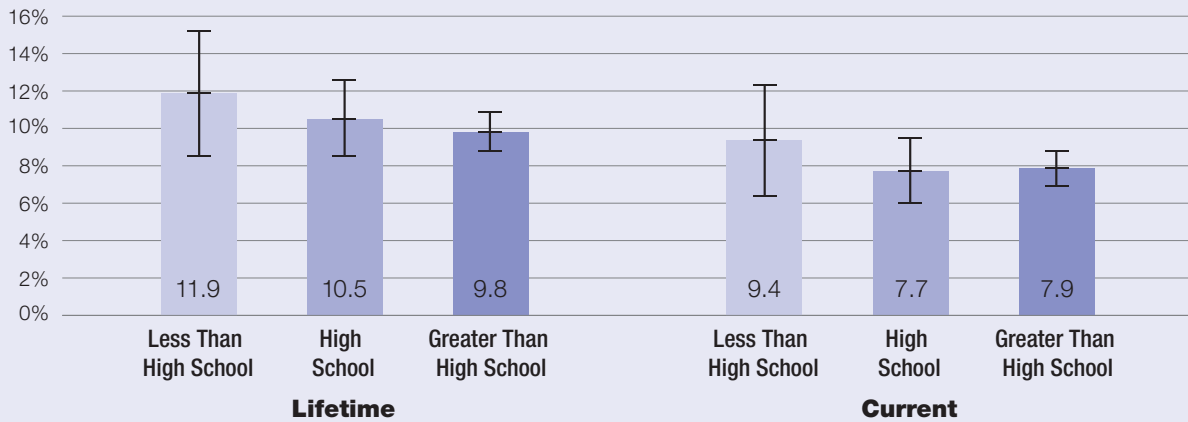
\*Parent/Guardian is self-reported proxy for children.

- Overall, adults living at or below the federal poverty level had higher lifetime and current asthma prevalence than adults who were living above the federal poverty level.
- Lifetime asthma prevalence was 11.6% for adults living at or below the federal poverty level; 10.7% for adults living between 100% and 200% of the federal poverty level; and 9.6% for adults living above 200% of the federal poverty level.
- Current asthma prevalence was 9.2% for adults living at or below the federal poverty level; 8.8% for adults living between 100% and 200% of the federal poverty level; and 6.9% for adults living above 200% of the federal poverty level.

## Asthma Prevalence by Highest Level of Household Educational Attainment

**Figure 26**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Highest Level of Household Educational Attainment, New York State, July 2002–August 2003



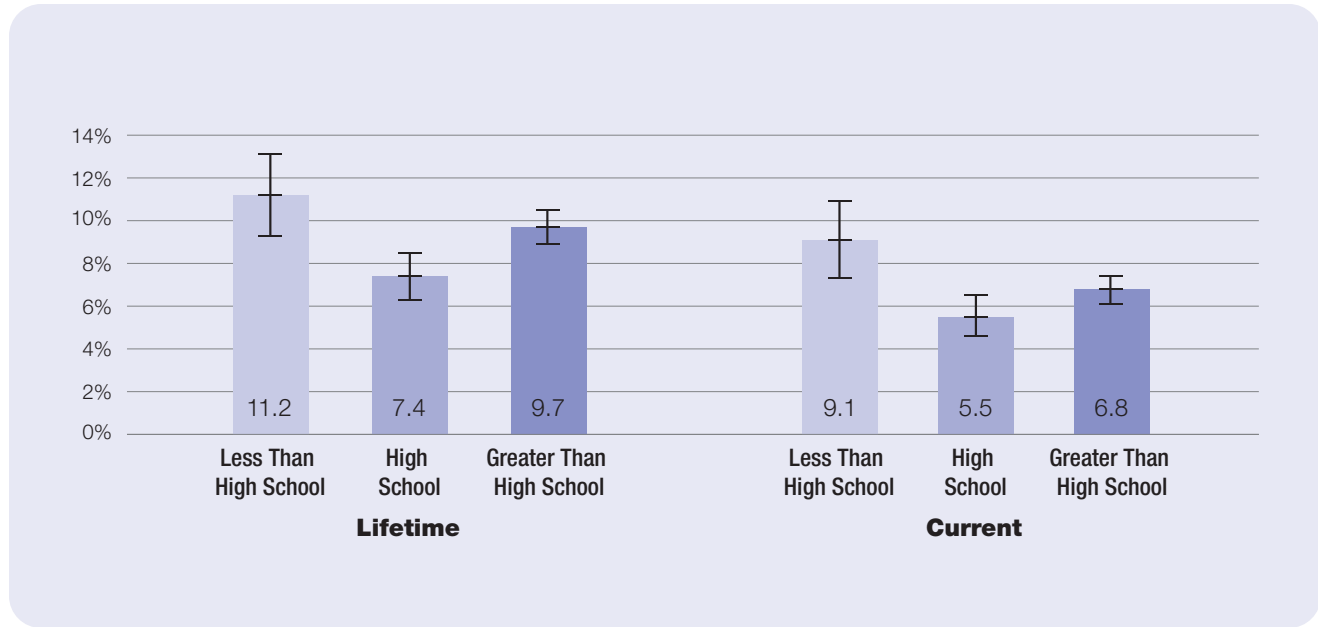
Asthma	Household Education Attainment	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Less Than High School	831 (11%)	11.9	8.5–15.2
	High School	1,281 (18%)	10.5	8.5–12.6
	Greater Than High School	5,170 (71%)	9.8	8.8–10.9
Current	Less Than High School	831 (11%)	9.4	6.4–12.3
	High School	1,277 (18%)	7.7	6.0–9.5
	Greater Than High School	5,162 (71%)	7.9	6.9–8.8

\*Parent/Guardian is self-reported proxy for children.

- In general, lifetime and current asthma prevalence for children decreased as the highest level of household educational attainment increased.
- Children from families whose highest level of household educational attainment was less than high school had the highest lifetime and current asthma prevalence at 11.9% and 9.4%, respectively.
- Children from families whose highest level of household educational attainment was greater than high school had the lowest lifetime asthma prevalence at 9.8%.
- Children from families whose highest level of household educational attainment was high school and greater than high school had the lowest current asthma prevalence at 7.7% and 7.9%, respectively.

**Figure 27**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Highest Level of Educational Attainment, New York State, July 2002–August 2003



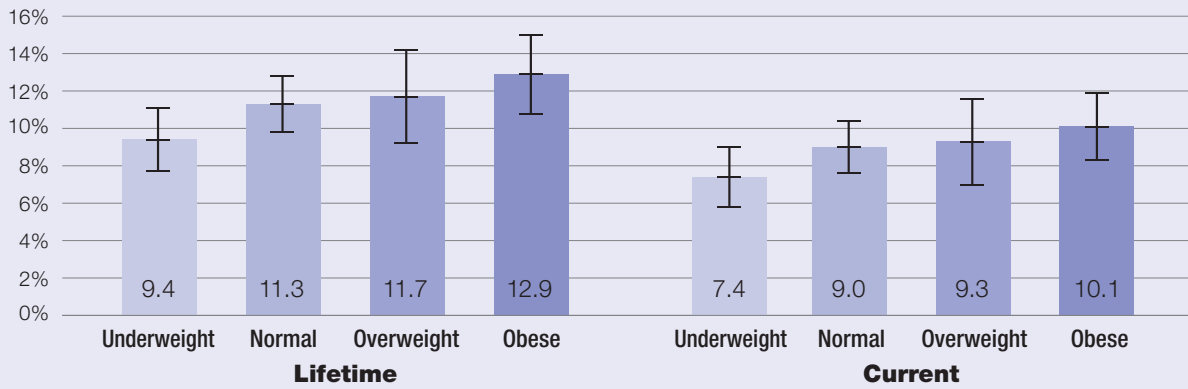
Asthma	Household Education Attainment	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Less Than High School	2,900 (14%)	11.2	9.3–13.1
	High School	5,532 (26%)	7.4	6.3–8.5
	Greater Than High School	12,714 (60%)	9.7	8.9–10.5
Current	Less Than High School	2,896 (14%)	9.1	7.3–10.9
	High School	5,526 (26%)	5.5	4.6–6.5
	Greater Than High School	12,701 (60%)	6.8	6.1–7.4

- In general, lifetime and current asthma prevalence for adults varied by educational attainment.
- Adults whose highest level of educational attainment was less than high school had the highest lifetime and current asthma prevalence at 11.2% and 9.1%, respectively.
- Adults whose highest level of educational attainment was high school had the lowest lifetime and current asthma prevalence at 7.4%, and 5.5%, respectively.

## Asthma Prevalence by Body Mass Index (BMI)

**Figure 28**

Self-reported Lifetime and Current Asthma Prevalence in Children (0–17 Years)\* by Body Mass Index (BMI)\*\*  
New York State, July 2002–August 2003



Asthma	Body Mass Index (BMI)	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Underweight	1,870 (27%)	9.4	7.7–11.1
	Normal	2,531 (36%)	11.3	9.8–12.8
	Overweight	861 (12%)	11.7	9.2–14.2
	Obese	1,766 (15%)	12.9	10.8–15.0
Current	Underweight	1,862 (27%)	7.4	5.8–9.0
	Normal	2,529 (36%)	9.0	7.6–10.4
	Overweight	860 (12%)	9.3	7.0–11.6
	Obese	1,763 (15%)	10.1	8.3–11.9

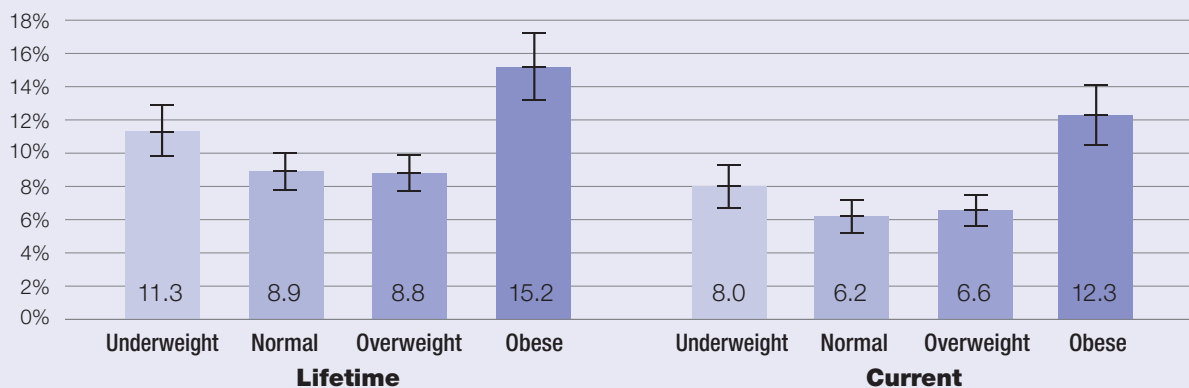
\*Parent/Guardian is self-reported proxy for children.

\*\*Children's BMI was calculated using "Body Mass Index: BMI for Children and Teens." This is also referred to as BMI-for-age and is gender- and age-specific.<sup>6</sup>

- Lifetime and current asthma prevalence increased in children as body mass index (BMI) increased.
- Underweight children had the lowest lifetime and current prevalence at 9.4% and 7.4%, respectively.
- Obese children had the highest lifetime and current asthma prevalence at 12.9% and 10.1%, respectively.

**Figure 29**

Self-reported Lifetime and Current Asthma Prevalence in Adults (18+ Years) by Body Mass Index (BMI)\*, New York State, July 2002–August 2003



Asthma	Body Mass Index (BMI)	Total Sample Size (%)	Weighted Prevalence (%)	95% CI
Lifetime	Underweight (<18.5)	4,869 (21%)	11.3	9.8–12.9
	Normal (18.5–24.9)	8,867 (38%)	8.9	7.8–10.0
	Overweight (25.0–29.9)	6,441 (28%)	8.8	7.7–9.9
	Obese (>30.0)	3,199 (14%)	15.2	13.2–17.2
Current	Underweight (<18.5)	4,857 (21%)	8.0	6.7–9.3
	Normal (18.5–24.9)	8,861 (38%)	6.2	5.2–7.2
	Overweight (25.0–29.9)	6,426 (28%)	6.6	5.6–7.5
	Obese (>30.0)	3,197 (14%)	12.3	10.5–14.1

\*BMI<sup>5</sup> = {Weight (pounds) / [Height (inches)]<sup>2</sup>} x 703

- Obese adults had the highest lifetime asthma prevalence at 15.2%.
- The lifetime prevalence for obese adults is significantly higher than the other BMI groups.
- Obese adults had the highest current asthma prevalence at 12.3%.
- The current prevalence for obese adults was significantly higher than the other BMI groups.

## Detailed Asthma Interview

Detailed asthma interviews were conducted with 1,970 individuals who represented a sub-sample of all individuals with asthma from the screening interview. These questions included history of asthma (daytime and night symptoms, and episodes/attacks); health care coverage (having insurance coverage, continuation of health insurance); health care utilization (asthma routine visits, asthma urgent visits, asthma emergency room visits, and asthma hospitalizations); knowledge of asthma/management plan (taught by a doctor or another health care professional to recognize early asthma symptoms, what to do during an asthma episode or attack, and receipt of an asthma management plan); and asthma's impact on usual activities (days missed school/work) and quality of life.

Of these 1,970 individuals who were asked detailed interview questions, 647 were children between the ages of 0 to 17 years and 1,323

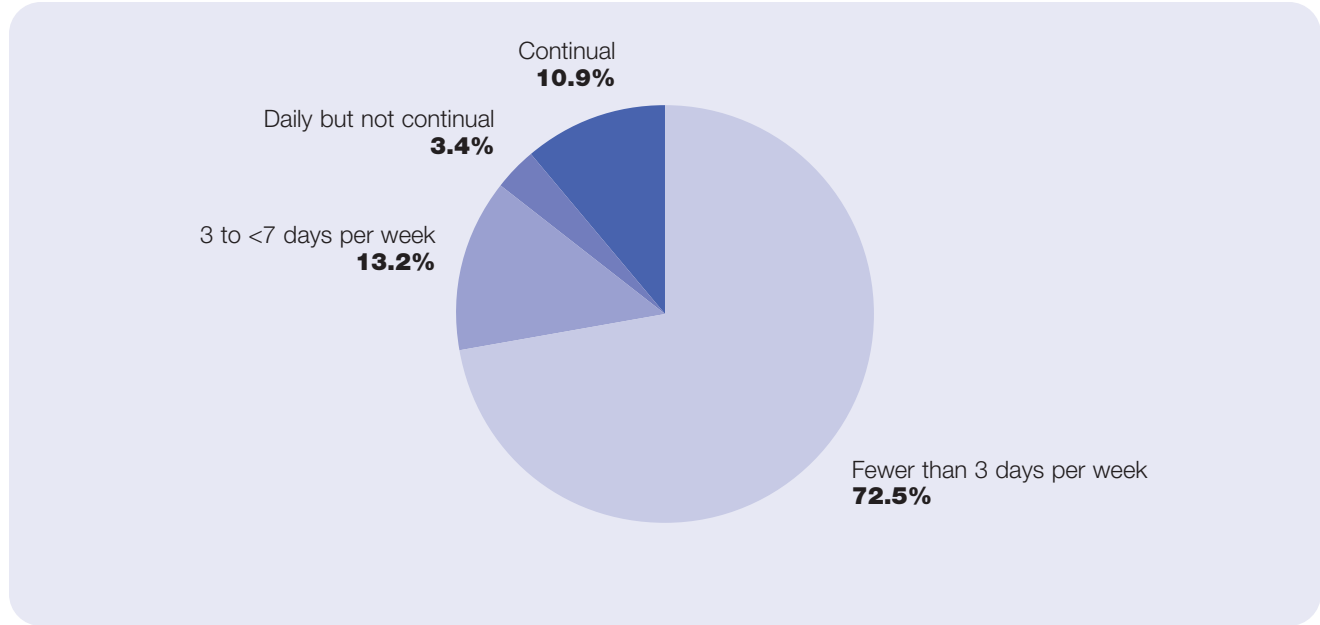
were adults 18 years and older. The analyses of detailed questions about asthma were conducted for individuals who had met at least one of the following behavioral criteria within the past three years: 1) having seen a healthcare professional for asthma; 2) having taken asthma medications; 3) having symptoms of asthma. There were 1,737 individuals who met these criteria including 606 children and 1,131 adults. The analyses were conducted for all individuals with asthma and separately for children and adults.

Results are presented in pie chart and table formats. The weighted percent of the answers for these questions and 95% CI are provided. In addition, raw frequencies are displayed for each category. Unknown or missing values are not included in the analyses. Estimates are considered "significantly different" from each other when they do not have overlapping confidence intervals.



## Asthma Daytime Symptoms

**Figure 30**  
Asthma Daytime Symptoms\* in the Past 30 Days Among Individuals,  
New York State, July 2002–August 2003



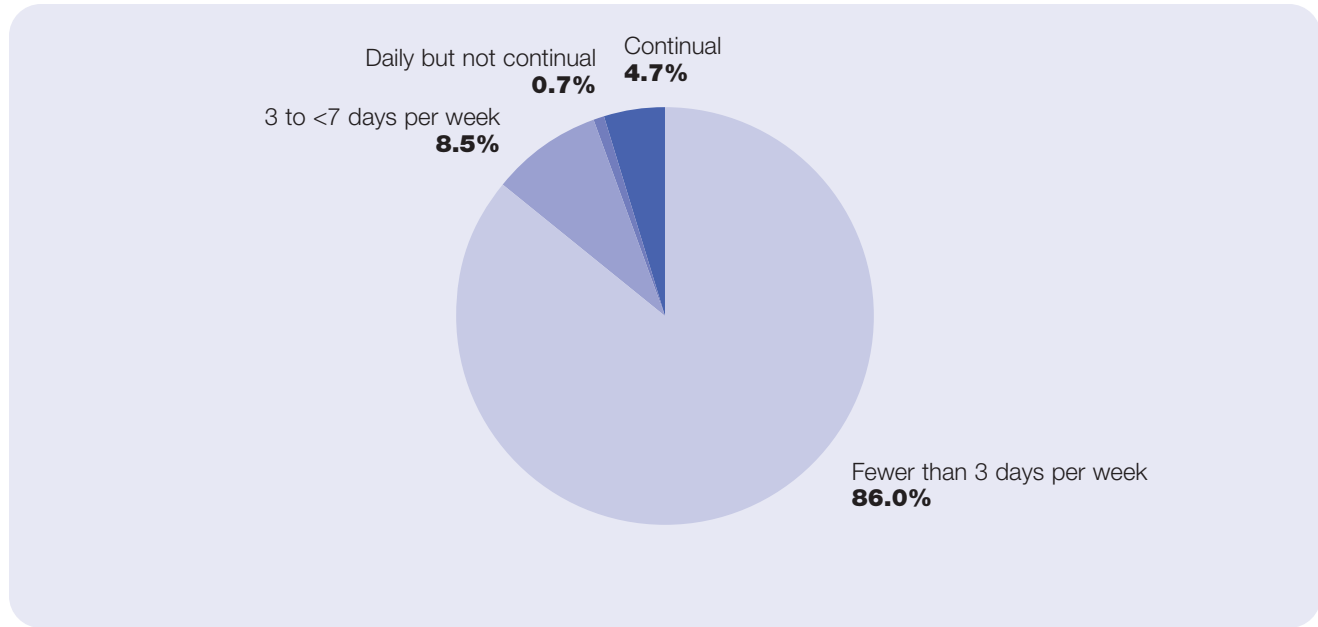
Asthma Symptoms	Frequency	Weighted Percentage (%)	95% CI
Fewer than 3 days per week	1,261	72.5	69.5–75.5
3 to <7 days per week	238	13.2	11.1–15.3
Daily but not continual	57	3.4	2.2–4.6
Continual	148	10.9	8.6–13.2

\*The two questions asked of the respondent were: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, how many days did you have any symptoms of asthma?” and “Do you have symptoms all the time?”

- Among individuals with asthma, 72.5% had symptoms fewer than three days per week; 13.2% had daytime symptoms three to less than seven days per week; 3.4% had daytime symptoms that were daily but not continual; and 10.9% experienced daytime symptoms on a continual basis.

**Figure 31**

Asthma Daytime Symptoms\* in the Past 30 Days in Children (0–17 Years),\*\*  
New York State, July 2002–August 2003



Asthma Symptoms	Frequency	Weighted Percentage (%)	95% CI
Fewer than 3 days per week	515	86.0	82.5–89.6
3 to <7 days per week	55	8.5	5.9–11.2
Daily but not continual	6	0.7	0.1–1.3
Continual	25	4.7	2.2–7.2

\*The two questions asked of the respondent were: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, how many days did your child have any symptoms of asthma?” and “Do you have symptoms all the time?”

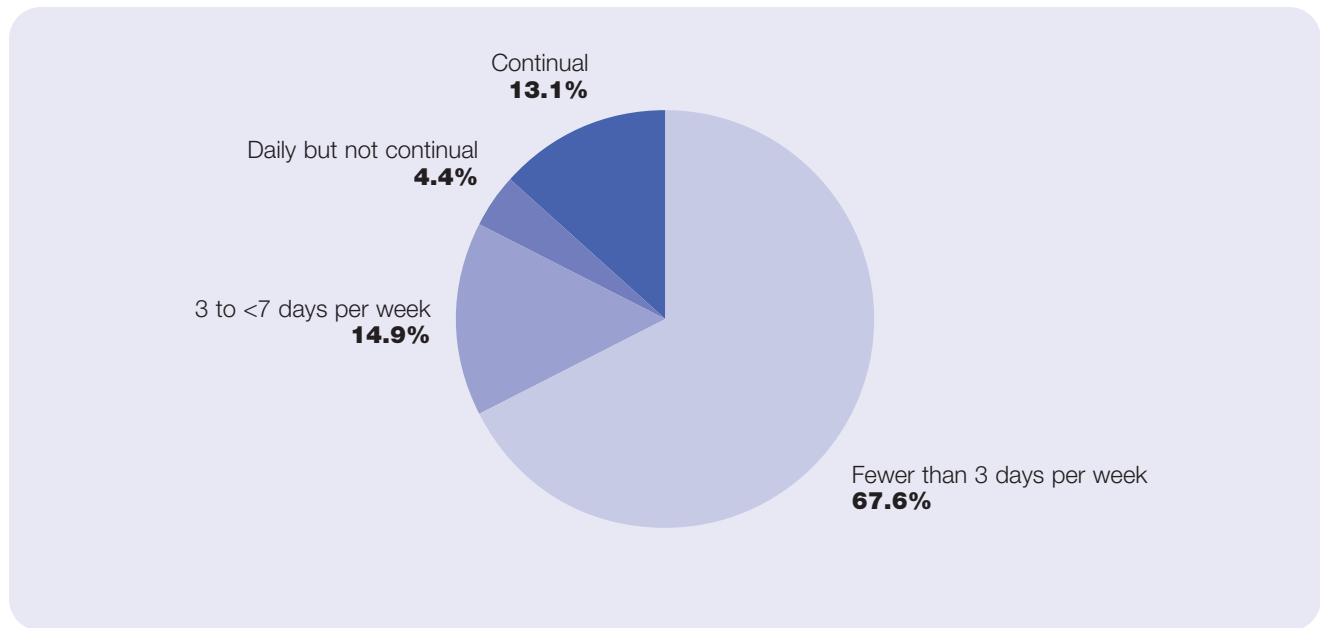
\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 86.0% had symptoms fewer than three days per week; 8.5% had daytime symptoms three to less than seven

days per week; 0.7% had daytime symptoms that were daily but not continual; and 4.7% experienced daytime symptoms on a continual basis.

**Figure 32**

Asthma Daytime Symptoms\* in the Past 30 Days in Adults (18+ Years),  
New York State, July 2002–August 2003



Asthma Symptoms	Frequency**	Weighted Percentage (%)	95% CI
Fewer than 3 days per week	746	67.6	63.8–71.5
3 to <7 days per week	183	14.9	12.2–17.6
Daily but not continual	51	4.4	2.7–6.1
Continual	123	13.1	10.1–16.0

\*The two questions asked of the respondent were: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, how many days did you have any symptoms of asthma?” and “Do you have symptoms all the time?”

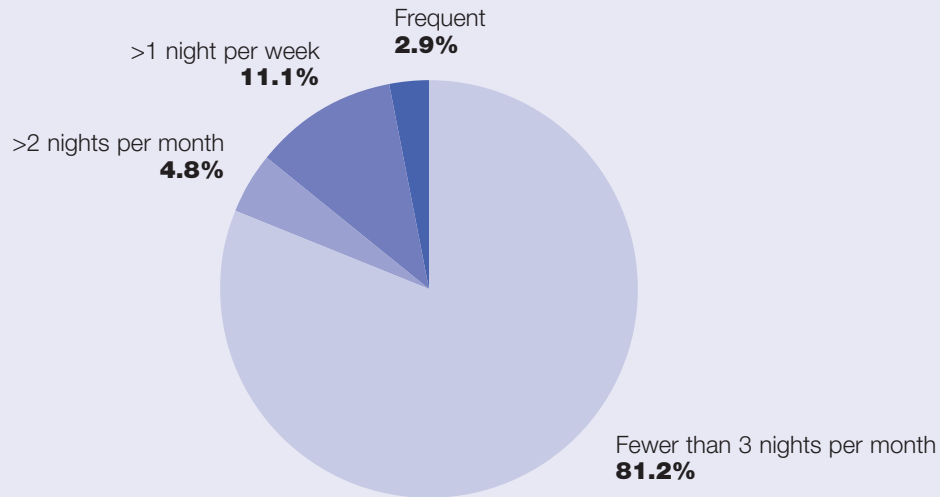
\*\*Frequent is defined as having asthma symptoms every night.

- Among adults with asthma, 67.6% had symptoms fewer than three days per week; 14.9% had daytime symptoms three to less than seven days per week; 4.4% had daytime symptoms that were daily but not continual; and 13.1% experienced daytime symptoms on a continual basis.
- Except for the daytime symptom frequency of less than three days a week, adults had higher proportions of daytime symptoms compared to children in all other frequency categories.

## Asthma Nighttime Symptoms

**Figure 33**

Asthma Nighttime Symptoms\* in the Past 30 Days Among Individuals, New York State, July 2002–August 2003



Asthma Symptoms	Frequency	Weighted Percentage (%)	95% CI
Fewer than 3 nights per month	1,380	81.2	78.4–84.0
>2 nights per month	91	4.8	3.4–6.2
>1 night per week	179	11.1	8.7–13.4
Frequent**	47	2.9	1.8–3.9

\*The question asked of the respondent was: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, on how many days did symptoms of asthma make it difficult for you to stay asleep?”

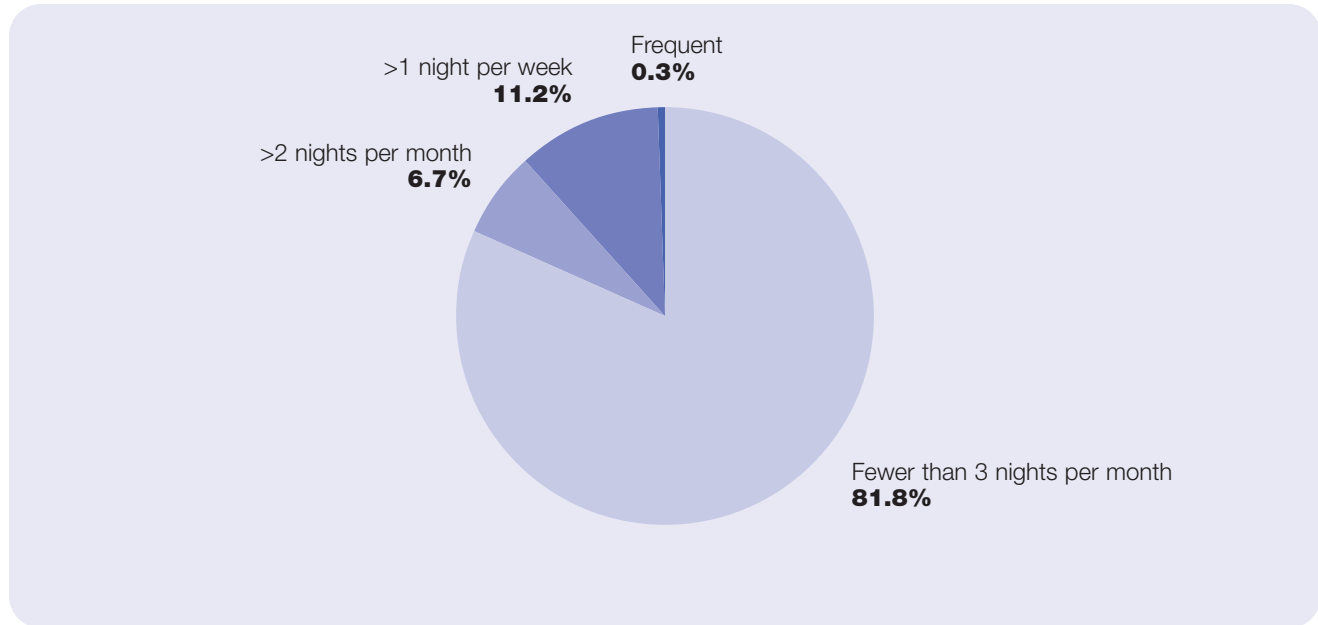
\*\*Frequent is defined as having asthma symptoms every night.

- Among individuals with asthma, 81.2% had nighttime symptoms fewer than three nights per month; 4.8% experienced nighttime symptoms more than two nights per month but less than

two nights per week; 11.1% had nighttime symptoms more than one night per week but not every night; and 2.9% experienced symptoms every night.

**Figure 34**

Asthma Nighttime Symptoms\* in the Past 30 Days in Children (0–17 Years),\*\*  
New York State, July 2002–August 2003



Asthma Symptoms	Frequency***	Weighted Percentage (%)	95% CI
Fewer than 3 nights per month	481	81.8	77.7–85.8
>2 nights per month	44	6.7	4.4–9.0
>1 night per week	58	11.2	7.7–14.8
Frequent***	3	0.3	0.0–0.7

\*The question asked of the respondent was: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, on how many days did symptoms of asthma make it difficult for your child to stay asleep?”

\*\*Parent/Guardian is self-reported proxy for children.

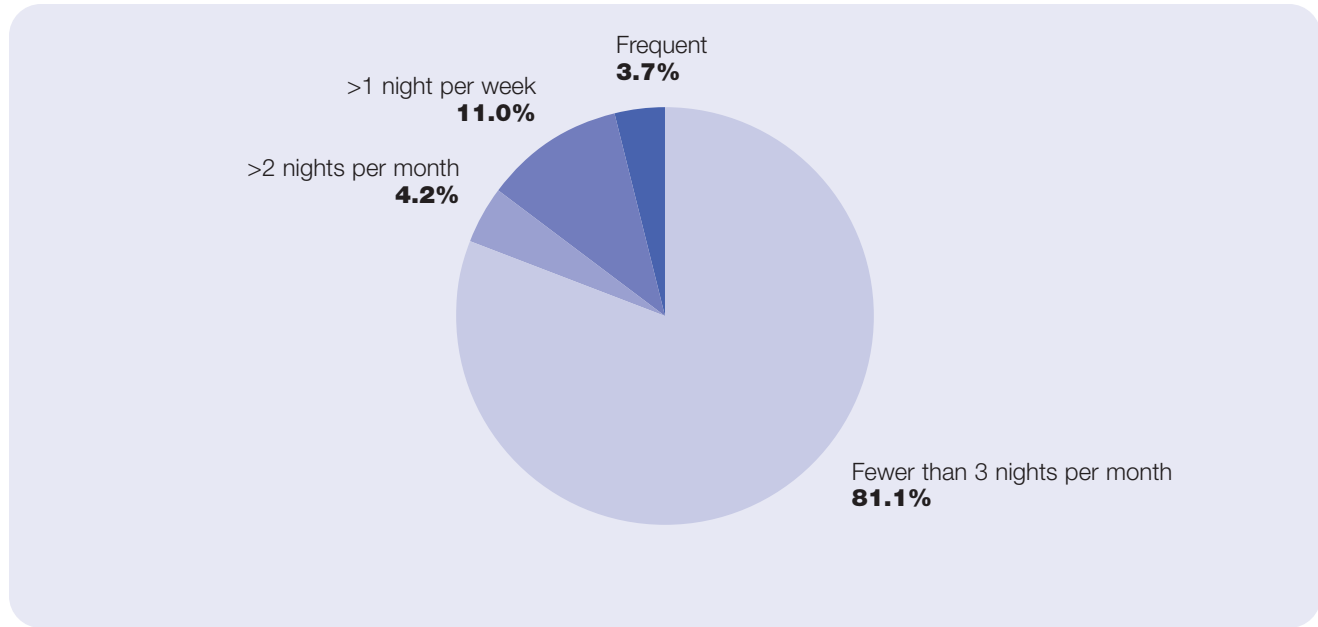
\*\*\*Frequent is defined as having asthma symptoms every night.

- Among children with asthma, 81.8% had nighttime symptoms fewer than three nights per month; 6.7% experienced nighttime symptoms more than two nights per month but less than

two nights per week; 11.2% had nighttime symptoms more than one night per week but not every night; and 0.3% had symptoms every night.

**Figure 35**

Asthma Nighttime Symptoms\* in the Past 30 Days in Adults (18+ Years),  
New York State, July 2002–August 2003



Asthma Symptoms	Frequency	Weighted Percentage (%)	95% CI
Fewer than 3 nights per month	899	81.1	77.7–84.4
>2 nights per month	47	4.2	2.6–5.8
>1 night per week	121	11.0	8.1–13.9
Frequent**	44	3.7	2.3–5.1

\*The question asked of the respondent was: “Symptoms of asthma include coughing, wheezing, shortness of breath, chest tightness or phlegm production when you do not have a cold or respiratory infection. During the past 30 days, on how many days did symptoms of asthma make it difficult for you to stay asleep?”

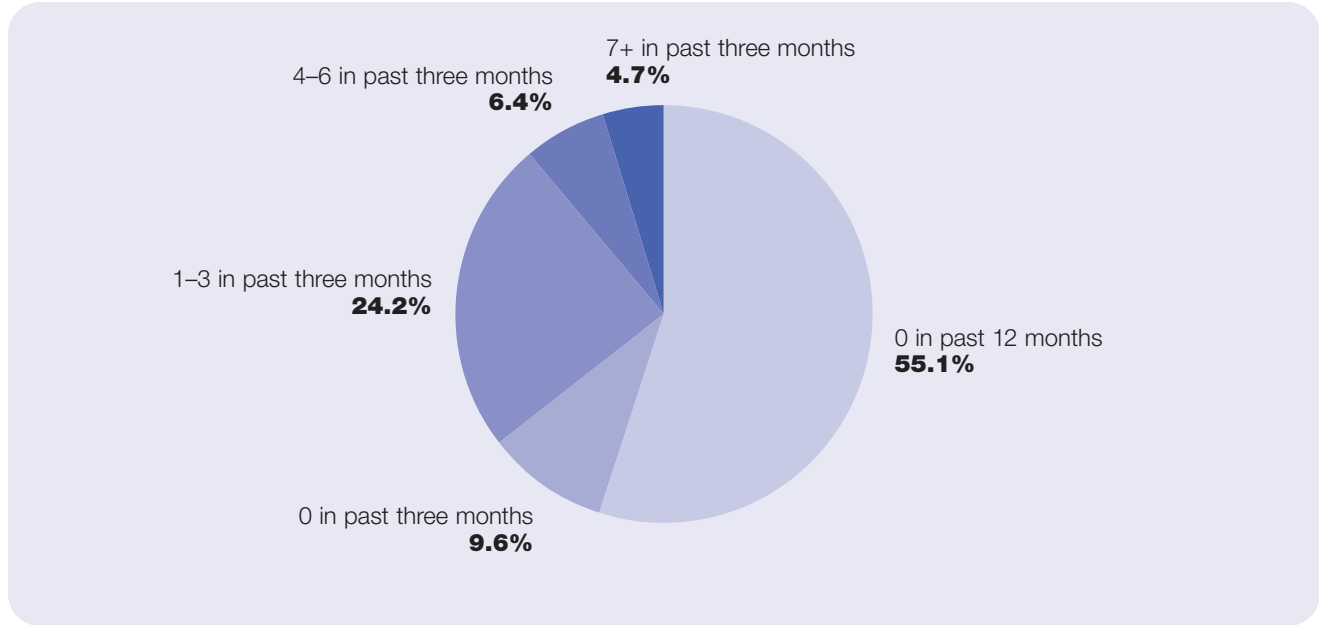
\*\*Frequent is defined as having asthma symptoms every night.

- Among adults with asthma, 81.1% had nighttime symptoms fewer than three nights per month; 4.2% experienced nighttime symptoms more than two nights per month; 11.0% had nighttime symptoms more than one night per week but not every night; and 3.7% had nighttime symptoms frequently.
- Overall, a higher proportion of adults experienced asthma symptoms every night compared to children.

## Asthma Episodes/Attacks

**Figure 36**

Asthma Episodes/Attacks\* in the Past 12 Months Among Individuals, New York State, July 2002–August 2003



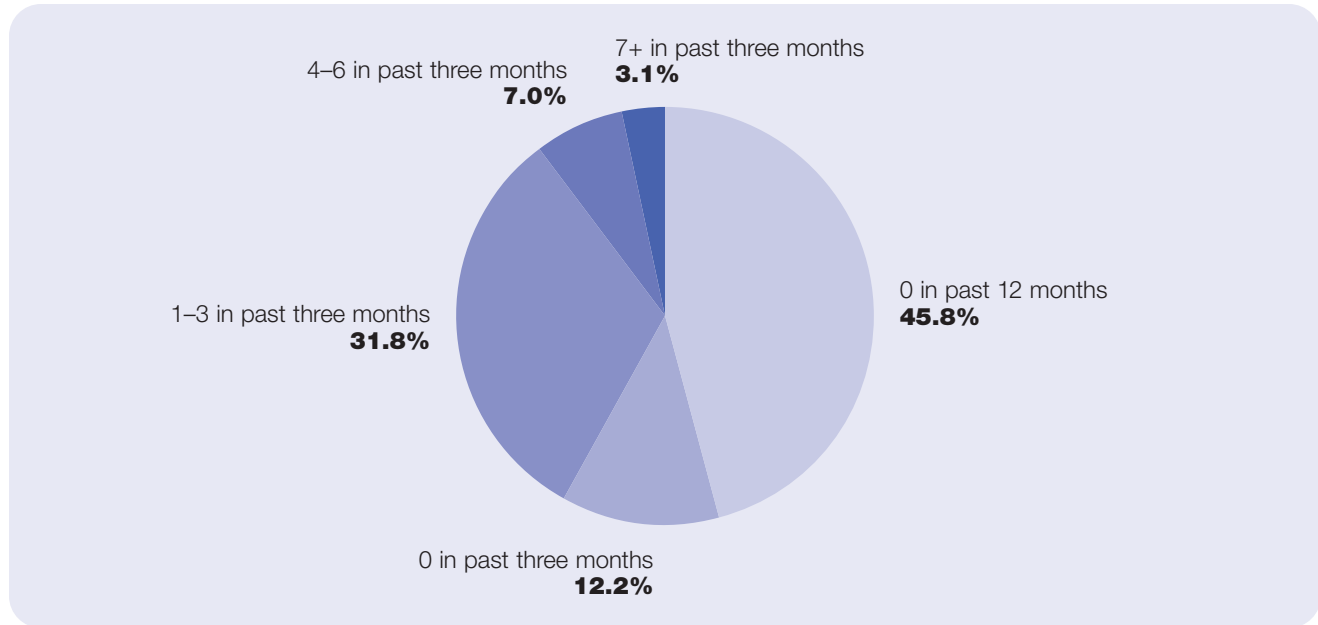
Episodes/Attacks	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	852	55.1	51.6–58.5
0 in past three months	194	9.6	7.8–11.4
1–3 in past three months	440	24.2	21.4–27.0
4–6 in past three months	106	6.4	4.7–8.1
7+ in past three months	88	4.7	3.4–6.0

\*The question asked of the respondent was: “During the past 12 months, have you had an episode of asthma or an asthma attack?” If “yes,” “During the past three months, how many episodes or attacks have you had?”

- Among individuals with asthma, 24.2% had 1–3 asthma episodes/attacks in the past three months; 6.4% had 4–6 asthma episodes/attacks in the past three months; and 4.7% had seven or more asthma episodes/attacks in the past three months.
- Among individuals with asthma, 9.6% did not experience any asthma episodes/attacks in the past three months while 55.1% did not have any asthma episodes/attacks in the past 12 months.

**Figure 37**

Asthma Episodes/Attacks\* in the Past 12 Months in Children (0–17 Years)\*\*  
New York State, July 2002–August 2003



Episodes/Attacks	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	259	45.8	40.7–50.9
0 in past three months	85	12.2	9.2–15.2
1–3 in past three months	196	31.8	27.2–36.5
4–6 in past three months	36	7.0	4.1–9.9
7+ in past three months	20	3.1	1.5–4.7

\*The question asked of the respondent was: “During the past 12 months, has your child had an episode of asthma or an asthma attack?” If “yes,” “During the past three months, how many asthma episodes or attacks have you had?”

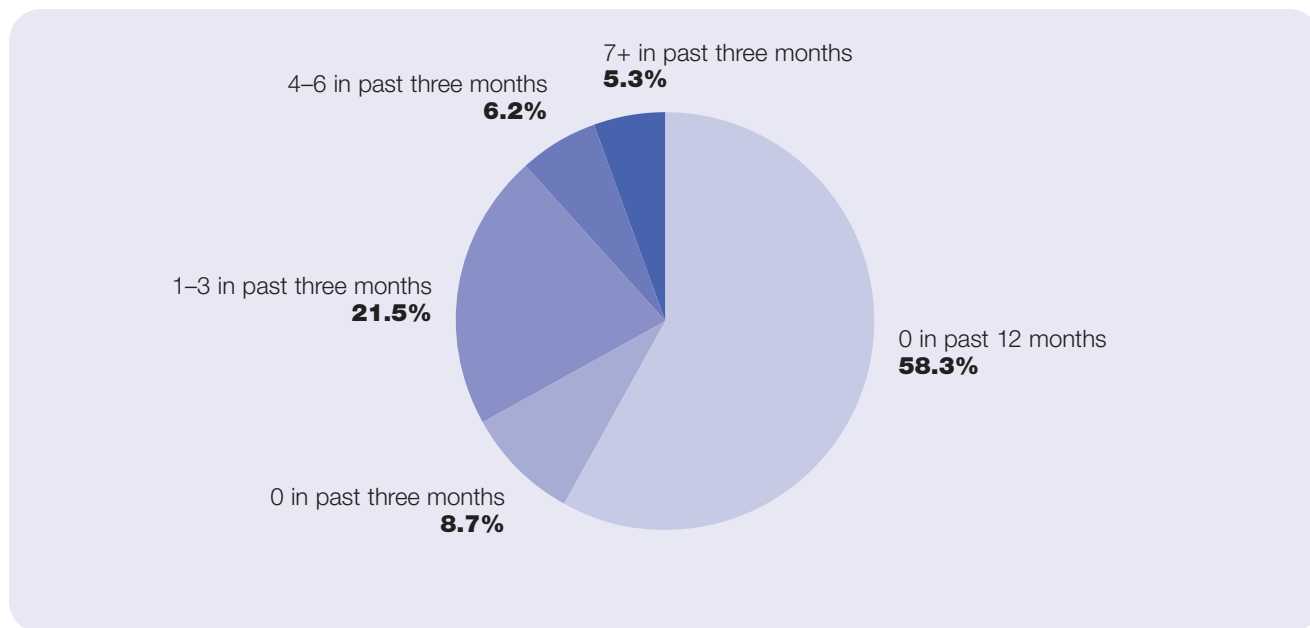
\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 12.2% had episodes/attacks in the past 12 months but did not experience any asthma episodes/attacks in the past three months while 45.8% did not have any asthma episodes/attacks in the past 12 months.
- Among children with asthma, 31.8% had 1–3 asthma episodes/attacks in the past three months; 7.0% had 4–6 asthma episodes/attacks in the past three months; and 3.1% had seven or more asthma episodes/attacks in the past three months.



**Figure 38**

Asthma Episodes/Attacks\* in the Past 12 Months in Adults (18+ Years),  
New York State, July 2002–August 2003



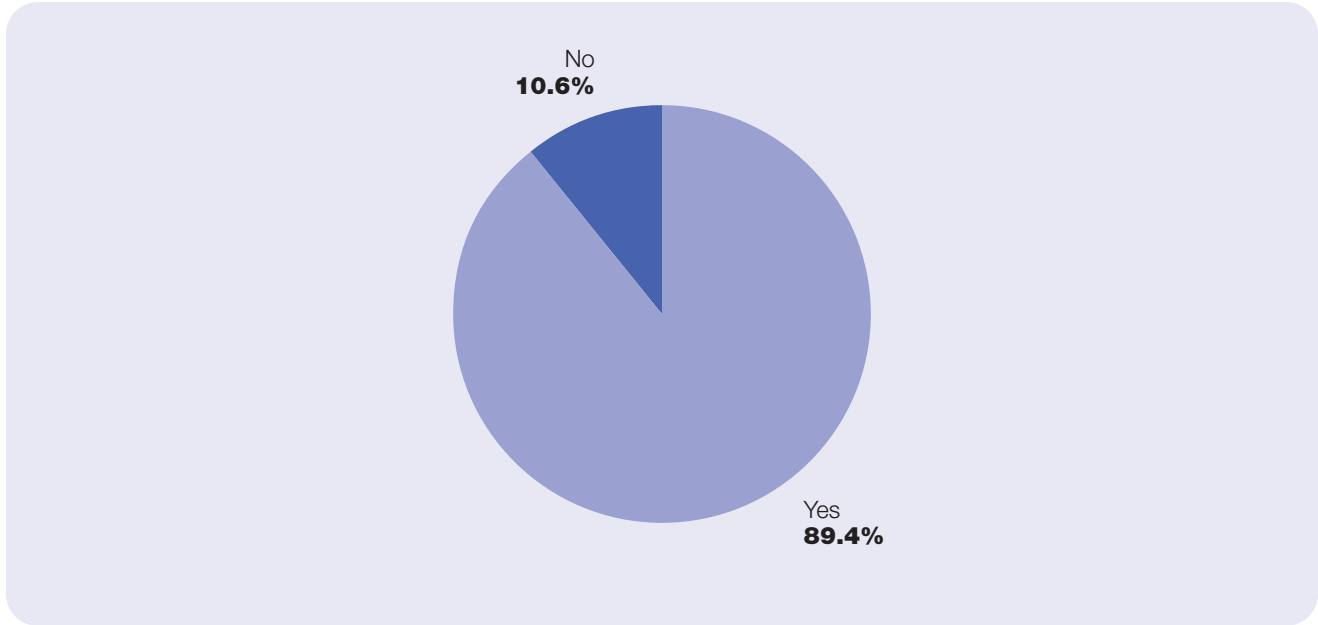
Episodes/Attacks	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	593	58.3	54.2–62.5
0 in past three months	109	8.7	6.6–10.9
1–3 in past three months	244	21.5	18.1–24.8
4–6 in past three months	70	6.2	4.2–8.1
7+ in past three months	68	5.3	3.7–6.9

\*The question asked of the respondent was: “During the past 12 months, have you had an episode of asthma or an asthma attack?” If “yes,” “During the past three months, how many asthma episodes or attacks have you had?”

- Of adults with asthma, 8.7% had episodes/attacks in the past 12 months but did not experience any asthma episodes/attacks in the past three months while 58.3% did not have any asthma episodes/attacks in the past 12 months.
- Among adults with asthma, 21.5% had 1–3 asthma episodes/attacks in the past three months; 6.2% had 4–6 asthma episodes/attacks in the past three months; and 5.3% had seven or more asthma episodes/attacks in the past three months.
- Compared to children, a significantly higher percent of adults experienced no episodes/attacks in the past 12 months.

## Health Care Coverage

**Figure 39**  
Health Care Coverage\* Among Asthma Patients,  
New York State, July 2002–August 2003



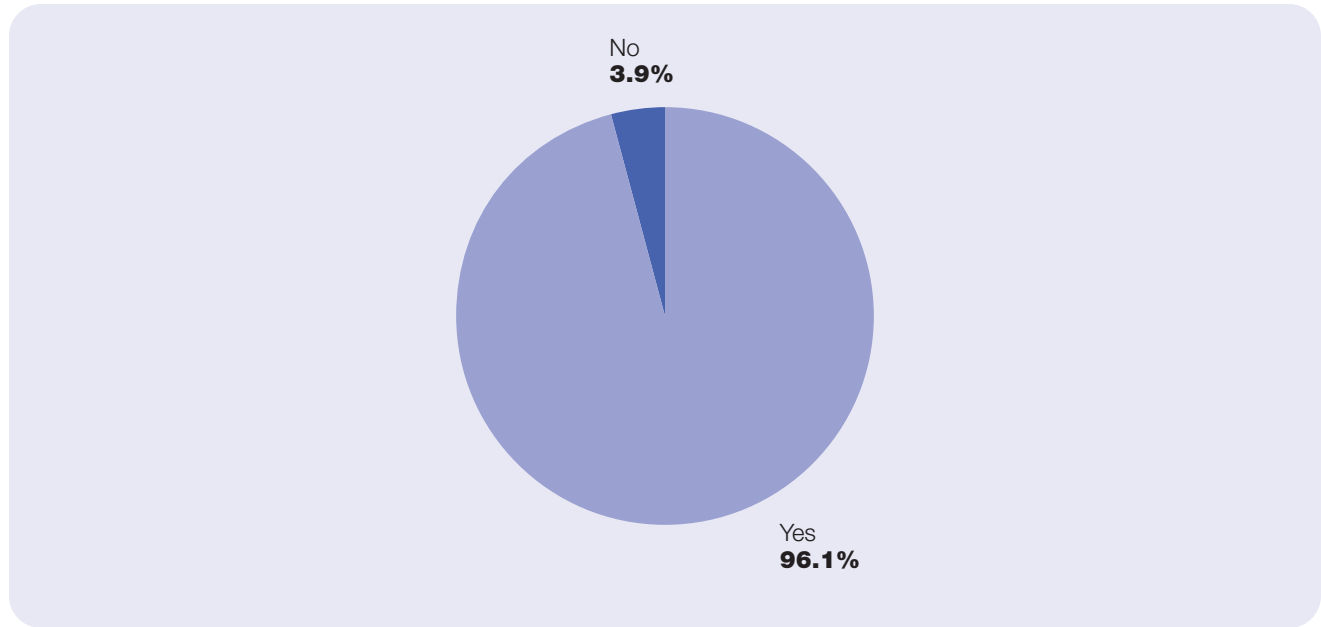
Health Care Coverage	Frequency	Weighted Percentage (%)	95% CI
Yes	1,560	89.4	87.3–91.6
No	168	10.6	8.4–12.7

\*The question asked of the respondent was: “Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?”

- Among asthma patients, 89.4% had some kind of health care coverage.

**Figure 40**

Health Care Coverage\* Among Pediatric Asthma Patients (0–17 Years),\*\*  
New York State, July 2002–August 2003



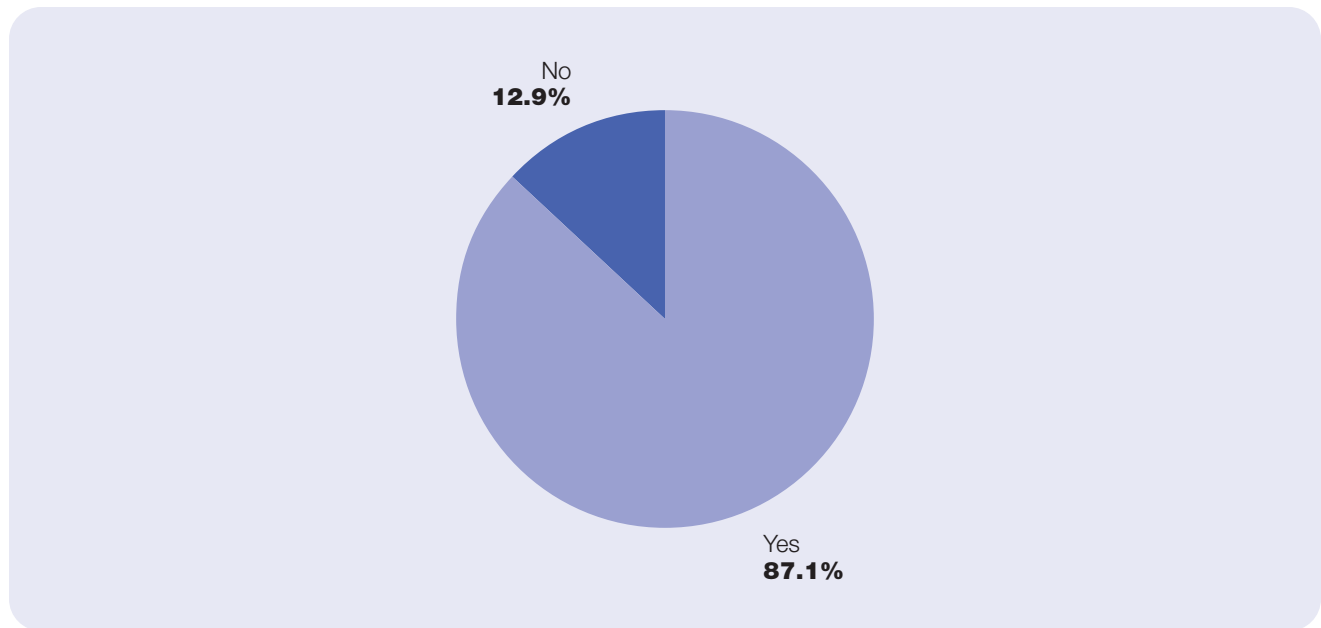
Health Care Coverage	Frequency	Weighted Percentage (%)	95% CI
Yes	573	96.1	94.6–97.7
No	31	3.9	2.3–5.4

\*The question asked of the respondent was: “Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among pediatric asthma patients, 96.1% had some kind of health care coverage.

**Figure 41**  
 Health Care Coverage\* Among Adult Asthma Patients (18+ Years),  
 New York State, July 2002–August 2003



Health Care Coverage	Frequency	Weighted Percentage (%)	95% CI
Yes	987	87.1	84.4–89.9
No	137	12.9	10.1–15.6

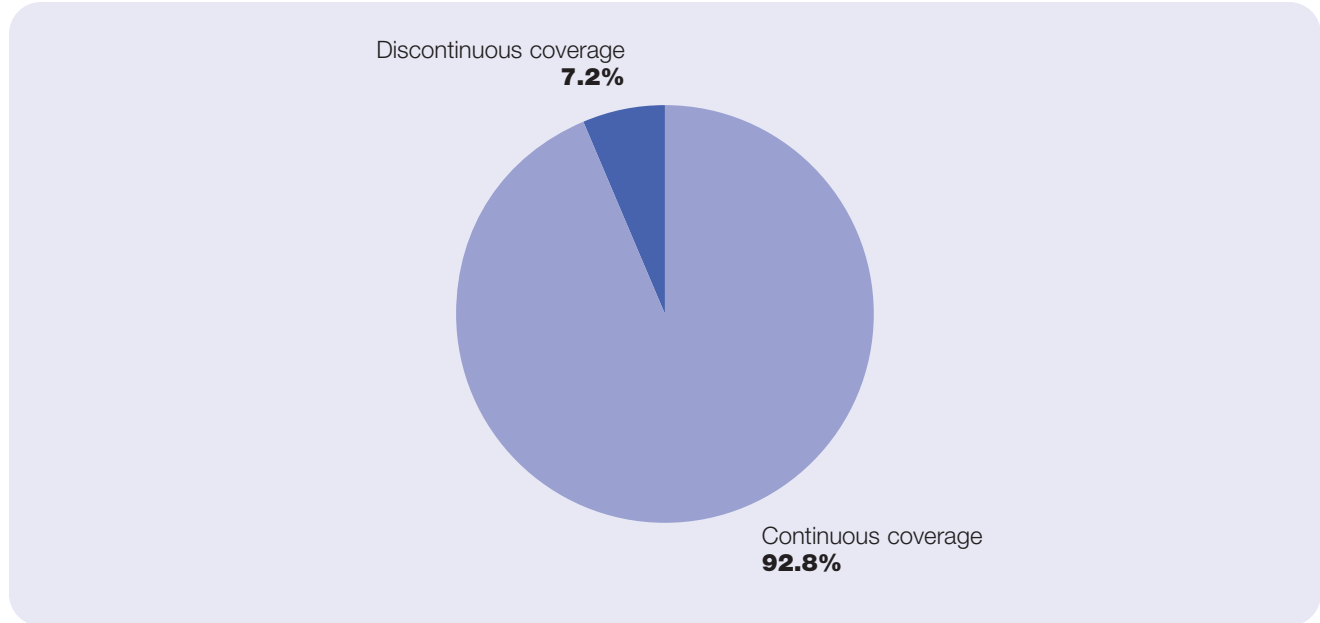
\*The question asked of the respondent was: “Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?”

- Among adult asthma patients, 87.1% had some kind of health care coverage.
- The proportion of adults reporting health care coverage in NAS-NYS was similar to the reported proportion in the 2003 BRFSS. BRFSS data indicated that 83.4% (95% CI 83.0–85.6) of adults had some kind of health care coverage.
- The data in Figure 40 and Figure 41 reveal that a significantly larger proportion of children with asthma are covered by health care (96.1%) compared to adults with asthma (87.1%).

## Continuous Health Insurance or Coverage

**Figure 42**

Continuity of Health Insurance or Coverage\* Among Asthma Patients in the Past 12 Months, New York State, July 2002–August 2003



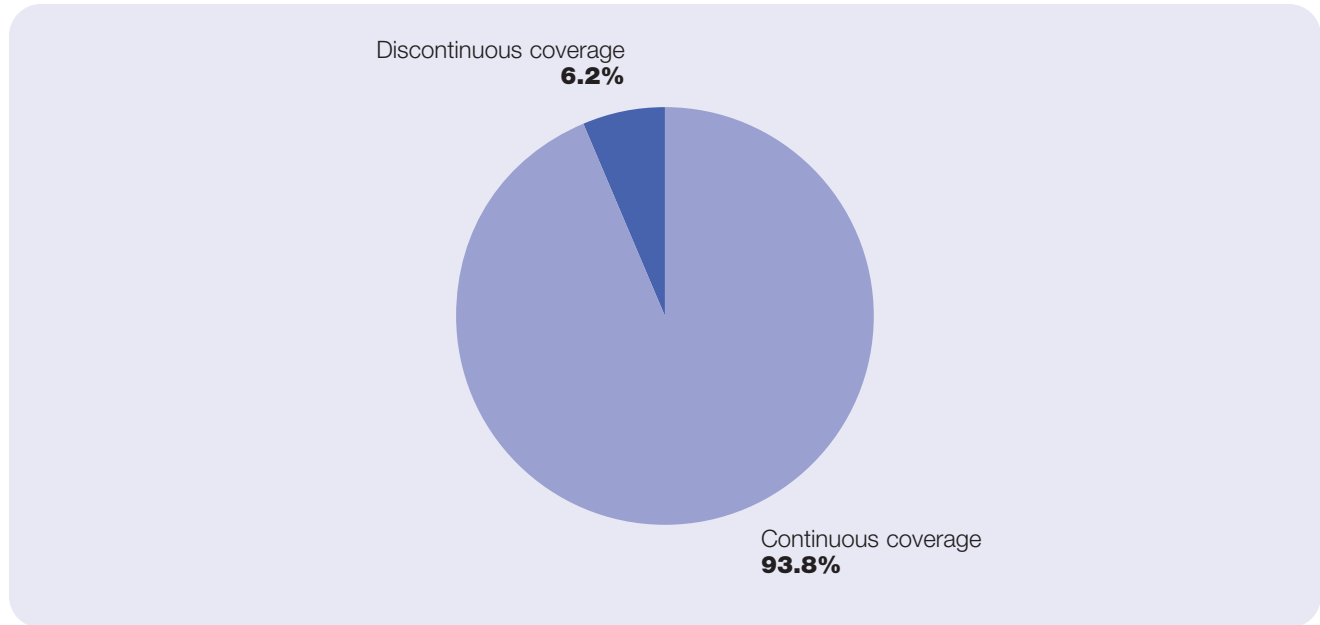
	Frequency	Weighted Percentage (%)	95% CI
Continuous coverage	1,441	92.8	90.8–94.8
Discontinuous coverage	118	7.2	5.2–9.2

\*The question asked of the respondent was: “During the past 12 months was there any time that you did not have any health insurance or coverage?”

- Among asthma patients who indicated that they had health insurance or coverage, 7.2% reported that they did not have continuous health insurance coverage during the past 12 months.

**Figure 43**

Continuity of Health Insurance or Coverage\* Among Pediatric Asthma Patients (0–17 Years)\*\* in the Past 12 Months, New York State, July 2002–August 2003



	Frequency	Weighted Percentage (%)	95% CI
Continuous coverage	532	93.8	91.7–96.0
Discontinuous coverage	41	6.2	4.0–8.3

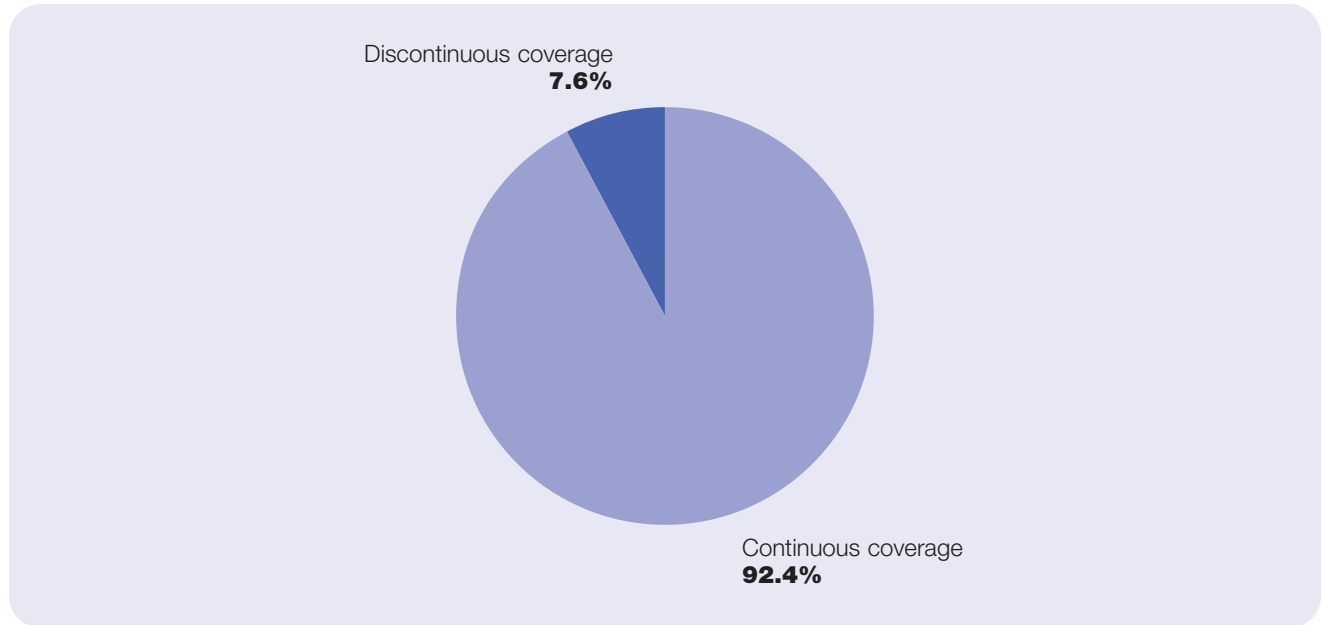
\*The question asked of the respondent was: “During the past 12 months was there any time that you did not have any health insurance or coverage?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among pediatric asthma patients who reported having health insurance or coverage, 6.2% were not covered for all of the previous 12 months.

**Figure 44**

Continuity of Health Insurance or Coverage\* Among Adult Asthma Patients (18+ Years) in the Past 12 Months, New York State, July 2002–August 2003



	Frequency	Weighted Percentage (%)	95% CI
Continuous coverage	909	92.4	89.8–95.0
Discontinuous coverage	77	7.6	5.0–10.2

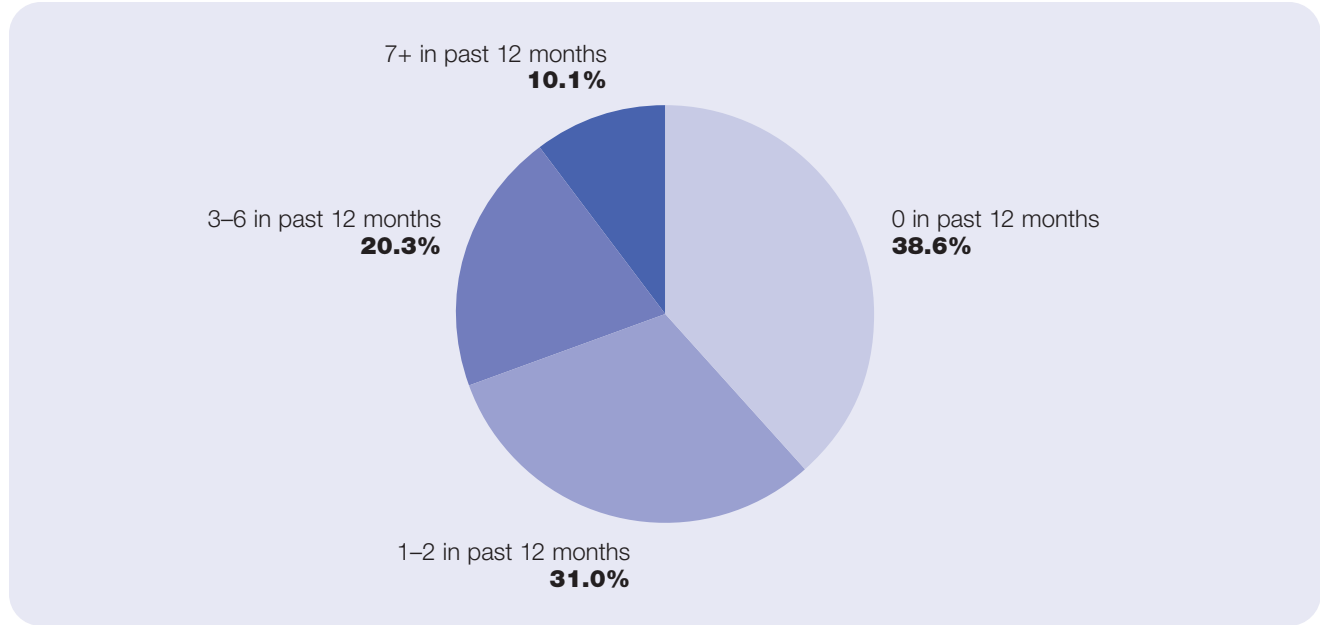
\*The question asked of the respondent was: “During the past 12 months was there any time that you did not have any health insurance or coverage?”

- Among adult asthma patients who reported having health insurance or coverage, 7.6% were not covered for all of the previous 12 months.

## Asthma Routine Visits

**Figure 45**

Asthma Routine Visits\* in the Past 12 Months Among Individuals, New York State, July 2002–August 2003



Asthma Routine Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	603	38.6	35.1–42.0
1-2 in past 12 months	572	31.0	28.0–34.1
3-6 in past 12 months	367	20.3	17.7–22.8
7+ in past 12 months	155	10.1	7.4–12.8

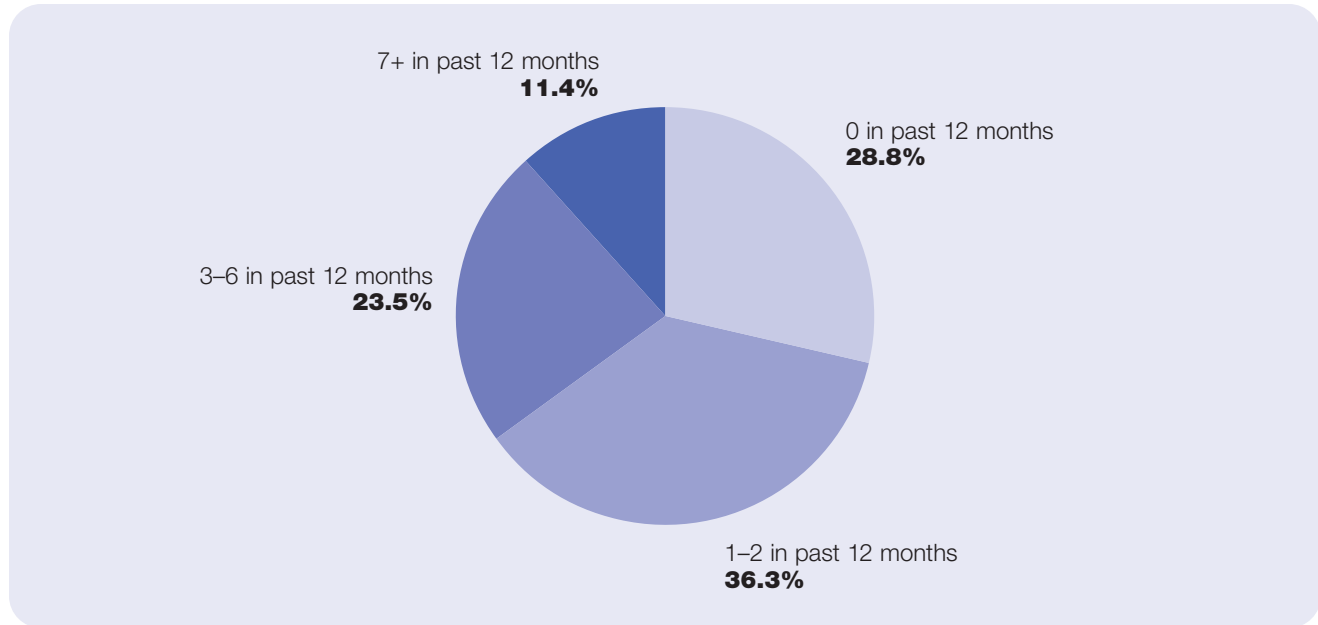
\*The question asked of the respondent was: “During the past 12 months, how many times did you see a doctor or other health professional for a routine checkup for your asthma?”

- Among individuals with asthma, 38.6% had no asthma routine visits in the past 12 months; 31.0% had 1–2 asthma routine visits in the past 12 months; 20.3% had 3–6 asthma routine visits in the past 12 months; and 10.1% had seven or more asthma routine visits in the past 12 months.



**Figure 46**

Asthma Routine Visits\* in the Past 12 Months in Children (0–17 Years)\*\*  
New York State, July 2002–August 2003



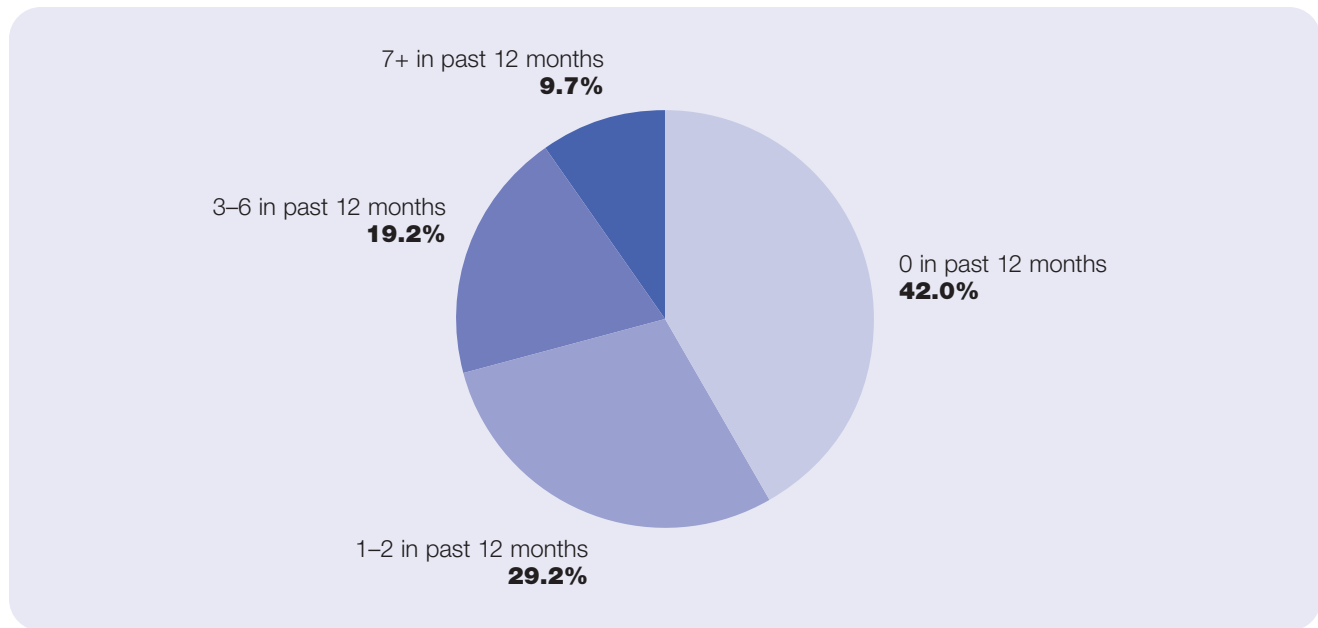
Asthma Routine Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	164	28.8	24.2–33.4
1–2 in past 12 months	229	36.3	31.5–41.2
3–6 in past 12 months	145	23.5	19.2–27.8
7+ in past 12 months	60	11.4	8.1–14.7

\*The question asked of the respondent was: "During the past 12 months, how many times did your child see a doctor or other health professional for a routine checkup for his/her asthma?"

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 28.8% had no asthma routine visits in the past 12 months; 36.3% had 1–2 asthma routine visits in the past 12 months; 23.5% had 3–6 asthma routine visits in the past 12 months; and 11.4% had seven or more asthma routine visits in the past 12 months.

**Figure 47**  
 Asthma Routine Visits\* in the Past 12 Months in Adults (18+ Years),  
 New York State, July 2002–August 2003



Asthma Routine Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	439	42.0	37.7–46.3
1–2 in past 12 months	343	29.2	25.5–32.9
3–6 in past 12 months	222	19.2	16.1–22.3
7+ in past 12 months	95	9.7	6.2–13.1

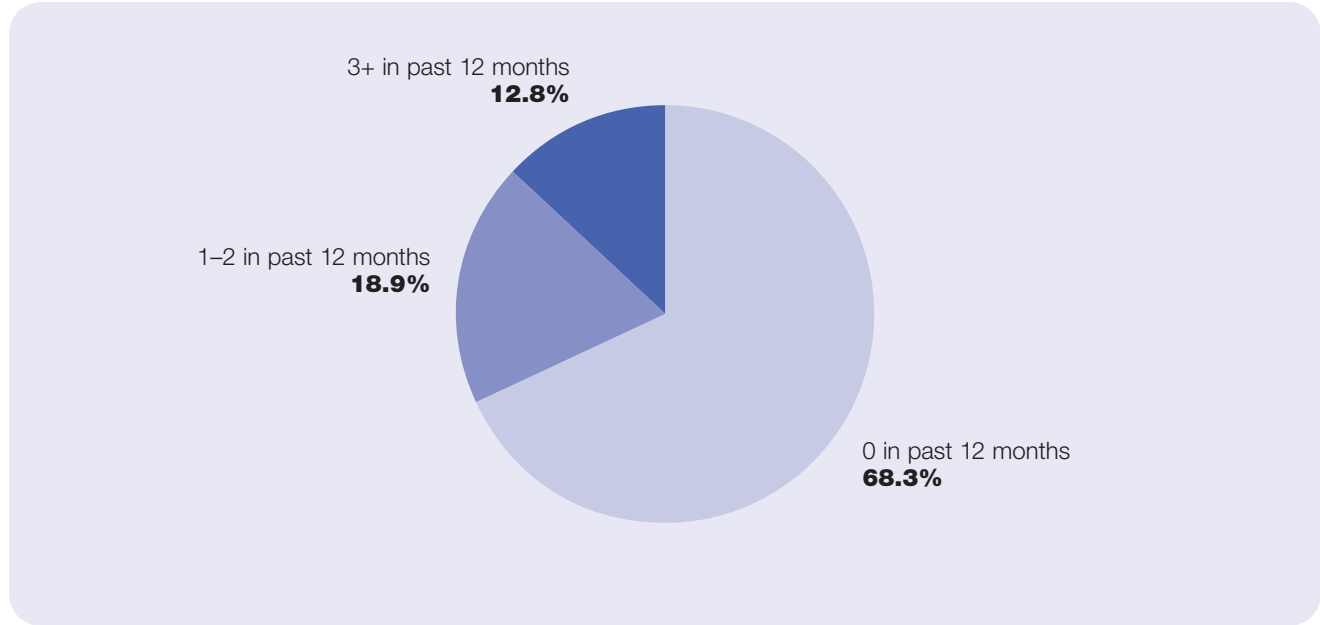
\*The question asked of the respondent was: “During the past 12 months, how many times did you see a doctor or other health professional for a routine checkup for your asthma?”

- Among adults with asthma, 29.2% had 1–2 asthma routine visits in the past 12 months; 19.2% had 3–6 asthma routine visits in the past 12 months; and 9.7% had seven or more asthma routine visits in the past 12 months.
- The proportion of adults with asthma who did not visit a doctor or other health professional for a routine checkup in the past 12 months was significantly higher than for children (42.0% vs. 28.8%, respectively).

## Asthma Urgent Visits

**Figure 48**

Asthma Urgent Visits\* in the Past 12 Months Among Individuals, New York State, July 2002–August 2003



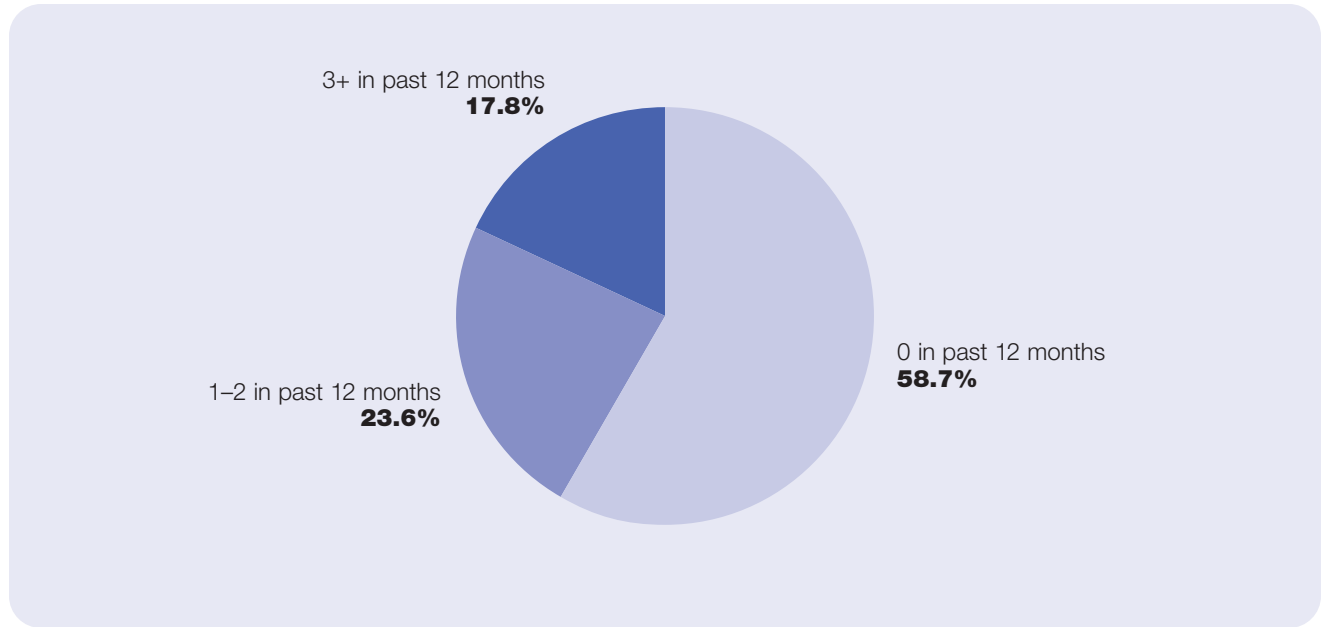
Asthma Urgent Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	1,167	68.3	65.1–71.5
1–2 in past 12 months	328	18.9	16.3–21.5
3+ in past 12 months	207	12.8	10.3–15.3

\*The question asked of the respondent was: “During the past 12 months, how many times did you see a doctor or other health professional for urgent treatment of worsening asthma symptoms or an asthma episode or attack?”

- Among individuals with asthma, 68.3% did not require an urgent visit in the past 12 months; 18.9% had 1–2 asthma urgent visits in the past 12 months; and 12.8% had three or more asthma urgent visits in the past 12 months.

**Figure 49**

Asthma Urgent Visits\* in the Past 12 Months in Children (0–17 Years),\*\*  
New York State, July 2002–August 2003



Asthma Urgent Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	359	58.7	53.6–63.7
1–2 in past 12 months	142	23.6	19.3–27.9
3+ in past 12 months	95	17.8	13.6–21.9

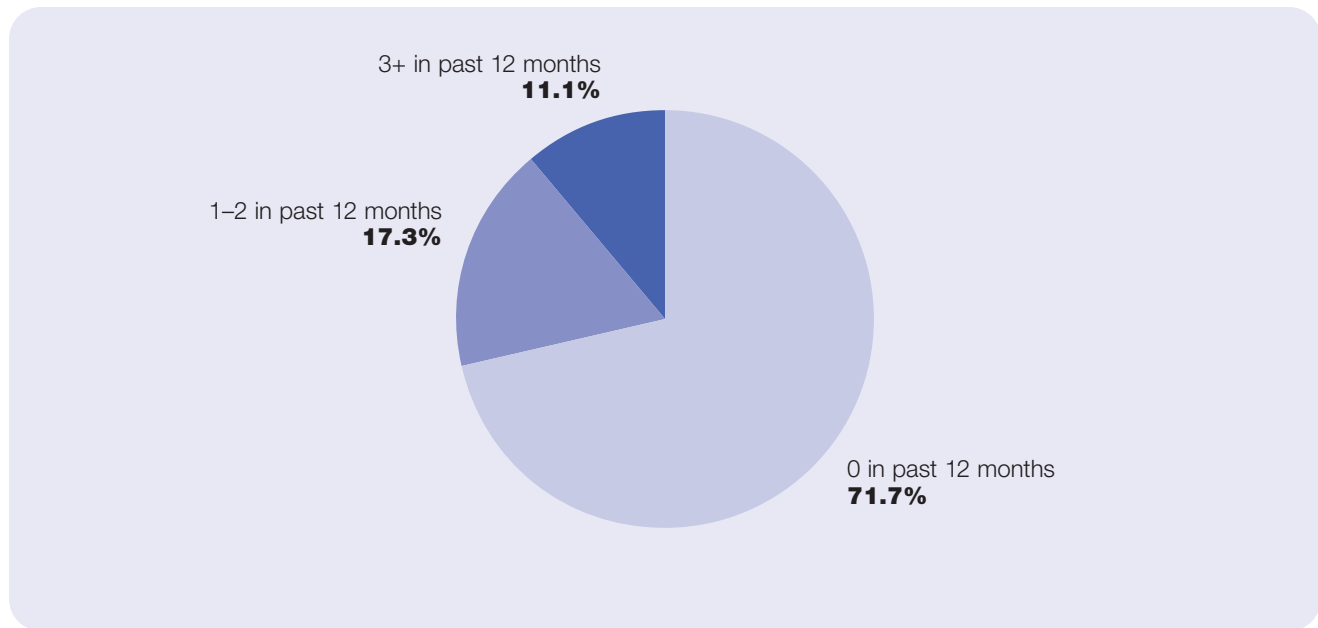
\*The question asked of the respondent was: “During the past 12 months, how many times did your child see a doctor or other health professional for urgent treatment of worsening asthma symptoms or an asthma episode or attack?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 58.7% did not require an urgent visit in the past 12 months; 23.6% had 1–2 asthma urgent visits in the past

12 months; and 17.8% had three or more asthma urgent visits in the past 12 months.

**Figure 50**  
 Asthma Urgent Visits\* in the Past 12 Months in Adults (18+ Years),  
 New York State, July 2002–August 2003



Asthma Urgent Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	808	71.7	67.8–75.6
1–2 in past 12 months	186	17.3	14.1–20.4
3+ in past 12 months	112	11.1	8.1–14.0

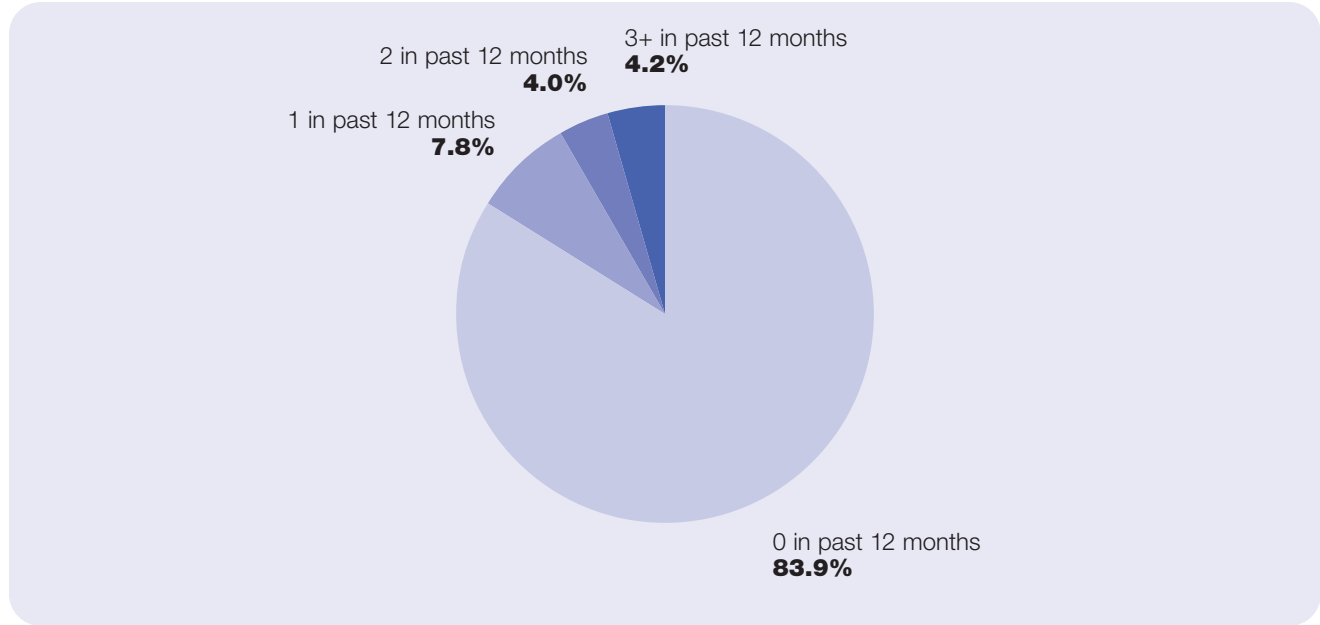
\*The question asked of the respondent was: “During the past 12 months, how many times did you see a doctor or other health professional for urgent treatment of worsening asthma symptoms or an asthma episode or attack?”

- Among adults with asthma, 71.7% did not require an urgent visit in the past 12 months; 17.3% had 1–2 asthma urgent visits in the past 12 months; and 11.1% had three or more asthma urgent visits in the past 12 months.
- The data in Figure 49 and Figure 50 reveal that children were more likely to have an urgent visit for worsening asthma symptoms or an asthma episode or attack in the past 12 months when compared to adults.

## Asthma Emergency Room Visits

**Figure 51**

Asthma Emergency Room Visits\* in the Past 12 Months,  
New York State, July 2002–August 2003



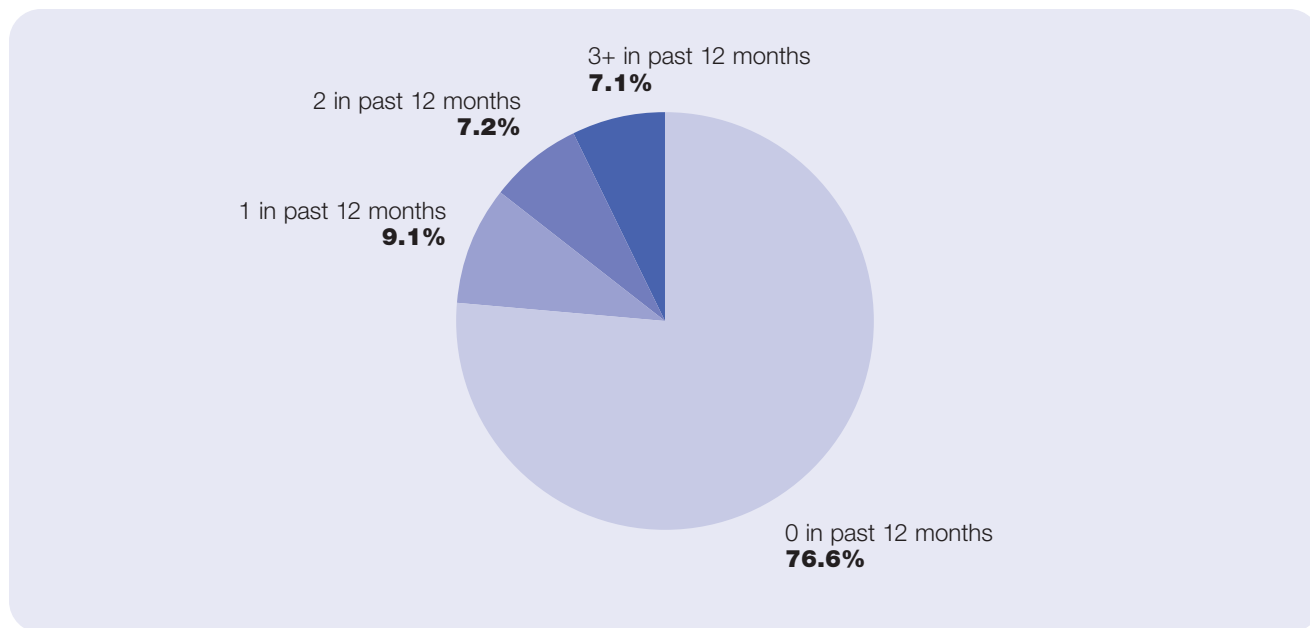
Asthma ER Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	1,434	83.9	81.4–86.5
1 in past 12 months	130	7.8	5.7–10.0
2 in past 12 months	68	4.0	2.7–5.4
3+ in past 12 months	94	4.2	3.2–5.2

\*The question asked of the respondent was: “During the past 12 months, have you had to visit an emergency room or urgent care center because of your asthma?” and “How many times did you visit an emergency room or urgent care center because of your asthma?”

- Among individuals with asthma, 83.9% of asthma patients did not visit the emergency room in the past 12 months due to asthma; 7.8% had one asthma emergency room visit in the past 12 months; 4.0% had two asthma emergency room visits in the past 12 months; and 4.2% had three or more asthma emergency room visits in past 12 months.

**Figure 52**

Asthma Emergency Room Visits\* in the Past 12 Months in Children (0–17 Years),\*\*  
New York State, July 2002–August 2003



Asthma ER Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	461	76.6	72.2–80.9
1 in past 12 months	56	9.1	6.1–12.1
2 in past 12 months	39	7.2	4.3–10.1
3+ in past 12 months	46	7.1	4.7–9.6

\*The question asked of the respondent was: “During the past 12 months, has your child had to visit an emergency room or urgent care center because of his/her asthma?” and “How many times did your child visit an emergency room or urgent care center because of his/her asthma?”

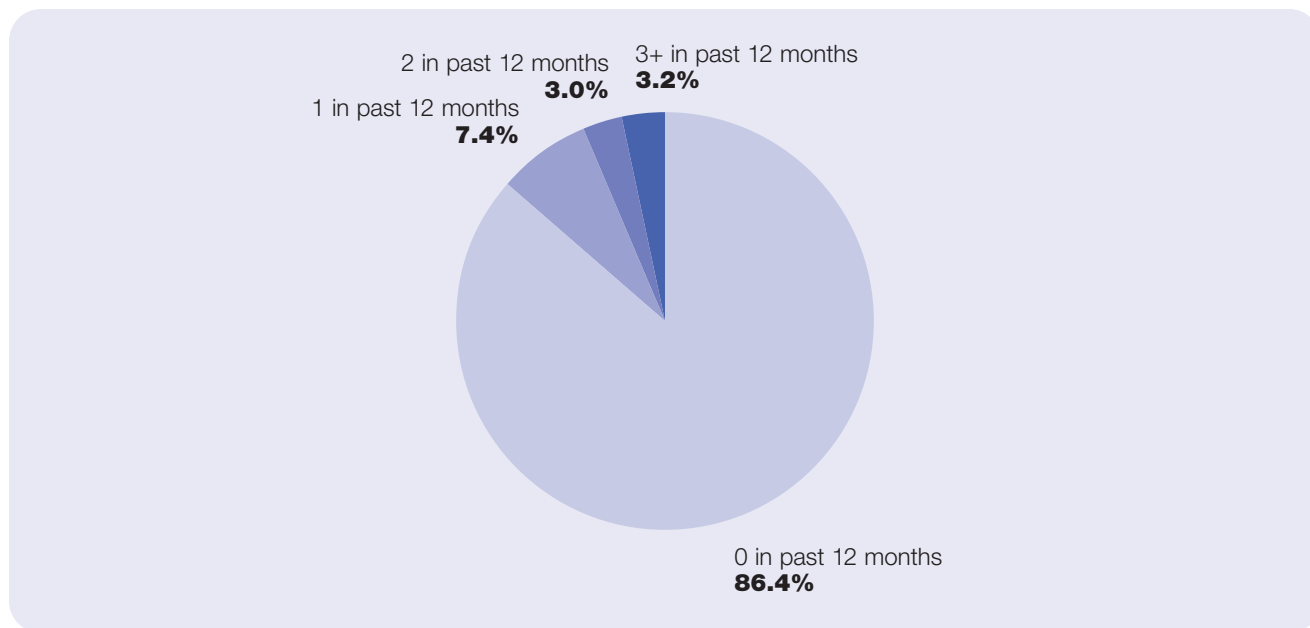
\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 76.6% did not visit the emergency room in the past 12 months due to asthma; 9.1% had one asthma emergency room visit in the past 12 months; 7.2% had two asthma

emergency room visits in the past 12 months; and 7.1% had three or more asthma emergency room visits in the past 12 months.

**Figure 53**

Asthma Emergency Room Visits\* in the Past 12 Months in Adults (18+ Years), New York State, July 2002–August 2003



Asthma ER Visits	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	973	86.4	83.3–89.5
1 in past 12 months	74	7.4	4.7–10.1
2 in past 12 months	29	3.0	1.5–4.4
3+ in past 12 months	48	3.2	2.1–4.3

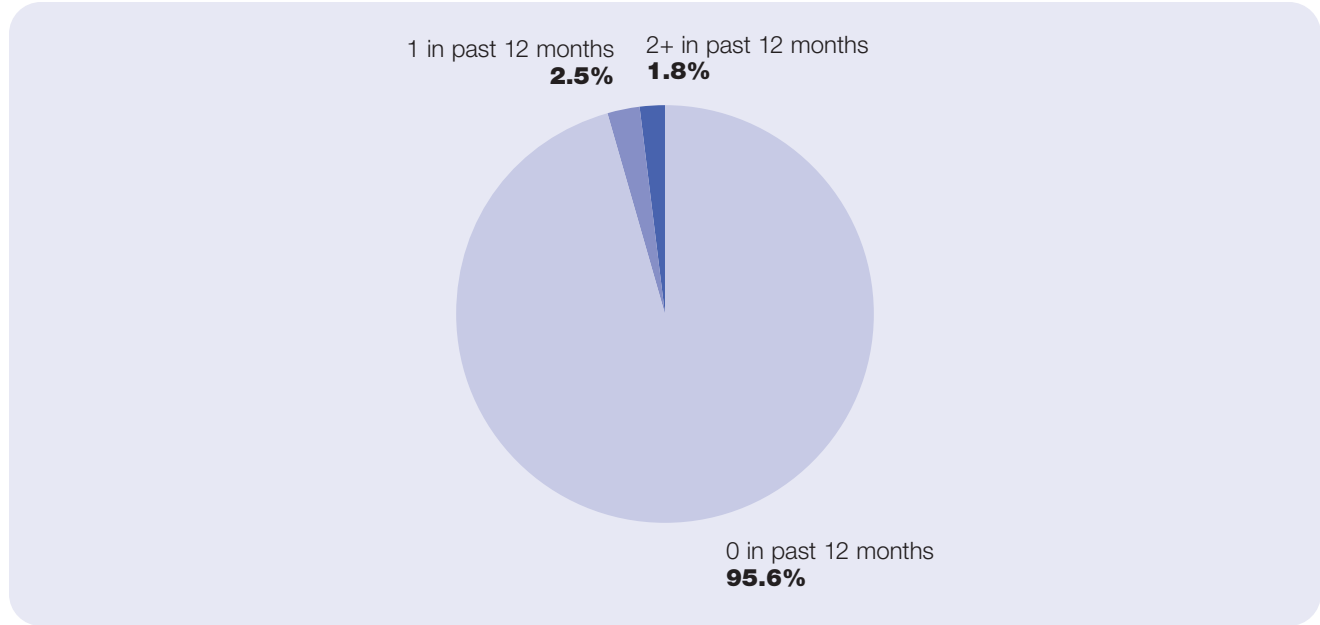
\*The question asked of the respondent was: “During the past 12 months, have you had to visit an emergency room or urgent care center because of your asthma?” and “How many times did you visit an emergency room or urgent care center because of your asthma?”

- Among adults with asthma, 86.4% did not visit the emergency room in the past 12 months due to asthma; 7.4% had one asthma emergency room visit in the past 12 months; 3.0% had two asthma emergency room visits in the past 12 months; and 3.2% had three or more asthma emergency room visits in the past 12 months.
- The data in Figure 52 and Figure 53 reveal that children were more likely to have at least one asthma visit to an emergency room in the past 12 months than adults.



## Asthma Hospitalizations

**Figure 54**  
Asthma Hospitalizations\* in the Past 12 Months,  
New York State, July 2002–August 2003



Asthma Hospitalizations	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	1,649	95.6	94.5–96.8
1 in past 12 months	52	2.5	1.6–3.4
2+ in past 12 months	35	1.8	1.1–2.6

\*The question asked of the respondent was: “During the past 12 months, that is, since one year ago today, have you had to stay overnight in a hospital because of your asthma? Do not include an overnight stay in the emergency room.”

- Among individuals with asthma, 95.6% were not hospitalized for asthma in the past 12 months; 2.5% had one asthma hospitalization in the past 12 months; and 1.8% had two or more asthma hospitalizations in the past 12 months.

**Figure 55**

Asthma Hospitalizations\* in the Past 12 Months in Children (0–17 Years)\*\*  
New York State, July 2002–August 2003



Asthma Hospitalizations	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	570	93.4	90.6–96.2
1 in past 12 months	25	4.5	2.1–6.9
2+ in past 12 months	11	2.1	0.5–3.7

\*The question asked of the respondent was: “During the past 12 months, that is, since one year ago today, has your child had to stay overnight in a hospital because of his/her asthma? Do not include an overnight stay in the emergency room.”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 93.4% were not hospitalized for asthma in the past 12 months; 4.5% had one asthma hospitalization in the past 12 months; and 2.1% had two or more asthma hospitalizations in the past 12 months.

**Figure 56**

Asthma Hospitalizations\* in the Past 12 Months in Adults (18+ Years),  
New York State, July 2002–August 2003



Asthma Hospitalizations	Frequency	Weighted Percentage (%)	95% CI
0 in past 12 months	1,079	96.4	95.3–97.6
1 in past 12 months	27	1.8	1.0–2.6
2+ in past 12 months	24	1.8	0.9–2.6

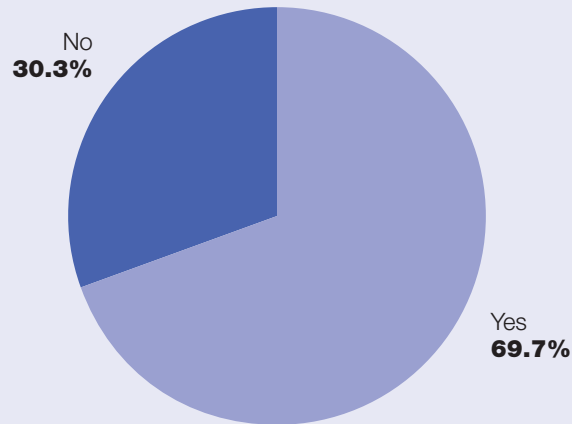
\*The question asked of the respondent was: “During the past 12 months, that is, since one year ago today, have you had to stay overnight in a hospital because of your asthma? Do not include an overnight stay in the emergency room.”

- Among adults with asthma, 96.4% were not hospitalized for asthma in the past 12 months; 1.8% had one asthma hospitalization in the past 12 months; and 1.8% had two or more asthma hospitalizations in the past 12 months.
- The data in Figure 55 and Figure 56 reveal that there were no significant differences in the distribution of asthma hospitalizations between children and adults.

## Asthma Patients Who Were Taught to Recognize Early Symptoms of an Asthma Episode

**Figure 57**

Asthma Patients Who Were Taught to Recognize Early Symptoms of an Asthma Episode,\*  
New York State, July 2002–August 2003



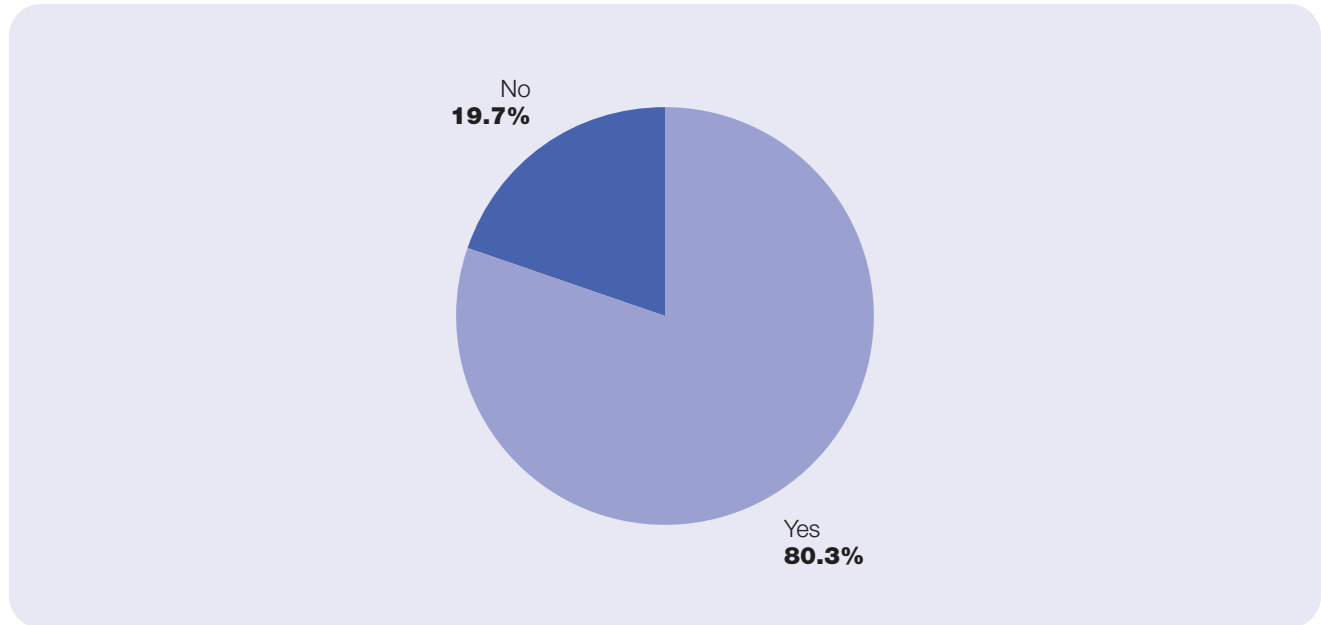
Taught to Recognize Early Symptoms	Frequency	Weighted Percentage (%)	95% CI
Yes	1,229	69.7	66.3–73.2
No	475	30.3	26.8–33.7

\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you how to recognize early signs or symptoms of an asthma episode?”

- Among individuals with asthma, 69.7% were taught by a doctor or other healthcare professional to recognize early symptoms of an asthma episode.

**Figure 58**

Children (0–17 Years)\*\* With Asthma Who Were Taught to Recognize Early Symptoms of an Asthma Episode,\*  
New York State, July 2002–August 2003



Taught to Recognize Early Symptoms	Frequency	Weighted Percentage (%)	95% CI
Yes	481	80.3	76.4–84.3
No	116	19.7	15.7–23.6

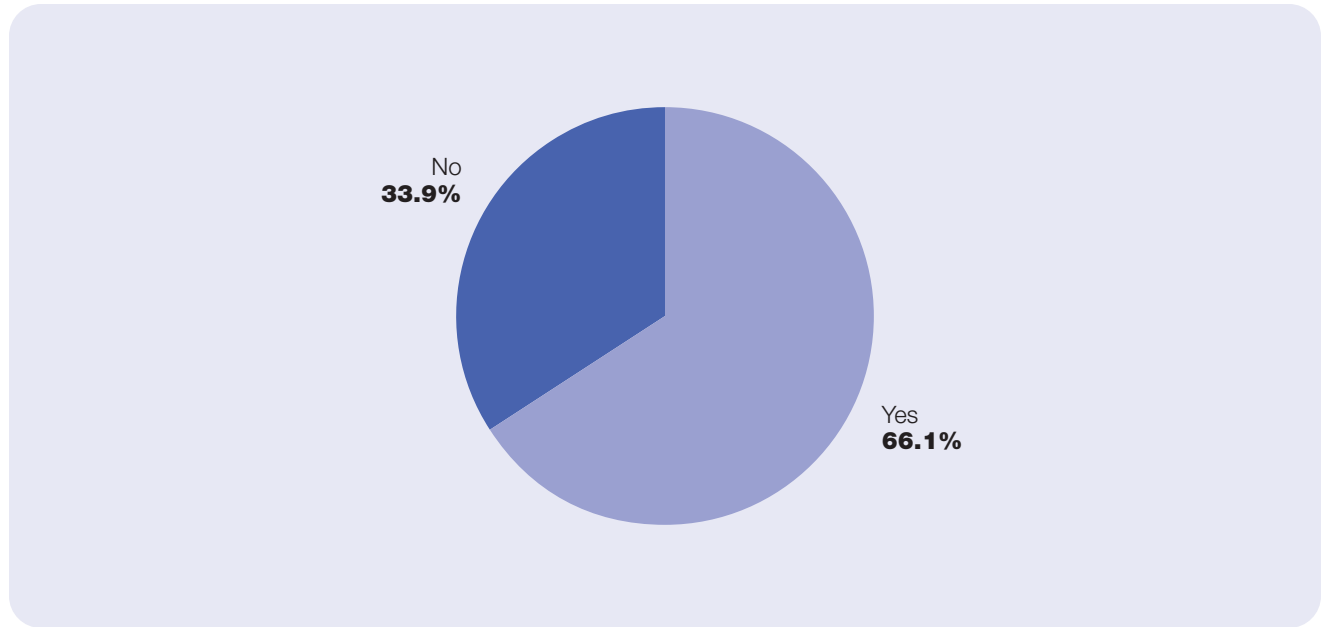
\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you or your child how to recognize early signs or symptoms of an asthma episode?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 80.3% were taught by a doctor or other healthcare professional to recognize early symptoms of an asthma episode.

**Figure 59**

Adults (18+ Years) With Asthma Who Were Taught to Recognize Early Symptoms of an Asthma Episode,\*  
New York State, July 2002–August 2003



Taught to Recognize Early Symptoms	Frequency	Weighted Percentage (%)	95% CI
Yes	748	66.1	61.7–70.4
No	359	33.9	29.6–38.3

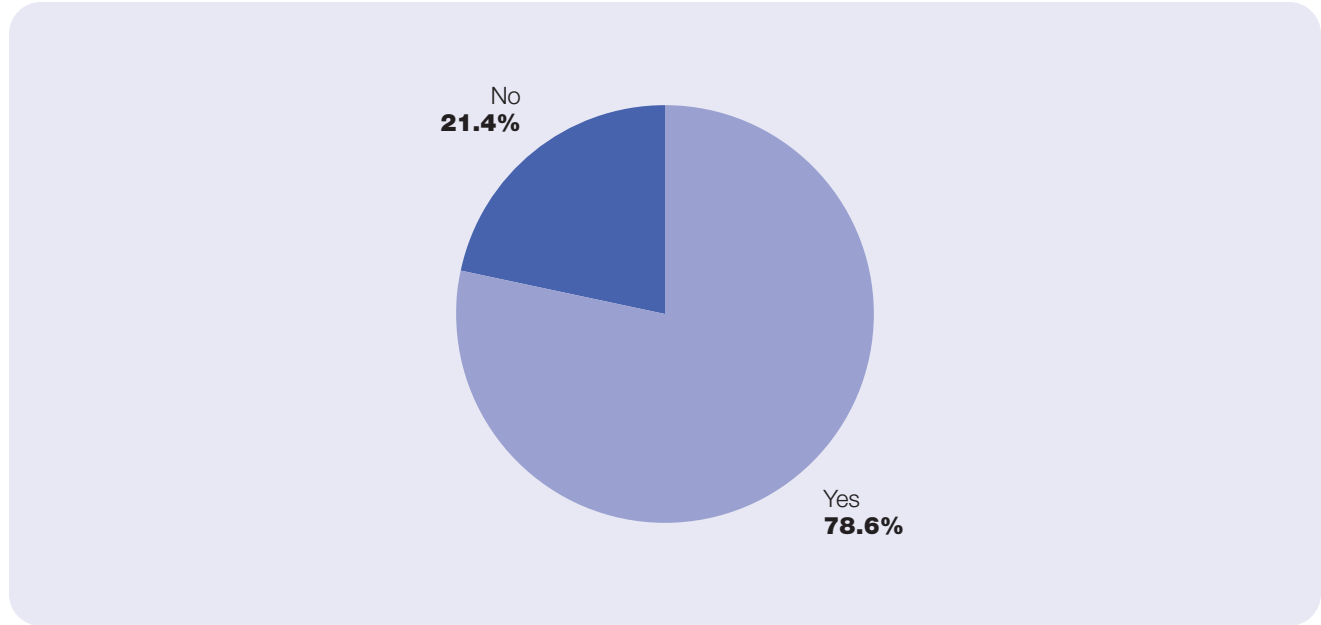
\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you how to recognize early signs or symptoms of an asthma episode?”

- Among adults with asthma, 66.1% were taught by a doctor or other healthcare professional to recognize early symptoms of an asthma episode.
- The data in Figure 58 and Figure 59 reveal that children were more likely to be taught to recognize early symptoms of an asthma episode than adults.

## Asthma Patients Who Were Taught What to Do During an Asthma Attack

**Figure 60**

Asthma Patients Who Were Taught What to Do During an Asthma Attack,\*  
New York State, July 2002–August 2003



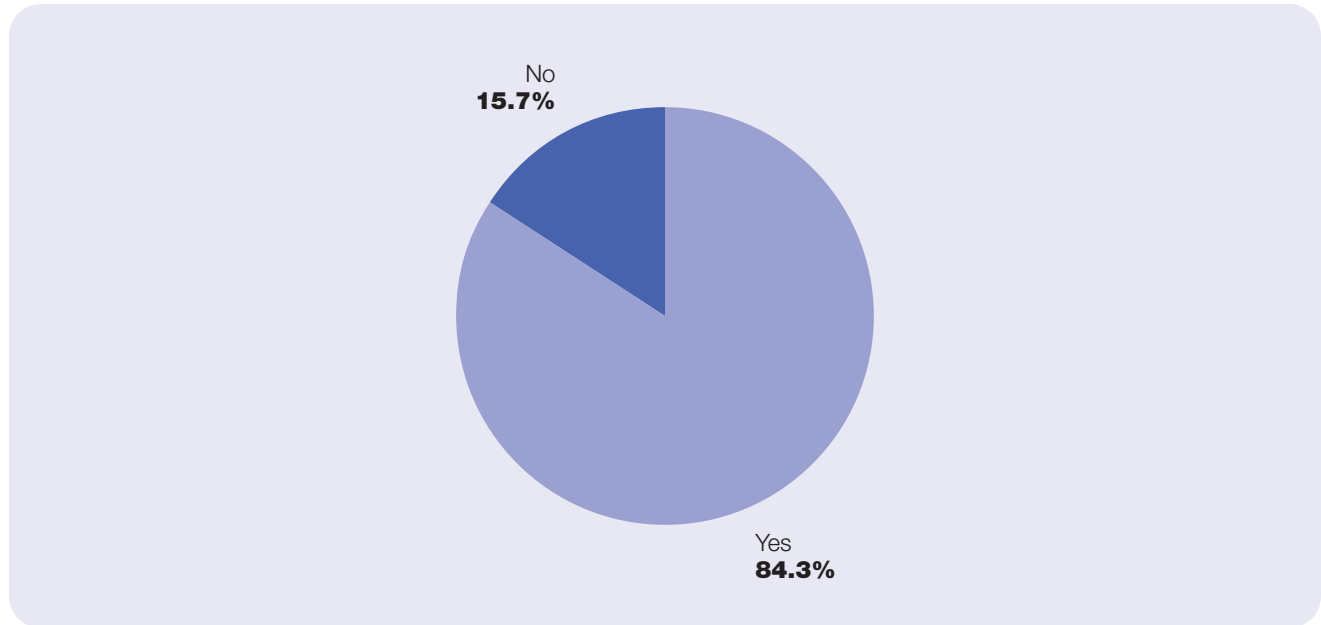
Taught How to Handle Attack	Frequency	Weighted Percentage (%)	95% CI
Yes	1,367	78.6	75.7–81.5
No	342	21.4	18.5–24.3

\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you what to do during an asthma episode or attack?”

- Among individuals with asthma, 78.6% were taught by a doctor or other healthcare professional what to do during an asthma attack.

**Figure 61**

Children (0–17 Years)\*\* With Asthma Who Were Taught What to Do During an Asthma Attack,\*  
New York State, July 2002–August 2003



Taught How to Handle Attack	Frequency	Weighted Percentage (%)	95% CI
Yes	504	84.3	80.7–88.0
No	94	15.7	12.0–19.3

\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you or your child what to do during an asthma episode or attack?”

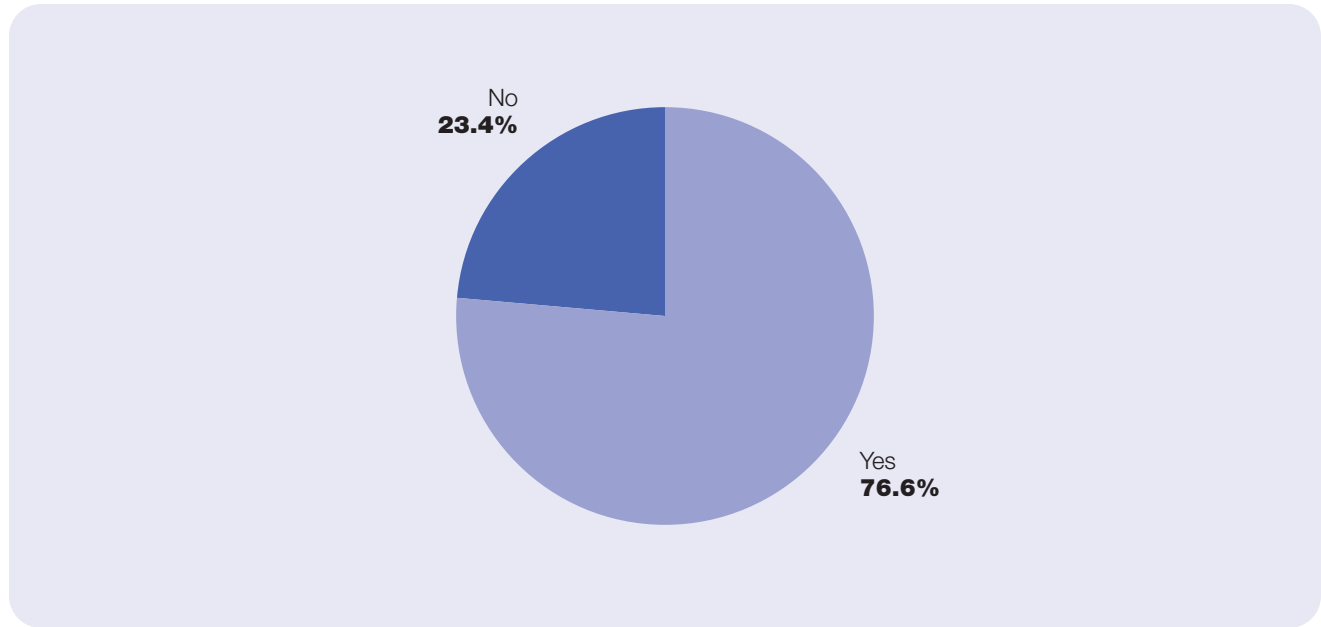
\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 84.3% were taught by a doctor or other healthcare professional what to do during an asthma attack.



**Figure 62**

Adults (18+ Years) With Asthma Who Were Taught What to Do During an Asthma Attack,\*  
New York State, July 2002–August 2003



Taught How to Handle Attack	Frequency	Weighted Percentage (%)	95% CI
Yes	863	76.6	73.0–80.2
No	248	23.4	19.8–27.0

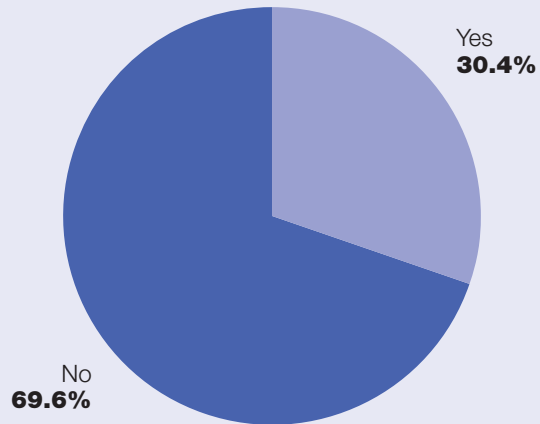
\*The question asked of the respondent was: “Has a doctor or other health professional ever taught you what to do during an asthma episode or attack?”

- Among adults with asthma, 76.6% were taught by a doctor or other healthcare professional what to do during an asthma attack.
- The data in Figure 61 and Figure 62 reveal that children were more likely to be taught what to do during an asthma attack than adults.

## Asthma Patients Who Were Given an Asthma Management Plan

**Figure 63**

Asthma Patients Who Were Given an Asthma Management Plan,\*  
New York State, July 2002–August 2003



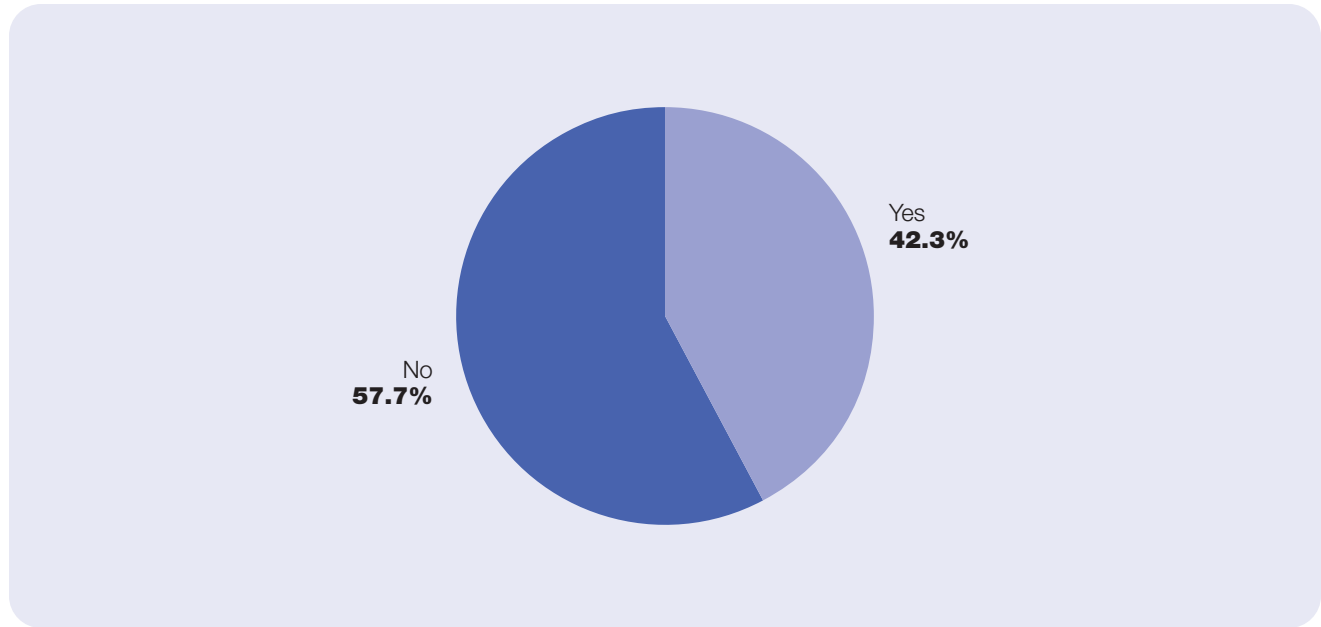
Given Asthma Management Plan	Frequency	Weighted Percentage (%)	95% CI
Yes	558	30.4	27.3–33.5
No	1,138	69.6	66.5–72.7

\*The question asked of the respondent was: “An asthma management plan is a printed form that tells when to change the amount or type of medicine, when to call the doctor for advice, and when to go to the emergency room. Has a doctor or other health professional ever given you an asthma management plan?”

- Among individuals with asthma, 30.4% were given an asthma management plan.

**Figure 64**

Children (0–17 Years)\*\* With Asthma Who Were Given an Asthma Management Plan,\*  
New York State, July 2002–August 2003



Given Asthma Management Plan	Frequency	Weighted Percentage (%)	95% CI
Yes	252	42.3	37.3–47.4
No	341	57.7	52.6–62.7

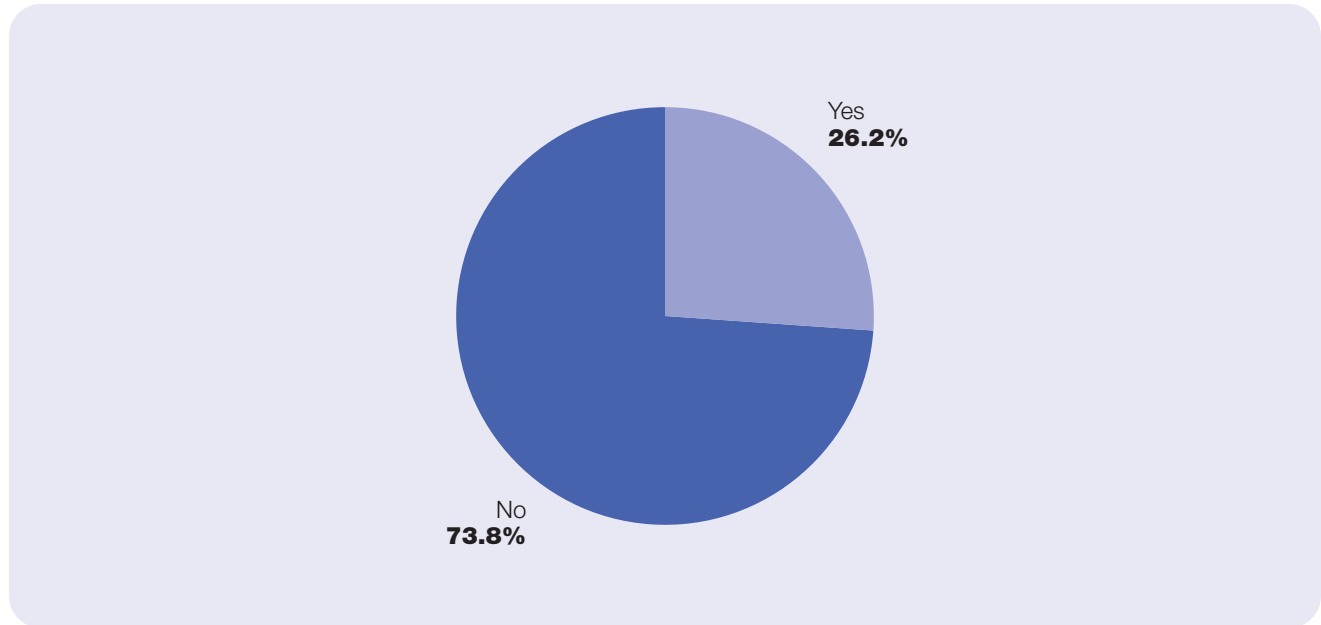
\*The question asked of the respondent was: “An asthma management plan is a printed form that tells when to change the amount or type of medicine, when to call the doctor for advice, and when to go to the emergency room. Has a doctor or other health professional ever given your child an asthma management plan?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 42.3% were given an asthma management plan.

**Figure 65**

Adults (18+ Years) With Asthma Who Were Given an Asthma Management Plan\*  
New York State, July 2002–August 2003



Given Asthma Management Plan	Frequency	Weighted Percentage (%)	95% CI
Yes	306	26.2	22.7–29.8
No	797	73.8	70.2–77.3

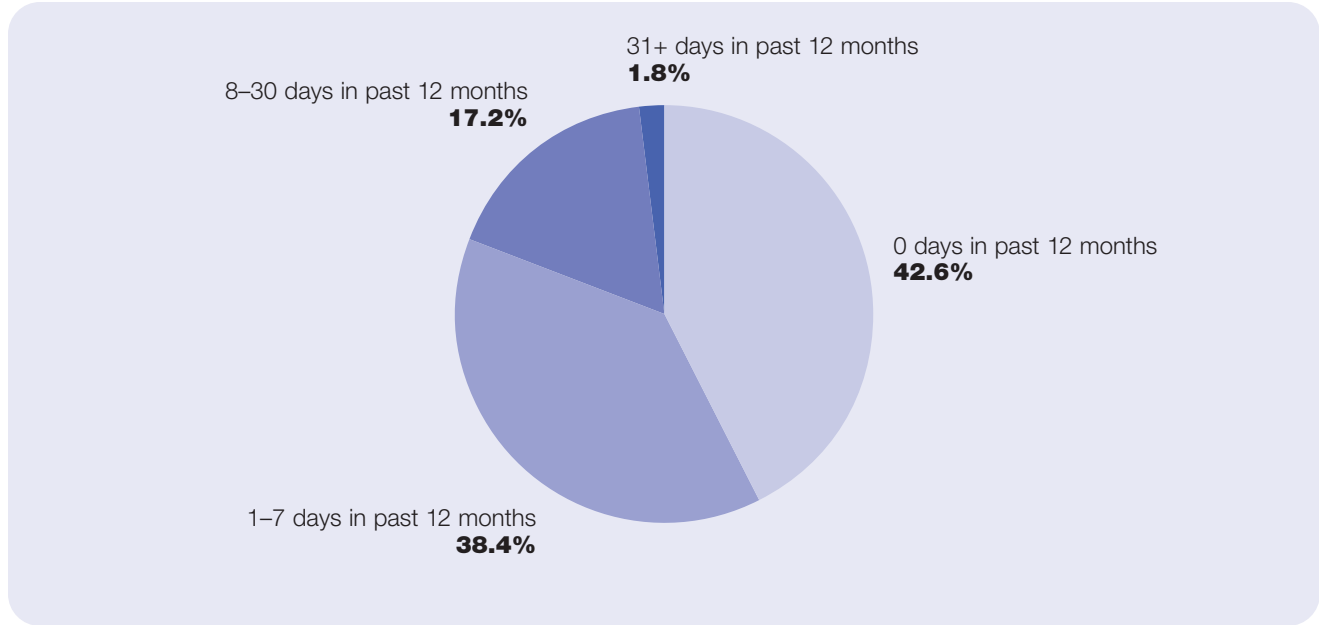
\*The question asked of the respondent was: “An asthma management plan is a printed form that tells when to change the amount or type of medicine, when to call the doctor for advice, and when to go to the emergency room. Has a doctor or other health professional ever given you an asthma management plan?”

- Children were given an asthma management plan from their doctor or other health professional more often than adults were.
- Among adults with asthma, 26.2% were given an asthma management plan.

## Days Missed School, Children (0–17 Years)

**Figure 66**

Days Missed School\* in the Past 12 Months in Children (0–17 Years)\*\* Due to Asthma, New York State, July 2002–August 2003



Days Missed School	Frequency	Weighted Percentage (%)	95% CI
0 days in past 12 months	255	42.6	37.6–47.6
1–7 days in past 12 months	212	38.4	33.4–43.4
8–30 days in past 12 months	90	17.2	13.0–21.4
31+ days in past 12 months	10	1.8	0.4–3.2

\*The question asked of the respondent was: “During the past 12 months, how many days of [daycare or preschool/school/school or work] did your child miss because of his/her asthma?”

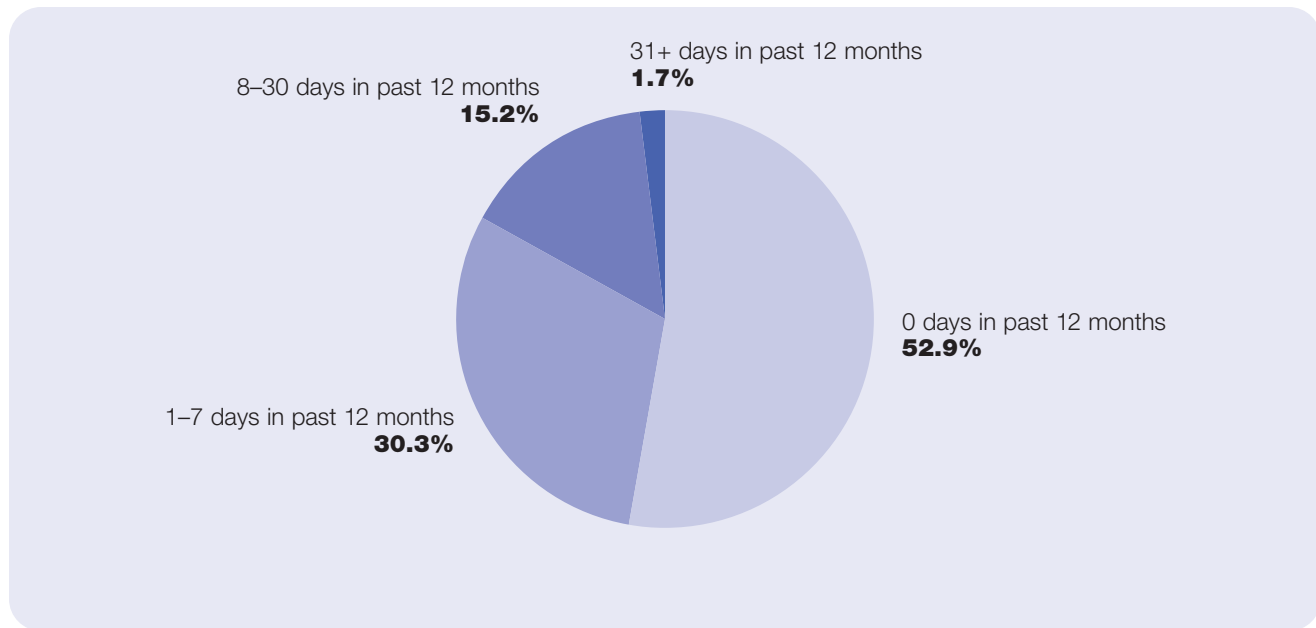
\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma 17 years of age and younger, 38.4% missed 1–7 days of daycare/preschool, school, school or work because of asthma in the past 12 months; 17.2% missed

8–30 days; and 1.8% missed 31 or more days of daycare/preschool, school, school or work due to asthma in the past 12 months.

**Figure 67**

Days Missed Daycare or Preschool\* in the Past 12 Months in Children (0–4 Years)\*\* Due to Asthma, New York State, July 2002–August 2003



Days Missed Daycare or Preschool	Frequency	Weighted Percentage (%)	95% CI
0 days in past 12 months	43	52.9	39.9–65.8
1–7 days in past 12 months	23	30.3	17.7–42.9
8–30 days in past 12 months	12	15.2	6.6–23.8
31+ days in past 12 months	1	1.7	0.0–4.9

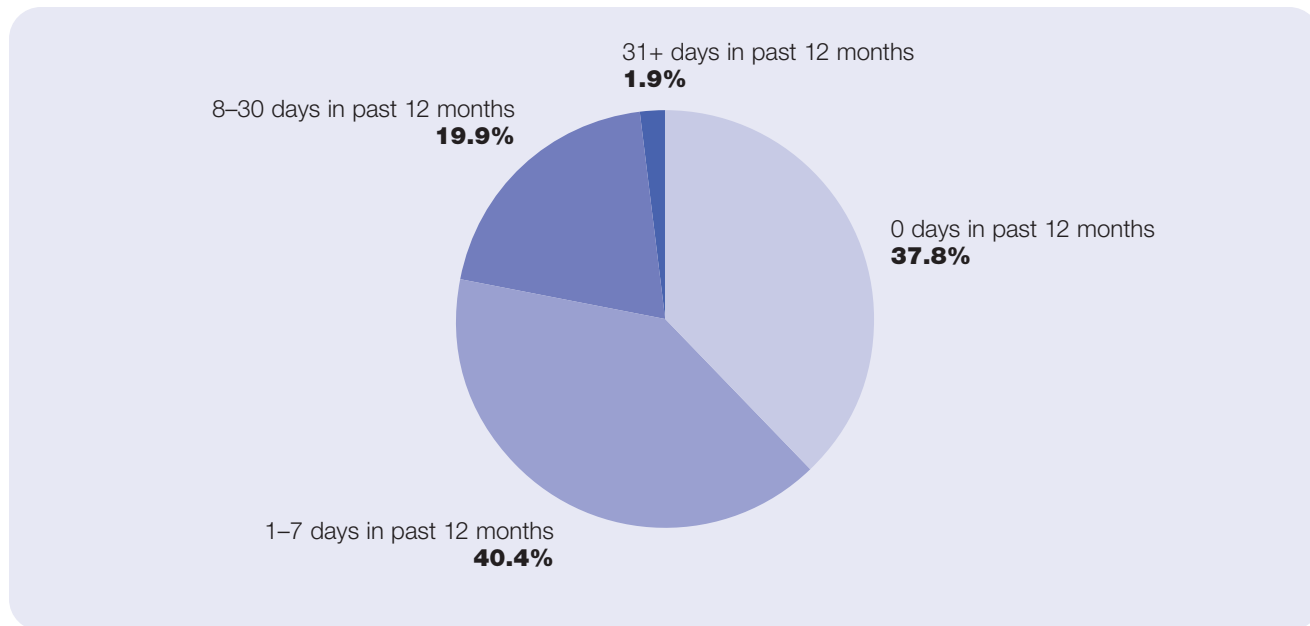
\*The question asked of the respondent was: “During the past 12 months, how many days of daycare or preschool did your child miss because of his/her asthma?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma in the 0–4 year age group, 30.3% missed 1–7 days of daycare/ preschool because of asthma in the past 12 months; 15.2% missed 8–30 days of daycare/ preschool because of asthma in the past 12 months; and 1.7% missed 31 or more days of daycare/ preschool due to asthma in the past 12 months.
- Overall, an estimated 265,425 days of daycare/ preschool were missed due to asthma for children (0–4 years) in the past 12 months.

**Figure 68**

Days Missed School\* in the Past 12 Months in Children (5–13 Years)\*\* Due to Asthma, New York State, July 2002–August 2003



Days Missed School	Frequency	Weighted Percentage (%)	95% CI
0 days in past 12 months	146	37.8	31.6–43.9
1–7 days in past 12 months	142	40.4	34.1–46.7
8–30 days in past 12 months	62	19.9	14.3–25.6
31+ days in past 12 months	5	1.9	0.0–4.0

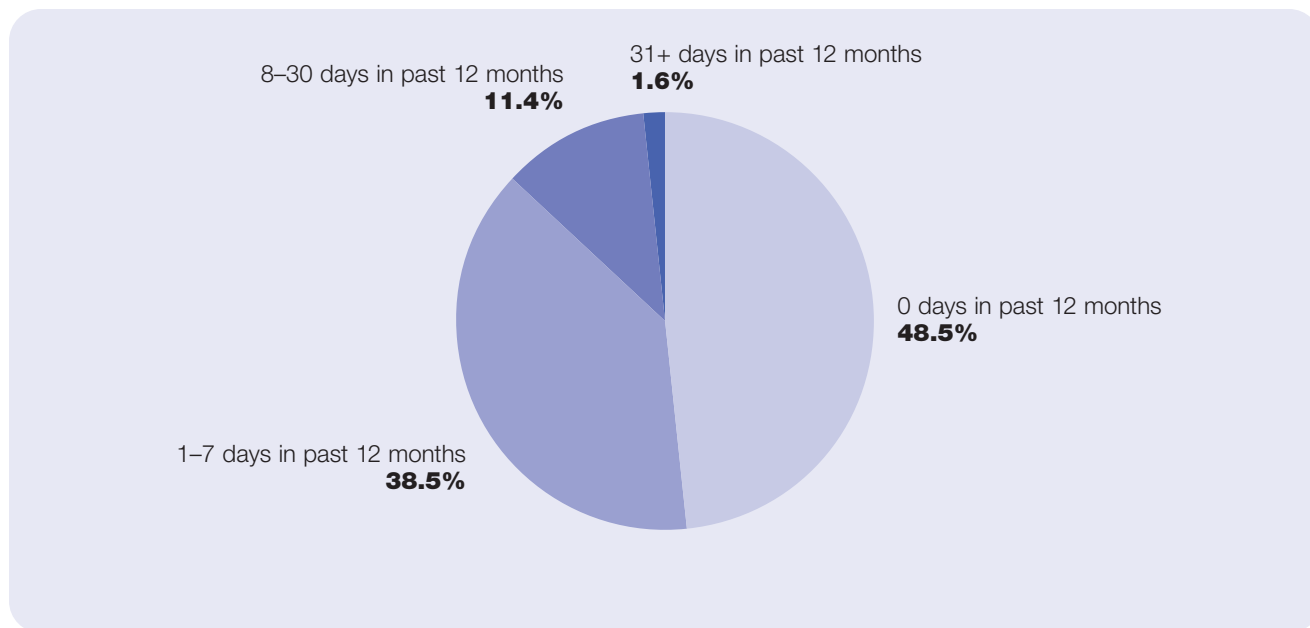
\*The question asked of the respondent was: “During the past 12 months, how many days of school did your child miss because of his/her asthma?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma in the 5–13 year age group, 40.4% missed 1–7 days of school because of asthma in the past 12 months; 19.9% missed 8–30 days of school because of asthma in the past 12 months; and 1.9% missed 31 or more days of school due to asthma in the past 12 months.
- Overall, an estimated 1.3 million days of school were missed due to asthma for children (5–13 years) in the past 12 months.

**Figure 69**

Days Missed School or Work\* in the Past 12 Months in Children (14–17 Years)\*\* Due to Asthma, New York State, July 2002–August 2003



Days Missed School	Frequency	Weighted Percentage (%)	95% CI
0 days in past 12 months	66	48.5	37.4–59.6
1–7 days in past 12 months	47	38.5	27.6–49.4
8–30 days in past 12 months	16	11.4	3.1–19.7
31+ days in past 12 months	4	1.6	0.0–3.2

\*The question asked of the respondent was: "During the past 12 months, how many days of school or work did your child miss because of his/her asthma?"

\*\*Parent/Guardian is self-reported proxy for children.

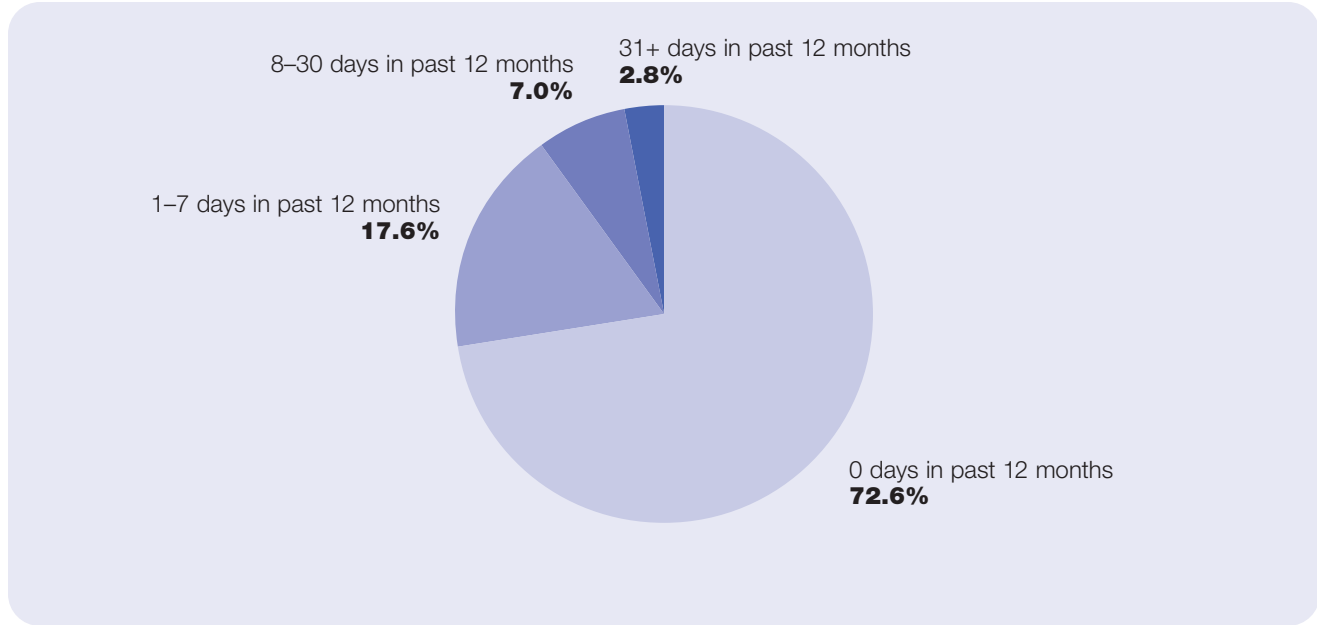
- Among children with asthma in the 14–17 year age group, 38.5% missed 1–7 days of school or work because of asthma in the past 12 months; 11.4% missed 8–30 days of school or work because of asthma in the past 12 months; and 1.6% missed 31 or more days of school or work due to asthma in the past 12 months.
- Overall, an estimated 343,791 days of school or work were missed due to asthma for children (14–17 years) in the past 12 months.



## Days Missed Work, Adults (18+ Years)

**Figure 70**

Days Missed Work or Unable to Carry out Usual Activities\* in the Past 12 Months in Adults (18+ Years) Due to Asthma, New York State, July 2002–August 2003



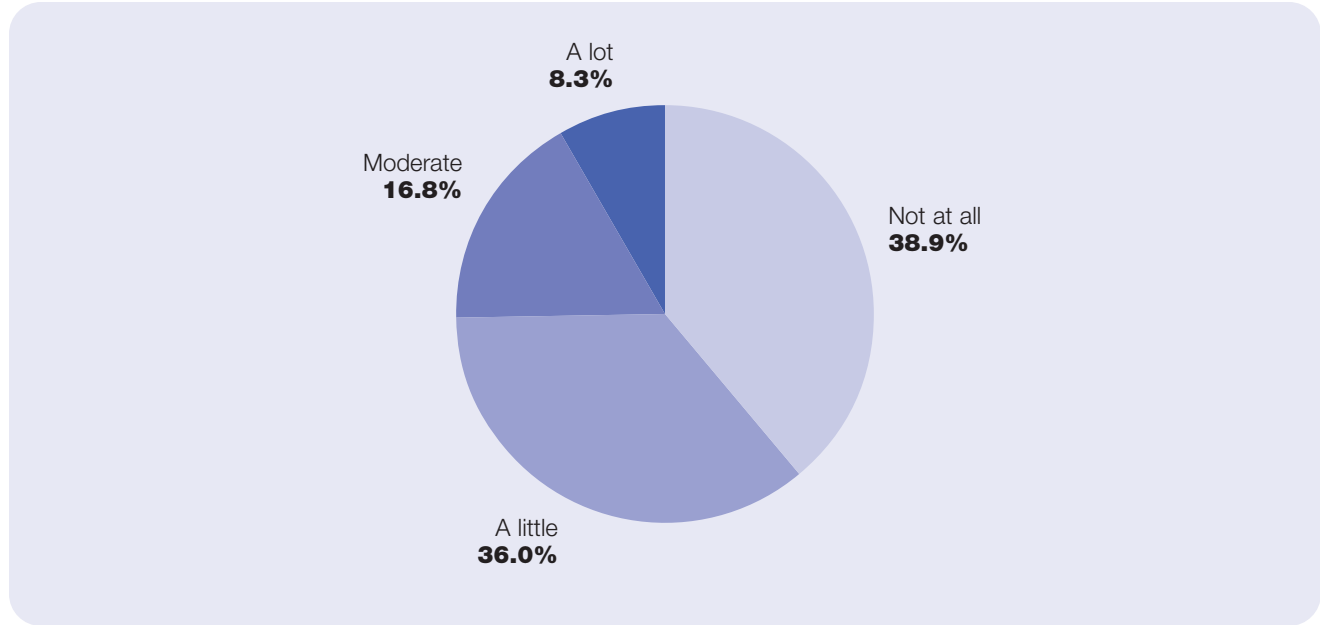
Days Missed Work or Unable to Carry Out Usual Activities	Frequency	Weighted Percentage (%)	95% CI
0 days in past 12 months	769	72.6	69.0–76.2
1–7 days in past 12 months	204	17.6	14.6–20.6
8–30 days in past 12 months	76	7.0	5.0–9.0
31+ days in past 12 months	32	2.8	1.4–4.2

\*The question asked of the respondent was: “During the past 12 months, how many days were you unable to work or carry out your usual activities because of your asthma?”

- Among adults with asthma, 17.6% missed 1–7 days of work or were unable to carry out their usual activities because of asthma in the past 12 months; 7.0% missed 8–30 days of work or were unable to carry out their usual activities due to asthma in the past 12 months; and 2.8% missed 31 or more days of work or were unable to carry out their usual activities because of asthma in the past 12 months.
- Overall, adults (18+ years) missed an estimated total of 7.6 million days in the past 12 months when they were unable to work or otherwise carry out their usual activities, due to asthma.

## Quality of Life

**Figure 71**  
Quality of Life\* Due to Asthma in the Past 12 Months,  
New York State, July 2002–August 2003



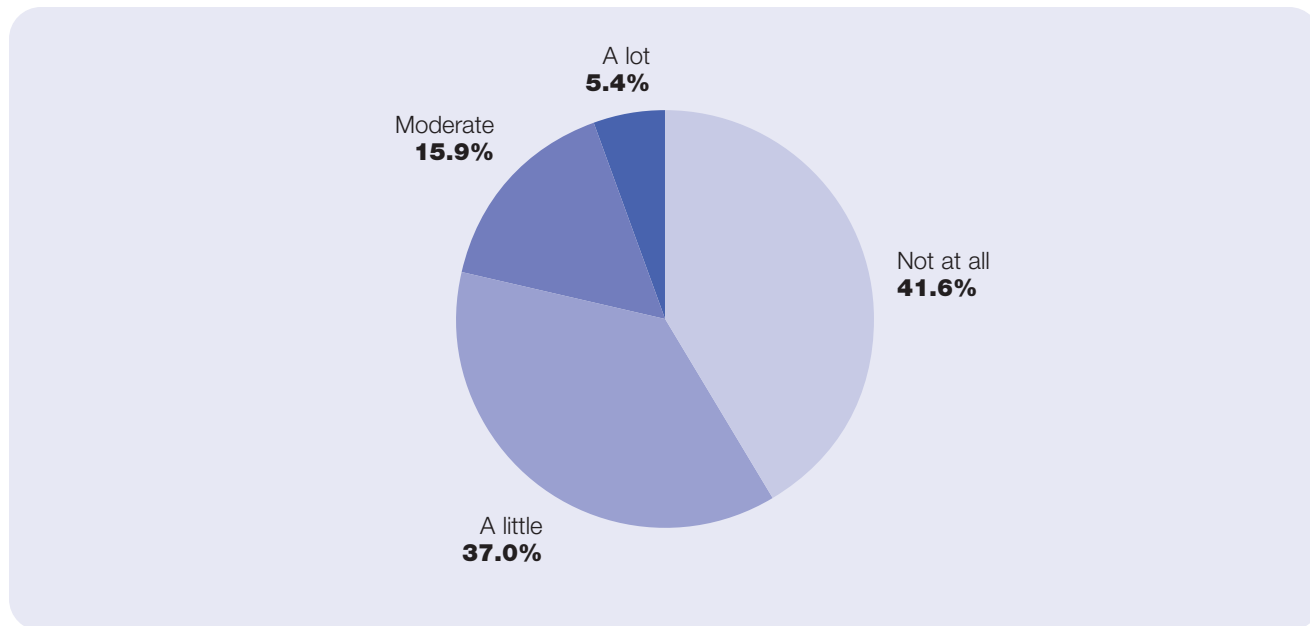
Effect on Quality of Life	Frequency	Weighted Percentage (%)	95% CI
Not at all	711	38.9	35.6–42.2
A little	602	36.0	32.6–39.4
Moderate	286	16.8	14.4–19.3
A lot	130	8.3	6.1–10.4

\*The question asked of the respondent was: “During the past 12 months, would you say you limited your activities due to asthma not at all, a little, a moderate amount, or a lot?”

- Among individuals with asthma, 38.9% reported that asthma did not affect them at all; 36.0% said asthma limited their usual activities a little in the past 12 months; 16.8% said asthma limited their usual activities a moderate amount in the past 12 months; and 8.3% said asthma limited their usual activities a lot in the past 12 months.

**Figure 72**

Quality of Life\* Due to Asthma in the Past 12 Months in Children (0–17 Years),\*\*  
New York State, July 2002–August 2003



Effect on Quality of Life	Frequency	Weighted Percentage (%)	95% CI
Not at all	254	41.6	36.7–46.6
A little	223	37.0	32.2–41.9
Moderate	97	15.9	12.1–19.8
A lot	31	5.4	3.1–7.6

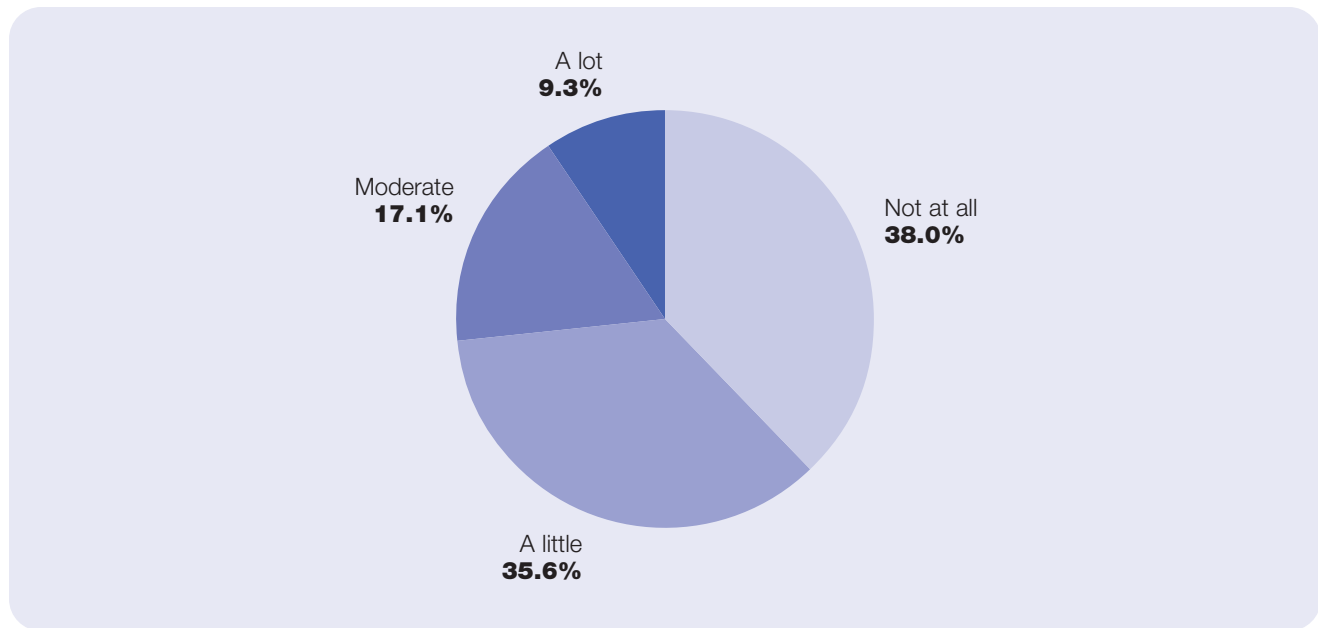
\*The question asked of the respondent was: “During the past 12 months, would you say your child limited his/her usual activities due to asthma: not at all, a little, a moderate amount, or a lot?”

\*\*Parent/Guardian is self-reported proxy for children.

- Among children with asthma, 41.6% reported that asthma did not affect them at all; 37.0% said that asthma limited their usual activities a little in the past 12 months; 15.9% said asthma limited their usual activities a moderate amount in the past 12 months; and 5.4% said asthma limited their usual activities a lot in the past 12 months.

**Figure 73**

Quality of Life\* Due to Asthma in the Past 12 Months in Adults (18+ Years),  
New York State, July 2002–August 2003



Effect on Quality of Life	Frequency	Weighted Percentage (%)	95% CI
Not at all	457	38.0	33.9–42.0
A little	379	35.6	31.3–39.9
Moderate	189	17.1	14.2–20.1
A lot	99	9.3	6.5–12.0

\*The question asked of the respondent was: “During the past 12 months, would you say you limited your activities due to asthma not at all, a little, a moderate amount, or a lot?”

- Among adults with asthma, 38.0% reported that asthma did not affect them at all; 35.6% said asthma limited their usual activities a little in the past 12 months; 17.1% said asthma limited their usual activities a moderate amount in the past 12 months; and 9.3% said asthma limited their usual activities a lot in the past 12 months.

# References

1. CDC National Center for Environmental Health. Asthma: National Asthma Control Program – Program in Brief. <http://www.cdc.gov/asthma/program.htm> Last accessed June 21, 2006.
2. CDC National Center for Health Statistics. Asthma Prevalence, Health Care Use and Mortality, 2002. <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm> Last accessed June 21, 2006.
3. New York State Asthma Surveillance Summary Report, October 2005.
4. U.S. Census Bureau. Poverty Thresholds for 2003. <http://www.census.gov/hhes/www/poverty/threshld/thresh03.html> Last accessed June 21, 2006.
5. CDC Department of Health and Human Services. BMI – Body Mass Index: about BMI for Adults. [http://www.cdc.gov/nccdphp/dnpa/bmi/adult\\_BMI/about\\_adult\\_BMI.htm](http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm) Last accessed June 21, 2006.
6. CDC Department of Health and Human Services. BMI – Body Mass Index: About BMI for Children and Teens. [http://www.cdc.gov/nccdphp/dnpa/bmi/childrens\\_BMI/about\\_childrens\\_BMI.htm](http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm) Last accessed June 21, 2006.

# Data Sources

- (a) New York State Behavioral Risk Factor Surveillance System (BRFSS), 1999–2004.
- (b) New York State Expanded Behavioral Risk Factor Surveillance (EBRFSS), 2003.
- (c) New York State Department of Health Vital Records – Death Files.
- (d) New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS) – Inpatient Files.
- (e) New York State Fee-for-Service Fiscal and Program Data Mart, 2003.

# Acknowledgments

Antonia C. Novello, MD, MPH, DrPH  
New York State Commissioner of Health

Dale Morse, MD, MS, Director, Office of Science and Public Health  
New York State Department of Health

Guthrie Birkhead, MD, MPH, Director, Center for Community Health  
New York State Department of Health

Michael Medvesky, MPH, Director, Public Health Information Group  
New York State Department of Health

Patricia Waniewski, RN, MS, Asthma Coordinator  
New York State Department of Health

*We gratefully acknowledge the contributions of the following individuals:*

Asthma Surveillance and Evaluation Staff:

Trang Nguyen, MD, MPH, Asthma Epidemiologist  
New York State Department of Health

Melissa Lurie, MPH, Asthma Research Specialist  
New York State Department of Health

Min Huang, MPH, Student Research Assistant, School of Public Health  
State University of New York at Albany

*Funding for this report was provided by the Centers for Disease Control and Prevention (CDC) National Center for Environmental Health grant, Addressing Asthma from a Public Health Perspective (Cooperative Agreement #U59/CCU220867). The contents are solely the responsibility of the authors and do not necessarily represent the official view of the CDC.*







