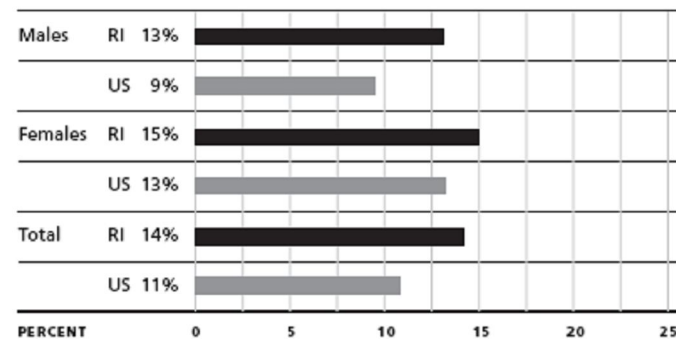




Rhode Island Department of Health, September 2009
Asthma Control Program

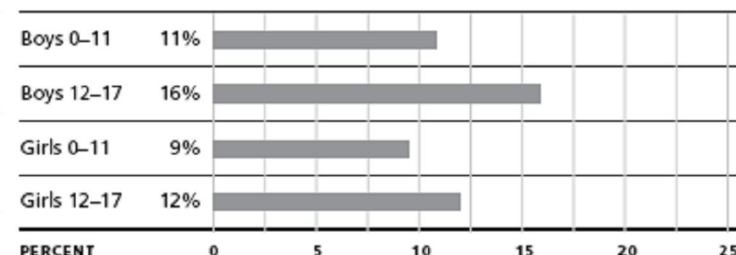
Highlights

FIGURE 10. PERCENTAGE OF HIGH SCHOOL STUDENTS WITH CURRENT ASTHMA BY SEX, RHODE ISLAND AND U.S. YOUTH RISK BEHAVIORAL SURVEY (YRBS), 2007



Data source: 2007 Rhode Island Youth Risk Behavior Survey, Rhode Island Department of Health, Center for Health Data and Analysis and 2007 YRBS: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health Data and Statistics. Available at: <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>

FIGURE 9. PERCENTAGE OF CHILDREN WITH CURRENT ASTHMA BY SEX AND AGE GROUP, RHODE ISLAND BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 2005-2007



Data Source: 2005-2007 Rhode Island Behavioral Risk Factor Surveillance System combined file, Rhode Island Department of Health, Center for Health Data and Analysis.

TABLE 26. ANNUAL AND AVERAGE AGE-SPECIFIC PEDIATRIC ASTHMA¹ HOSPITALIZATION RATES² BY RACE, RHODE ISLAND HOSPITAL DISCHARGE DATA, 2001-2007³

AGE-SPECIFIC PEDIATRIC ASTHMA HOSPITALIZATION RATES	2001	2002	2003	2004	2005	2006	2007	AVERAGE
	Children age 0-17							
White non-Hispanic	16.9	18.1	19.1	17.5	16.4	14.8	16.4	17.0
Black non-Hispanic	37.0	43.3	39.4	39.6	33.7	43.8	42.0	39.8
Hispanic	22.3	27.8	31.1	27.2	27.5	23.2	29.8	27.1

1 Asthma listed as the principal diagnosis (ICD-9-CM codes 493.00 - 493.92).
2 All rates are per 10,000 population.
3 Data for 2000 are not shown because less than 50 children hospitalized for asthma were non-Hispanic black or Hispanic.

Data Source: 2001-2007 Rhode Island Hospital Discharge Data, Rhode Island Department of Health, Center for Health Data and Analysis.

This report presents information on asthma prevalence, asthma triggers, and quality of life for Rhode Island children with current asthma. Data excerpted here come from *The Burden of Asthma in Rhode Island 2009* report.

About the Burden Report: The purpose of this report is to describe the prevalence of asthma and asthma-related health outcomes in Rhode Island using the most recent data available. *The Burden of Asthma in Rhode Island* is an updated version of two earlier publications on the burden of asthma in the state, published in 2004 and 2007, respectively. Data for the current *Burden* report come from the Rhode Island Behavioral Risk Factor Surveillance System (BRFSS), the Rhode Island Youth Risk Behavior Survey (YRBS), Rhode Island Hospital Discharge Data (HDD), Rhode Island Emergency Department Data (EDD), and Rhode Island Vital Records. Data on asthma in children come from the Random Child Selection and the Child Asthma Prevalence Modules included in the 2005-2007 BRFSS.

Current asthma: Current asthma is defined as having been diagnosed with asthma and still having asthma at the time of the survey.

Reading statistics: This report presents bar graphs showing percentages and 95% confidence intervals (CI). Since percentages from survey data are estimates, the 95% CI indicates the range of values within which the “true” value lies 95% of the time. When two groups have 95% CI that overlap, it indicates that the “true” values are likely to be similar in both groups. If the 95% CI do not overlap, it indicates that the two groups are statistically significantly different from one another.

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For further information: For the Asthma Control Program go to <http://www.health.ri.gov/disease/asthma/index.php>; for the BRFSS go to <http://www.health.ri.gov/chic/statistics/brfss.php>, <http://www.health.ri.gov/webquery/index.html>, <http://www.cdc.gov/brfss>, or contact the Asthma Control Program, Rhode Island Department of Health at 401-222-4040.

Highlights prepared by: NJ Everage, ScM, N Sutton RD, MS, DN Pearlman, PhD, and D Goldman RN, MPH, from the Division of Community Health, Family Health, and Equity.

Excerpts from the 2009 *Burden of Asthma in Rhode Island* Report:

- ❖ Nearly 17% of children in Rhode Island have *lifetime* asthma, with over 11% of children having *current* asthma (Table 8). There has been a slight increase in *lifetime* and *current* asthma during the period of 2005-2007 (Figure 8).
- ❖ Based on 2007 data, there is no difference between public high school and public middle school students in the percentage of public school students in Rhode Island with *current* asthma (Table 11).
- ❖ While there are gender and age differences in *current* asthma prevalence among adults, these disparities are **not** seen in children (Table 9). There is a significant difference in asthma prevalence between children ages 0-4 and children aged 12-17 (Table 9).
- ❖ Figure 22 displays the percentage of children enrolled in Neighborhood Health Plan of Rhode Island receiving appropriate asthma medication by age group. Since 2005, over 91% of enrolled children received their appropriate asthma medications, a tremendous improvement over just a 3-year period.
- ❖ Table 26 shows extreme differences in age-adjusted asthma hospitalization rates by race and ethnicity among children age 0-17. Black non-Hispanic children have 39.8 asthma hospitalizations per 10,000 people versus 27.1 for Hispanic children and 17.0 for white non-Hispanics.

Discussion: Rhode Island is making great strides in improving the quality of life for people with asthma. The Rhode Island Department of Health’s Asthma Control Program and the Asthma Coalition and its committees are committed to securing a high measure of quality of life for all Rhode Islanders who have asthma and their families. The *Reducing the Burden of Asthma in Rhode Island, Asthma State Plan 2009-2014* and community interventions focus on asthma management through chronic care and disease management and healthy housing.

*All tables and figures are excerpted from *The Burden of Asthma in Rhode Island 2009* Report

TABLE 8. ASTHMA PREVALENCE IN CHILDREN AGGREGATED OVER TIME, RHODE ISLAND BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 2005-2007*

	TOTAL NUMBER OF RESPONDENTS	LIFETIME ASTHMA (95% CI)	CURRENT ASTHMA (95% CI)
Children 0-17 years	3,691	16.5 (15.1 - 17.9)	11.3 (10.1 - 12.5)
Weighted sample	236,257	39,102	26,696

Data Source: 2005-2007 Rhode Island Behavioral Risk Factor Surveillance System combined file, Rhode Island Department of Health, Center for Health Data and Analysis. * Percentages, 95% confidence intervals and corresponding sample sizes are weighted.

TABLE 11. PERCENTAGE OF PUBLIC SCHOOL STUDENTS WITH CURRENT ASTHMA, RHODE ISLAND AND U.S., YOUTH RISK BEHAVIORAL SURVEY (YRBS), 2007

CHARACTERISTICS	ASTHMA SAMPLE	
	UNWEIGHTED SAMPLE ¹	CURRENT ASTHMA PREVALENCE PERCENTAGE (95% CI) ²
High School, Rhode Island	2,141	13.6 (12.1 - 15.1)
Middle School, Rhode Island	2,339	13.4 (11.7 - 15.3)

¹ Sample of respondents with a "yes" or "no" response to the question about current asthma.
² Weighted data.

Data Source: 2007 Rhode Island Youth Risk Behavior Survey, Rhode Island Department of Health, Center for Health Data and Analysis.

TABLE 9. DISPARITIES IN CURRENT PEDIATRIC ASTHMA PREVALENCE, RHODE ISLAND BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 2005-2007

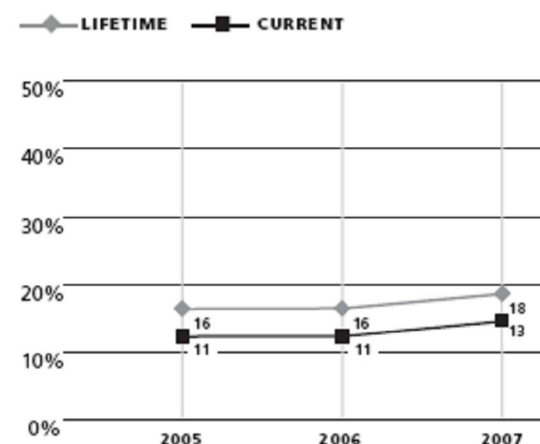
CHARACTERISTICS OF CHILDREN (0-17 YRS)		ASTHMA SAMPLE	
		UNWEIGHTED SAMPLE ¹	CURRENT ASTHMA PREVALENCE PERCENTAGE (95% CI) ²
Sex	Male	1,864	12.6 (10.9 - 14.4)
	Female	1,712	10.2 (8.4 - 11.9)
Age group	0-4	829	8.1 (5.9 - 10.4)
	5-11	1,249	11.6 (9.5 - 13.7)
	12-17	1,370	13.6 (11.6 - 15.8)
Overall		3,625	11.3 (10.1 - 12.5)

¹ Sample of respondents with a "yes" or "no" response to the question about current asthma.
² Weighted data.

Data Source: 2005-2007 Rhode Island Behavioral Risk Factor Surveillance System combined file, Rhode Island Department of Health, Center for Health Data and Analysis.

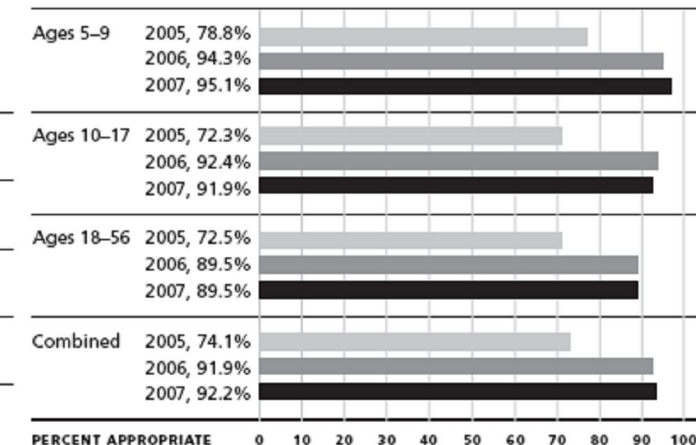
*All tables and figures are excerpted from *The Burden of Asthma in Rhode Island 2009 Report*

FIGURE 8. TRENDS IN LIFETIME AND CURRENT PEDIATRIC ASTHMA PREVALENCE BY YEAR, RHODE ISLAND BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 2005-2007



Data Source: 2005-2007 Rhode Island Behavioral Risk Factor Surveillance System, Rhode Island Department of Health, Center for Health Data and Analysis.

FIGURE 22. HEDIS MEASURE: USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA ENROLLED IN NEIGHBORHOOD HEALTH PLAN OF RHODE ISLAND, 2005-2007



Data Source: Neighborhood Health Plan of Rhode Island HEDIS® 2007 Results and CAHPS® 2007 Results. Created on: 8/7/2006 by Erin E. McCombs Printed On: 2/13/2008. HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA). Accessed on the web at: www.nhpi.org/nhriarch/documents/HEDIS_2007_Results.pdf and reproduced with permission of Neighborhood Health Plan of Rhode Island.

TABLE 25. ANNUAL AND AVERAGE AGE-SPECIFIC ASTHMA¹ HOSPITALIZATION RATES² AND OVERALL AGE-ADJUSTED ASTHMA HOSPITALIZATION RATES³ BY SEX AND AGE GROUP, RHODE ISLAND HOSPITAL DISCHARGE DATA, 2000-2007

		2000	2001	2002	2003	2004	2005	2006	2007	AVERAGE
Female	age 0-17	11.0	15.2	16.6	19.0	17.3	16.8	15.3	16.4	16.0
	age 18-44	13.7	12.2	12.2	12.7	10.6	11.7	10.4	11.0	11.8
	age 45-64	16.1	17.4	17.3	19.5	20.3	21.9	24.5	21.6	19.8
	age 65+	15.0	22.9	21.7	24.5	24.6	30.6	29.9	28.3	24.7
	Overall (Female)	13.0	17.1	16.4	18.9	18.2	21.2	21.4	21.3	20.6
Male	age 0-17	19.6	25.1	26.8	28.0	24.2	23.7	22.9	25.7	24.5
	age 18-44	6.2	4.8	5.1	4.9	3.6	4.6	4.3	4.0	4.7
	age 45-64	4.8	5.8	5.4	6.3	6.6	8.8	7.0	9.3	6.7
	age 65+	4.3	8.2	8.0	10.7	10.6	13.7	11.9	11.0	9.8
	Overall (Male)	11.2	15.3	15.2	16.2	13.6	14.1	13.5	13.9	15.1
Overall (Age-adjusted)		11.6	13.3	13.7	14.9	13.6	14.9	14.3	14.6	13.9

¹ Asthma listed as the principal diagnosis (ICD-9-CM codes 493.00 - 493.92).
² All rates are per 10,000 population.
³ Age-adjusted to the year 2000 U.S. standard population

Data Source: 2000-2007 Rhode Island Hospital Discharge Data, Rhode Island Department of Health, Center for Health Data and Analysis.

*All tables and figures are excerpted from *The Burden of Asthma in Rhode Island 2009 Report*