

# Florida Asthma Measures, 2008 - 2010

## Introduction

There are a variety of data sources that provide different perspectives of the burden of asthma in Florida. After assessing the various sources (availability, strengths and limitations, etc.), the Florida Asthma Prevention and Control Program (FLAPCP) developed a set of priority measures to monitor asthma in Florida. The program's goal is to provide a more comprehensive view of asthma as a whole. The table on the following page presents descriptions of each measure and includes data for 2008, 2009, and 2010.

The Florida asthma measures are classified into four categories: 1) Health Status and Quality of Life, 2) Risks and Risk Behaviors, 3) Asthma Care, Awareness, and Management, and 4) Cost and Barriers. The majority of the measures will be assessed annually; particularly the 11 prescribed measures required under the FLAPCP's cooperative agreement with the CDC (noted with a <sup>1</sup>). Some of the measures align with the Healthy People 2020 Objectives (noted with an \*), and other measures have been selected based the needs of stakeholders, availability, and relevance. This list will be modified as capacity increases, data availability changes, and/or new data needs arise.

## Methods

The asthma measures table pulls data from more than 10 different sources. These sources can be categorized as Mandatory Reportable Health Data and Population-Based Survey Data, both are described below.

### Mandatory Reportable Health Data

The emergency department visit and hospitalization data come from the Agency for Health Care Administration (AHCA) and only include cases with asthma listed as the primary diagnosis (determined by ICD-9 code 493). The mortality data come from the Florida Department of Health, Bureau of Vital Statistics (VS) and only include cases with asthma listed as the primary cause of death (determined by ICD-10 codes J45-J46). Rates are calculated using population estimates provided by the Florida Legislature, Office of Economic and Demographic Research.

### Population-Based Survey Data

The survey data included each use different sampling and surveying methodology, but all data have been weighted to be representative of the state population. The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone-based survey that uses a random-digit dial sampling methodology to select households across the state. BRFSS respondents that have children under the age of 18 in the household and that agree to be called back for future studies make up the sampling frame for the Florida Child Health Survey (FCHS). BRFSS respondents that have asthma and agree to be called back for future studies make up the sampling frame for the Adult Asthma Callback Survey (ACBS).

The Florida Youth Tobacco Survey (FYTS) and the Youth Risk Behavior Survey (YRBS) are part of the Florida Youth Survey, a multi-agency collaboration between the Florida Departments of Health, Education, Children and Families, and Juvenile Justice. The FYS is a simultaneous administration of several survey instruments to a random representative sample of Florida public middle and high school students. Surveys are administered in the classroom, using a paper and pencil format.

This publication was supported by Cooperative Agreement Number 5U59EH000523-03 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.



# Florida Asthma Measures, 2008-2010

Category	Measure	2008	2009	2010	Trend*	Definition
Health Status and Quality of Life	1 Lifetime Prevalence of Asthma (Children) <sup>1</sup>	16.4%		18.0%	●	FCHS: Adults who report they have ever been told by a doctor, nurse, or other health professional that their child has asthma (note: data for 2008 and 2009 were combined due to small sample size)
	2 Lifetime Prevalence of Asthma (Adolescents)	18.0%	18.1%	18.4%	●	FYTS: Adolescents (grades 6-12) that have ever been told by a doctor or nurse that they have asthma
	3 Lifetime Prevalence of Asthma (Adults) <sup>1</sup>	10.2%	11.7%	13.8%	●	BRFSS: Adults that have ever been told by a doctor, nurse, or health professional that they have asthma
	4 Current Prevalence of Asthma (Children) <sup>1</sup>	-	-	-	-	FCHS: Children (0 - 17) with current asthma (insufficient data)
	5 Current Prevalence of Asthma (Adolescents) <sup>1</sup>	-	9.0%	10.2% <sup>^</sup>	●	YRBS: Adolescents (grades 9-12) with current asthma ( <sup>^</sup> 2011 data point)
	6 Current Prevalence of Asthma (Adults) <sup>1</sup>	6.6%	6.9%	8.3%	●	BRFSS: Adults with current asthma
	7 Sleep Loss Due to Asthma Symptoms	18.6%	23.5%	23.9%	●	ACBS: Adults with current asthma who experienced difficulty staying asleep due to asthma symptoms on one or more of the past 30 nights
	8 Asthma and Depression	27.9%	39.7%	33.8%	●●	ACBS: Adults with current asthma that report a medical diagnosis of depression
	9 Asthma and Feelings of Hopelessness among Adolescents	30.1%	30.1%	28.6%	●	FYTS: Adolescents (grades 6-12) with lifetime asthma who felt so sad or hopeless for two weeks or more in a row that they stopped doing some of their usual activities
	10 Asthma Hospitalization Rate per 10,000 (Primary Diagnosis) <sup>1,2</sup>	14.76	15.48	16.45	●	AHCA: Floridians discharged from a hospital with the primary diagnosis of "asthma" (primary diagnosis code 493)
	11 Asthma Emergency Department Visit Rate per 10,000 (Primary Diagnosis) <sup>2</sup>	41.21	45.6	48.31	●	AHCA: Floridians discharged from an emergency room with the primary diagnosis of "asthma" (primary diagnosis code 493)
	12 Asthma Death Rate per 100,000 (Underlying Cause) <sup>1,2</sup>	0.8	0.9	0.8	●●	VS: Floridians with the underlying cause of death listed as "asthma" (ICD-10 J45-J46)
Symptoms, Risk Behaviors, and Trigger Exposure Measures	13 Asthma Episode/Attack in Past Year (Adolescents)	21.2%	22.5%	19.7%	●●	FYTS: Adolescents with lifetime asthma who responded "Yes, I have had an attack" to the question: During the past 12 months, did you have an asthma attack?
	14 Asthma Episode/Attack in Past Year (Adults)	32.2%	33.9%	35.3%	●	ACBS: Adults reporting an asthma attack or episode in the past year among adults with current asthma
	15 Current Smoking among Adolescents with Asthma	11.2%	11.5%	10.5%	●	FYTS: Adolescents with lifetime asthma who respond one or more days to the question: During the past 30 days, on how many days did you smoke cigarettes?
	16 Current Smoking among Adults with Asthma	22.8%	16.1%	20.6%	●	BRFSS: Adults with lifetime asthma who responded that they have smoked 100+ cigarettes in their life and respond "Every day" or "Some days" to the question: "Do you now smoke cigarettes ever day, some days, or not at all?"
	17 Exposure to Secondhand Smoke among Adolescents with Asthma	59.7%	58.2%	56.2%	●	FYTS: Adolescents with lifetime asthma who respond one or more times to either of the following questions: During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes?; During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes?
	18 Exposure to Secondhand Smoke among Adults with Asthma	17.1%	14.6%	13.2%	●	ACBS: Adults with lifetime asthma who responded "Yes" to the question: "In the past week, has anyone smoked inside your home?"
19 Smoking Allowed in the Home among Adolescents with Asthma	16.3%	15.7%	15.1%	●	FYTS: Adolescents with lifetime asthma who respond "Yes" to the question: Is smoking allowed inside your home?	
Asthma Self-Management Education Measures	20 Take a Formal Class on Asthma <sup>1,2</sup>	7.9%	10.2%	6.5%	●●	ACBS: Adults with asthma who have ever taken a course or class on how to manage his/her asthma
	21 Taught about the Symptoms of Asthma <sup>1,2</sup>	55.4%	57.9%	64.8%	●	ACBS: Adults with asthma who have ever been taught how to recognize early signs or symptoms of an asthma episode by a doctor or other health professional
	22 Taught Proper Response to an Asthma Attack/Episode <sup>1</sup>	67.3%	71.3%	72.8%	●	ACBS: Adults with asthma who have ever been taught what to do during an asthma episode by a doctor or other health professional
	23 Taught about Peak Flow Use <sup>1</sup>	42.7%	33.0%	38.6%	●●	ACBS: Adults with asthma who have ever been taught how to use a peak flow meter to adjust his/her daily medications by a doctor or other health professional
	24 Advised on Controlling Triggers	33.4%	31.4%	40.3%	●●	ACBS: Adults with current asthma that have been advised to make environmental changes at home, school, or work
	25 Given a Written Asthma Action Plan <sup>1</sup>	22.1%	23.2%	23.6%	●	ACBS: Adults with asthma who have ever been given an asthma action plan by a doctor or other health professional
	26 Instructed on How to Use Medication <sup>2</sup>	82.4%	77.9%	87.4%	●●	ACBS: Adults with asthma who have been shown how to use an inhaler by a doctor or other health professional
27 Routine Asthma Follow-up Visits <sup>2</sup>	42.2%	39.0%	36.8%	●	ACBS: Adults with asthma who have seen a doctor or other health professional one or more times during the past 12 months for a routine checkup for his/her asthma	
Cost and Barrier Measures	28 Asthma Hospitalization Charges (millions of dollars)	\$608.8	\$693.9	\$748.5	●	AHCA: Total charges for hospitalizations with a primary diagnosis of asthma in Florida
	29 Asthma Emergency Department Visit Charges (millions of dollars)	\$150.4	\$183.3	\$204.1	●	AHCA: Total charges for emergency department visits with a primary diagnosis of asthma in Florida
	30 Cost as a Barrier to Routine Doctor Visit	13.1%	12.5%	10.3%	●	ACBS: Adults with asthma who needed to see their primary care doctor for asthma but were unable because of cost in the past 12 months
	31 Cost as Barrier to Medication	11.9%	11.4%	13.6%	●	ACBS: Adults with asthma who needed to buy medication for their asthma but could not due to cost in the past 12 months
	32 Missed Work Days/Limited Activity <sup>2</sup>	35.9%	30.9%	24.7%	●	ACBS: Adults with asthma who were unable to work or carry out usual activities because of their asthma one or more days during the past 12 months

1 - CDC Core Measures; 2 - Healthy People 2020 Objective

\*Trend direction does not imply significance: ●=Trend moving in unfavorable direction; ●●=Trend moving in favorable direction;

●●=Trend moved in unfavorable direction from '08-'09 -- favorable direction from '09-'10; ●●=Trend moved in favorable direction from '08-'09 -- unfavorable direction from '09-'10

Note - For detailed descriptions of the data sources and measures, refer to the Florida Asthma Surveillance Plan - <http://www.myfloridaeh.com/medicine/Asthma/surveillance.html>