Florida Asthma Measures, 2012-2014

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 Program (FAP) developed a set of priority measures to monitor asthma in Florida. The program's goal is to provide a multifaceted view of asthma through comprehensive analysis of several key datasets and their relevant measures. The table on the following page presents descriptions of each measure and includes data for 2012, 2013 and 2014, the most recent years for which all data are available.

The Florida Asthma Measures are classified into four categories: 1) Health Status and Quality of Life; 2) Symptoms, Risk Behaviors, and Trigger Exposure; 3) Asthma Care and Self-Management Education; and 4) Cost and Barriers. The majority of these measures will be assessed annually; particularly the six prescribed measures required under the FAP's cooperative agreement with the Centers for Disease Control and Prevention (CDC) (noted with a [1]). Some measures align with the Healthy People 2020 Objectives (noted with a [2]), and other measures have been selected based on the needs of stakeholders, availability, and relevance. This list will be modified as capacity increases, data availability changes, and/or new data needs arise.

Data Sources

Mandatory Reportable Health Data

Emergency department and hospital discharge 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). Mortality data come from the Florida Department of Health, Bureau of Vital Statistics (VS) and only include cases with asthma listed as the underlying cause of death (determined by ICD-10 codes J45-J46). Rates are age-adjusted using the 2000 U.S. standard population estimates from the U.S. Census Bureau.

Population-Based Survey Data

The various sources of survey data included in the following table use different sampling and surveying methods, 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 technique on both landlines and cell phones. BRFSS respondents who have asthma and agree to be contacted for future studies make up the sampling frame for the Adult Asthma Callback Survey (ACBS).

The Florida Youth Tobacco Survey (FYTS) is part of the Florida Youth Survey (FYS), 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.

The National Survey of Children's Health (NSCH) is a national telephone-based survey that provides a broad range of information about children's health. Survey results are weighted to represent the population of non-institutionalized children ages 0-17 nationally and in each state.

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Category		Measure	2012	2013	2014	Definition
Health Status and Quality of Life	1	Lifetime Prevalence of Asthma (Children)[1]		17.5%		**NSCH:** Parents who report they have ever been told by a doctor, nurse, or other health professional that their child has asthma
	2	Lifetime Prevalence of Asthma (Adolescents)	20.5%	20.6%	20.8%	**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)[1]	12.6%	13.5%	12.2%	**BRFSS:** Adults that have ever been told by a doctor, nurse, or health professional that they have asthma
	4	Current Prevalence of Asthma (Children)[1]		9.9%		**NSCH:** Children (0 - 17) with current asthma
	5	Current Prevalence of Asthma (Adolescents)	11.2%	11.2%	11.3%	**FYTS:** Adolescents (grades 6-12) with current asthma
	6	Current Prevalence of Asthma (Adults)[1]	8.2%	8.2%	8.0%	**BRFSS:** Adults with current asthma
	7	Asthma and Feelings of Hopelessness among Adolescents	29.0%	28.5%	32.8%	**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
	8	Asthma and Depression	44.1%	44.0%	37.7%	**ACBS:** Adults with current asthma that report a medical diagnosis of depression
	9	Sleep Loss Due to Asthma Symptoms	67.0%	61.9%	60.9%	**ACBS:** Adults with current asthma who experienced difficulty staying asleep due to asthma symptoms on one or more of the past 30 nights
	10	Age-Adjusted Asthma Hospitalization Rate per 10,000 (Primary Diagnosis)[1,2]	14.3	14.1	13.6	**AHCA:** Floridians discharged from a hospital with the primary diagnosis of "asthma" (primary diagnosis code 493)
	11	Age-Adjusted Asthma Emergency Department Visit Rate per 10,000 (Primary Diagnosis)[2]	58.8	58.3	60.7	**AHCA:** Floridians discharged from an emergency room with the primary diagnosis of "asthma" (primary diagnosis code 493)
	12	Age-Adjusted Asthma Death Rate per 100,000 (Underlying Cause)[1,2]	0.9	0.8	0.9	**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)	17.0%	17.2%	17.8%	**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)	54.8%	61.7%	57.9%	**ACBS:** Adults with current asthma who reported having an asthma attack or episode in the past year
	15	Current Smoking among Adolescents with Asthma	9.8%	7.7%	6.6%	**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	19.7%	20.6%	21.6%	**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 every day, some days, or not at all?
	17	Exposure to Secondhand Smoke among Adolescents with Asthma	50.0%	46.5%	43.6%	**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	19.0%	15.3%	12.0%	**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	14.0%	12.7%	12.6%	**FYTS:** Adolescents with lifetime asthma who respond "Yes" to the question: Is smoking allowed inside your home?
Asthma Care and Self-Management Education Measures	20	Take a Formal Class on Asthma[2]	11.0%	7.1%	7.5%	**ACBS:** Adults with lifetime asthma who have ever taken a course or class on how to manage his/her asthma
	21	Taught about the Symptoms of Asthma[2]	64.9%	64.4%	55.9%	**ACBS:** Adults with lifetime 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	67.1%	70.6%	74.4%	**ACBS:** Adults with lifetime 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	42.8%	39.6%	42.6%	**ACBS:** Adults with lifetime 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	47.3%	41.7%	38.7%	**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	39.3%	24.9%	26.9%	**ACBS:** Adults with lifetime asthma who have ever been given an asthma action plan by a doctor or other health professional
	26	Instructed on How to Use Medication[2]	99.2%	93.7%	95.4%	**ACBS:** Adults with lifetime asthma who have been shown how to use an inhaler by a doctor or other health professional
	27	Routine Asthma Follow-up Visits[2]	86.3%	83.1%	76.4%	**ACBS:** Adults with current 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)	$786.1	$842.9	$863.7	**AHCA:** Total charges for hospitalizations with a primary diagnosis of asthma among Florida residents
	29	Asthma Emergency Department Charges (millions of dollars)	$266.4	$294.1	$347.2	**AHCA:** Total charges for emergency department visits with a primary diagnosis of asthma among Florida residents
	30	Cost as a Barrier to Routine Doctor Visit	17.3%	20.0%	20.1%	**ACBS:** Adults with current 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	22.7%	32.5%	28.3%	**ACBS:** Adults with current 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[2]	43.5%	46.9%	34.1%	**ACBS:** Adults with current 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

Note - For detailed descriptions of the data sources and measures, refer to the Florida Asthma Surveillance Plan -
http://www.floridahealth.gov/diseases-and-conditions/asthma/_documents/surveillance-plan-09-14.pdf