

## INTRODUCTION

Currently the Florida Department of Health Florida Asthma Coalition (FAC) has identified key strategic goals to reduce asthma-related health disparities. As identified in the key findings from the 2013 Burden of Asthma in Florida, the Florida Department of Health estimates there are greater than 2.6 million children and adults in Florida with asthma which has significantly increased since the previous report last year. Only one in three children with asthma has received an Asthma Action Plan and only one in ten children has received education and training on how to manage his or her disease. Several programs exist that utilize validated education and training modules to improve the safety and management of children with asthma, such as American Lung Association's Open Airways For Schools® and the FAC Asthma-Friendly Child Care Centers and Schools Recognition Programs.

## OBJECTIVES

- To rank and identify contributing factors to pediatric asthma rates in Hillsborough County, FL.
- To develop a weighed matrix and geographic representation of priority zip codes with increased asthma-related risks in pediatric populations that may benefit from a validated school-based asthma curriculum in Hillsborough County, FL.

## METHODS

Recruit two student pharmacist interns to perform data mining and surveillance analysis. Determine characteristics reflective of the burden of disease for asthma in the target population by synthesizing asthma-related reports, databases and service programs. Utilize prevalence, air quality, and income as community characteristics that may have an effect on the burden of disease in a targeted geographic region. Synthesize a weighted evaluation matrix using data from 2009-2013 emergency department (ED) visits and hospitalizations in Hillsborough County with a primary diagnosis of asthma to rank priority zip codes by risk and need for clinical interventions and school-based asthma services and education.

## CONCLUSIONS

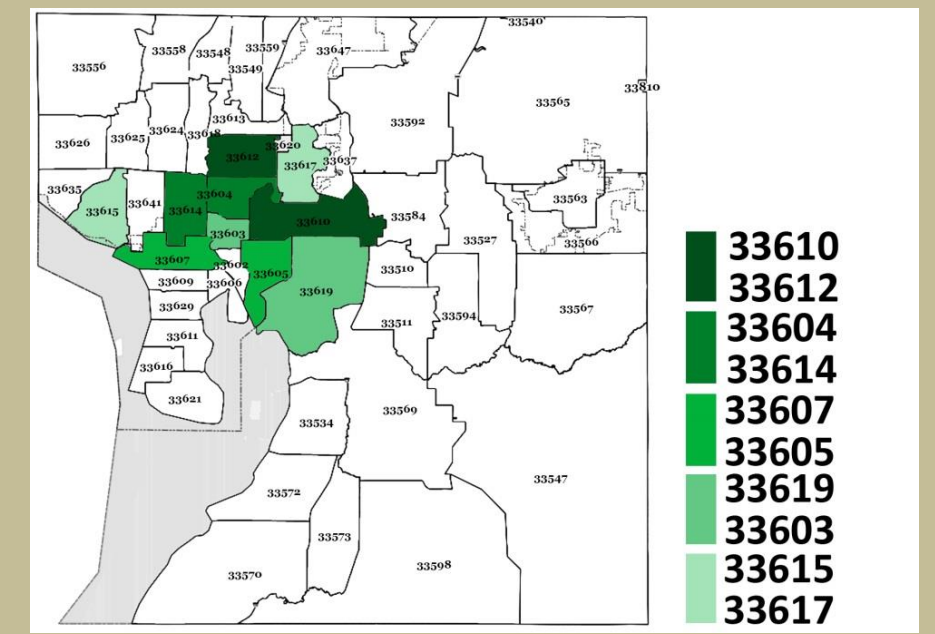
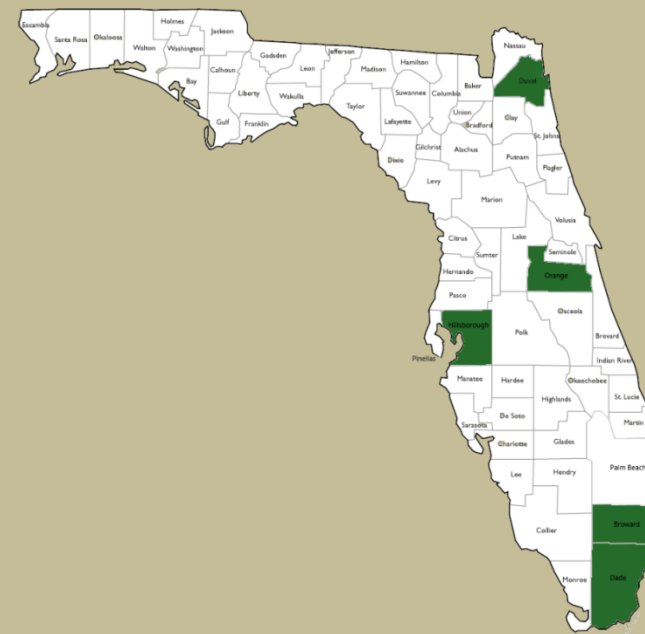
While there are programs available that have demonstrated success in improving the safety and management of children with asthma in Florida, their accessibility in Hillsborough County is limited at best as there are currently no schools in Hillsborough County that are regarded as "asthma friendly" by the Florida Asthma Coalition. Although there is an apparent need for these types of programs that can influence the quality of life for children with asthma in Hillsborough County, disparities in access to resources persist.

## REFERENCES

- Florida Department of Health, Division of Community Health Promotion, Bureau of Chronic Disease Prevention, Florida Asthma Program. Burden of Asthma in Florida, 2013.
- Florida Public Health Tracking System. Florida Public Health Tracking System. <http://www.floridatracking.com/healthtrack/fl/dealindicator.aspx?pageid=11500>. 2014.
- U.S. Census Bureau; Census 2010-2014, American Community Survey 5-Year Estimates ; generated by Kristal Urena; using American FactFinder; June 2016.
- Forrest J, Farrington K. Asthma Data for Hillsborough County by Zip Code.

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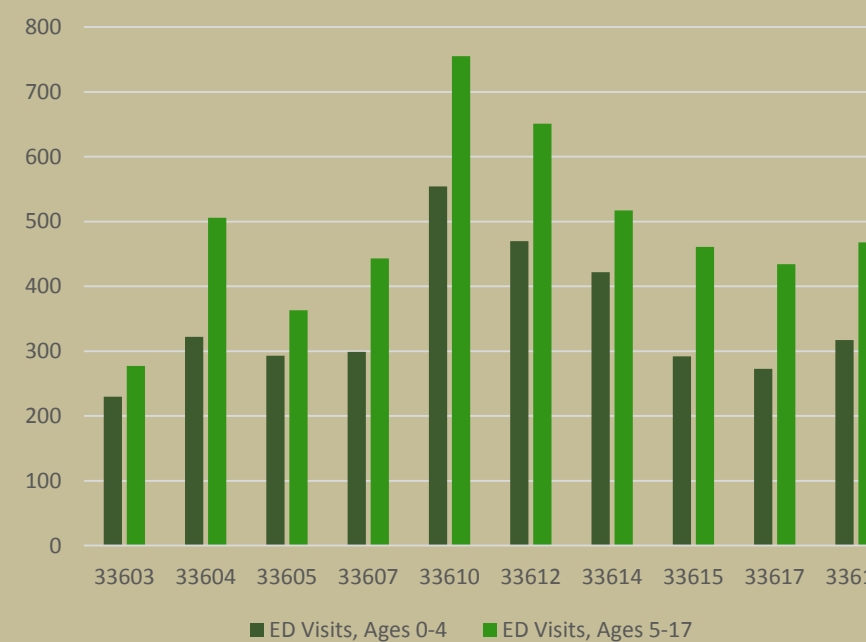
## RESULTS



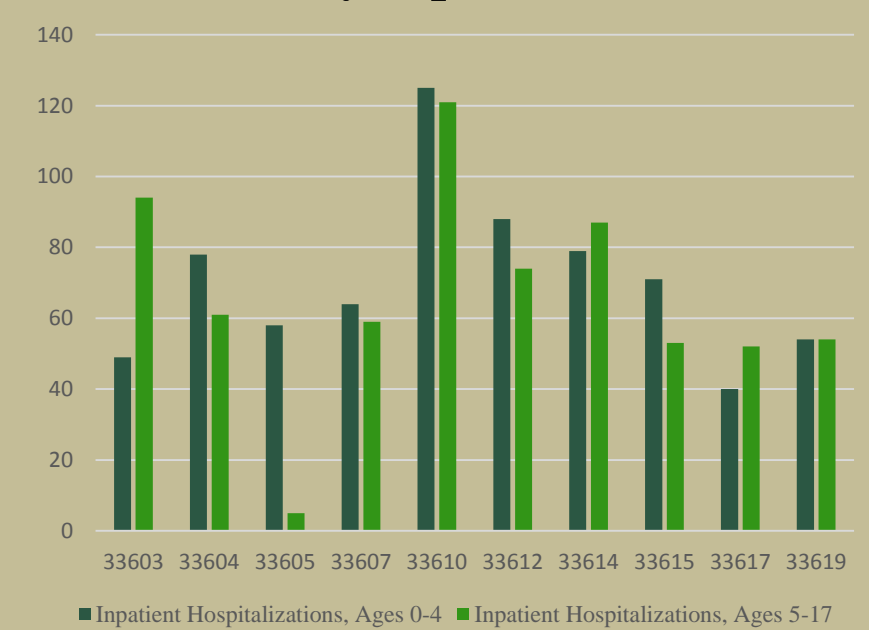
Weighted Evaluation Matrix

	Emergency Department (ED) Visits	Hospitalizations	Emergency Department (ED) Visits among children (0-4)	Emergency Department (ED) Visits among children (5-17)	Inpatient Hospitalizations among children (0-4)	Inpatient Hospitalizations among children (5-17)	Total Points
33610	9	8	10	10	10	10	57
33612	8	5	9	9	9	7	47
33604	4	7	7	7	7	5	37
33614	3	1	8	8	8	8	36
33607	7	9	5	4	5	4	34
33605	10	10	4	2	4	0	30
33619	5	2	6	6	3	3	25
33603	6	6	1	0	2	9	24
33615	0	0	3	5	6	2	16
33617	0	0	2	3	1	1	7
33511	0	0	0	1	0	6	7

Emergency Department (ED) Visits among Children with a Primary Diagnosis of Asthma by Zip Code



Inpatient Hospitalizations among Children with a Primary Diagnosis of Asthma by Zip Code



Florida State of Air Report

County	Grade
Broward	B
Duval	B
Hillsborough	F
Miami-Dade	B
Orange	D
Palm Beach	B

Mean and Median Incomes of Top 10 Zip Codes

