



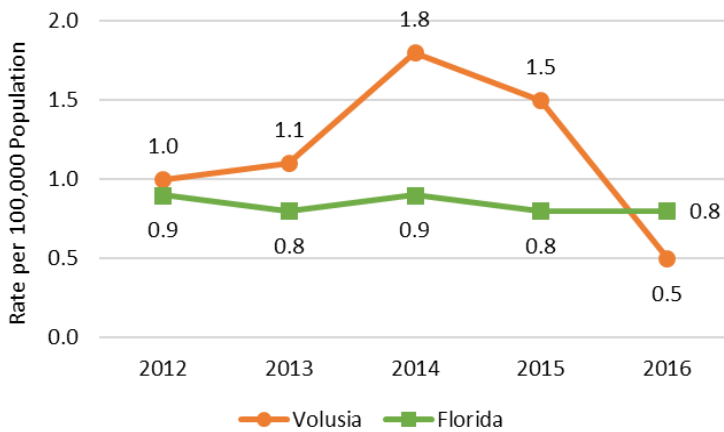
PUBLIC HEALTH DATA BRIEF



ASTHMA IN VOLUSIA COUNTY

The Centers for Disease Control and Prevention (CDC) defined asthma as a disease that affects the lungs causing repeated episodes of wheezing, breathlessness, tightness of the chest, and cough in the early morning or at night. Asthma affects people of every age, gender, and race/ethnicity. However, disparities exist in the disease and its mortality, mainly for minority and low-income residents. In 2016, for the first time in over 20 years, Volusia County had a lower age-adjusted asthma death rate than the state of Florida. Healthy People 2020 (HP2020) reports that currently more than 25 million people in the United States have asthma.

**Asthma Age-Adjusted* Death Rates
Volusia County and Florida, 2012-2016**



- ↑ Volusia County’s asthma death rate was higher than Florida’s in four of the five years from 2012 to 2016.
- ↑ Volusia’s asthma death rate peaked in 2014 then decreased 72 percent by 2016.

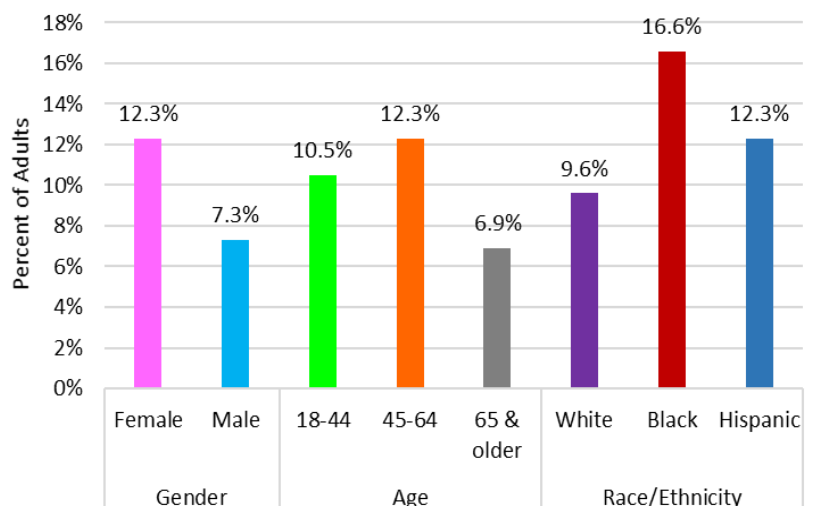
- ➔ The percent of women who had asthma was 1.7 times higher than men.
- ➔ Adults 65 and older were less likely to have asthma than those 18-44 and 45-65 years of age.
- ➔ Non-Hispanic black adults with asthma were 1.7 times more likely to have asthma than non-Hispanic white adults .

**Percentage of Adults with Asthma by Income,
Volusia County, 2010 -2016**

Annual Income	2010	2013	2016
Less than \$25,000	7.3%	12.9%	11.6%
\$25,000-\$49,999	9.6%	9.3%	5.8%
\$50,000 or More	8.7%	9.6%	10.8%

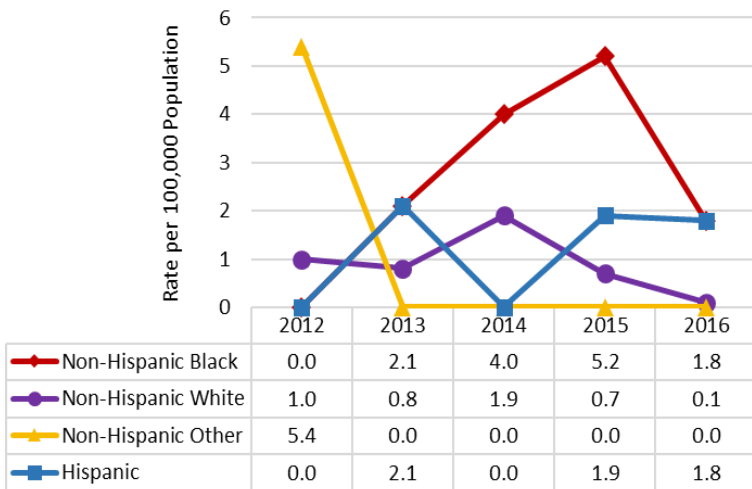
- ↑ In Volusia County, residents with annual incomes less than \$25,000 had the greatest increase (58.9%) in the percentage of adults with asthma from 2010 to 2016.
- ↑ Adults with an annual income between \$25,000-\$49,999 experienced a decrease (35.6%) in asthma from 2010 to 2016.

**Percentage of Adults with Asthma by Gender, Age, and
Race/Ethnicity, Volusia County, 2016**



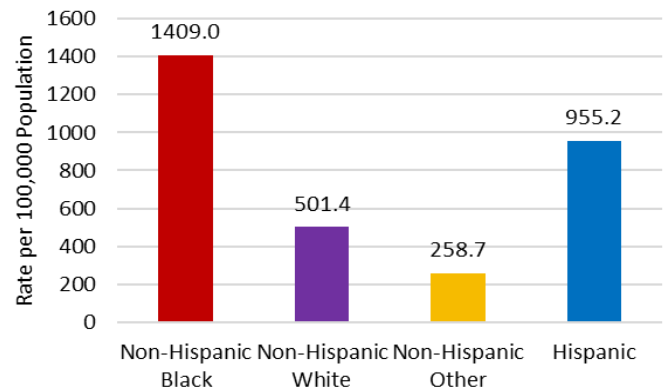
*The frequency with which health events occur is almost always related to age. The age-adjusted rate eliminates the effect of the underlying age distribution of the population, allowing for comparisons between populations regardless of their age structure.

Age-Adjusted* Asthma Death Rates by Race/Ethnicity, Volusia County, 2012-2016



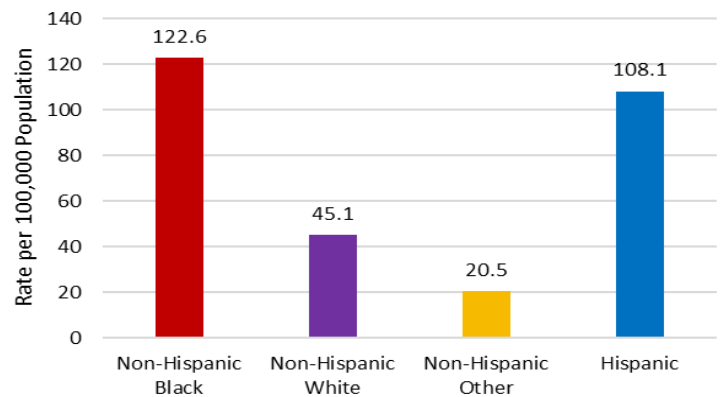
↑ Non-Hispanic black residents died from asthma at higher rates in four of the five years.

Age-Adjusted* Rates for ED Visits due to Asthma by Race/Ethnicity Volusia County, 2016



↑ The age-adjusted ED visits rates for black residents was almost three times (2.8) higher than rates for non-Hispanic white residents .

Age-Adjusted* Rates for Hospitalizations due to Asthma by Race/Ethnicity Volusia County, 2016



↑ The age-adjusted asthma hospitalization rate for black residents was six times higher than the lowest rate (20.5) among residents of other racial/ethnic groups.

Data Sources:

1. Agency for Health Care Administration (AHCA), Hospital and Emergency Department Datasets, 2016
2. Behavioral Risk Factor Surveillance System (BRFSS), Volusia County, 2016
3. Florida Department of Health, Bureau of Vital Statistics, 2012-2016
4. Healthy People 2020, www.healthypeople.gov

Percentages of Asthma Deaths, ED Visits, and Hospitalizations by Race/Ethnicity, Volusia County, 2016

Race/Ethnicity	Population	Deaths	ED Visits	Hospitalizations
Non-Hispanic Black	10.3%	33.3%	31.6%	26.1%
Non-Hispanic White	73.4%	33.3%	45.4%	49.5%
Non-Hispanic Other	3.7%	0.0%	1.7%	1.4%
Hispanic	12.6%	33.3%	21.3%	23.0%

← Non-Hispanic black residents and Hispanic Residents were over represented in asthma deaths, emergency department visits, and hospitalizations compared to the general population percentages in 2016.