

2016 GEORGIA DATA SUMMARY | ADULT ASTHMA

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. During asthma episodes, the airway muscles tighten and the airway lining swells, thus making the airways very narrow, leading to difficulty in breathing. Asthma symptoms include wheezing, coughing, chest tightness, and shortness of breath¹.

ASTHMA PREVALENCE^a:

In 2014, the overall asthma prevalence among adult Georgians (persons aged 18 years and older) was 8.4%. Differences in asthma prevalence existed by demographic characteristics.

- Asthma prevalence was significantly lower among males (6.7%; 95% CI: 5.5-8.2) than females (10.0%; 95% CI: 8.7-11.4).
- Asthma prevalence was nearly four times higher in Hispanic women than in Hispanic men (Figure 1).
- There was no significant difference of asthma prevalence between age groups, although it was highest among those aged 55-64 years (9.9%; 95% CI: 8.1-12.1).
- Asthma prevalence was highest among adults whose annual household income was less than \$15,000 (12.5%), and similar to that among adults with an annual household income of \$15,000-\$24,999 (11.6%). Asthma was more prevalent in adults with a household income greater than \$75,000 than among those with incomes between \$25,000 and \$74,999 (Figure 2). Prevalence was significantly higher among individuals with less than a high school diploma (12.0%; 95% CI: 9.2, 15.6) than among college graduates (6.7%; 95% CI: 5.5, 8.1).

There was no significant difference in asthma prevalence between those with (8.5%) or without (8.1%) health insurance

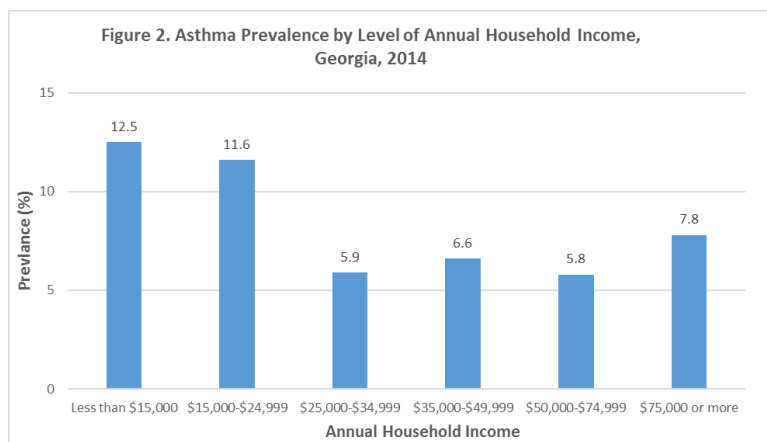
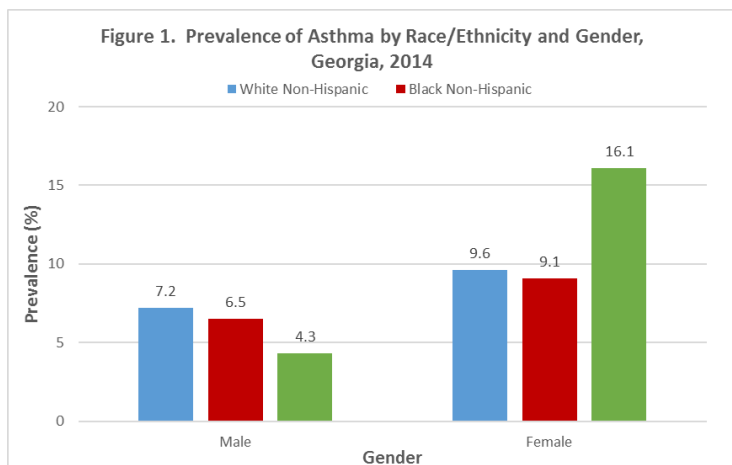
ASTHMA AND OTHER CONDITIONS^a:

- In Georgia during 2014, the prevalence of asthma was significantly higher among those who were obese (10.7%; 95% CI: 8.9, 12.7) than those who were not obese (7.2%; 95% CI: 6.2, 8.4).
- Asthma prevalence was also significantly higher among current smokers (13.1%; 95% CI: 10.3, 16.5) than among those who were not current smokers (7.8%; 95% CI: 6.9, 8.9).
- Asthma prevalence was significantly lower among those who reported they exercised in the last 30 days (7.6%; 95% CI: 6.6, 8.7) than those who reported no exercise or physical activity in the last 30 days (11.0%; 95% CI: 9.1, 13.3).
- During 2014, there was no significant difference in flu vaccination for Georgia adults with asthma (36.9%, 95% CI: 31.4, 42.8) compared to those without asthma (34.1%, 95% CI: 32.4, 35.8).

ASTHMA CONTROL^b:

From the Asthma Call Back Survey (ACBS), three measures are used to assess asthma control: 1) the number of days in a month that asthma symptoms occurred; 2) the number of nighttime awakenings in a month; and 3) and the use of short acting beta agonists (SABA).

- In Georgia during the period from 2011 to 2014, 40% of adults with active asthma had their asthma well controlled; 27% had their asthma not well controlled; and 33% had their asthma very poorly controlled. Definitions for asthma control are shown at the end of this document.
- About 30% of adults with active asthma had 9 or more nights in the past 30 days when they had difficulty sleeping due to asthma.
- Only 27% of adults with asthma had an asthma action plan.



OCCUPATION AND ASTHMA^b:

- During the period from 2011-2014 in Georgia, 29% of adults with asthma indicated they were unable to work or carry out usual activities on one or more days in the past 12 months due to asthma.
- During the same period, 8% of Georgia adults with asthma had been told by a health professional that their asthma was work-related.

ASTHMA HOSPITALIZATION^c:

In Georgia during 2014, there were 6,601 asthma related hospitalizations (a rate of 87 per 100,000) among adults 18 years and older.

- In 2014, the total charges for asthma-related hospitalizations among adults 18 years and older were \$155.3 million. This is a \$4.6 million increase in total charges (unadjusted) compared to total asthma-related hospital charges in 2012.
- As age increased (Figure 3), the rate of asthma hospitalizations also increased (25/100,000 for those 18-24 years vs 149/100,000 for those 65+ years)
- The overall rate of hospitalizations due to asthma was more than two times higher among females (121/100,000) than among males (49/100,000).
- In each age group, the rate of asthma hospitalization was more than two times higher for blacks (141/100,000) than whites (63/100,000). (Figure 4)

ASTHMA EMERGENCY DEPARTMENT (ED) VISITS^d:

In Georgia during 2014, there were 31,595 ED visits due to asthma for adults, a rate of 415 per 100,000.

- In 2014, the total charges for asthma-related ED visits among adults 18 years and older were \$82.3 million. This is a \$14.2 million increase in total charges (unadjusted) compared to total asthma-related hospital charges in 2012.
- The ED visit rate decreased with increasing age, in contrast to the asthma hospitalization rate, which increased with increasing age (Figure 5).
- The ED visit rate among adults was higher among females (507/100,000) than males (317/100,000).
- In Georgia during 2014, the overall asthma ED visit rate for blacks was about four times higher than for whites (870 vs 201/100,000; Figure 6). action plan.

Figure 3. Rate of Asthma Hospitalizations Among Adults, by Age and Sex, Georgia, 2014

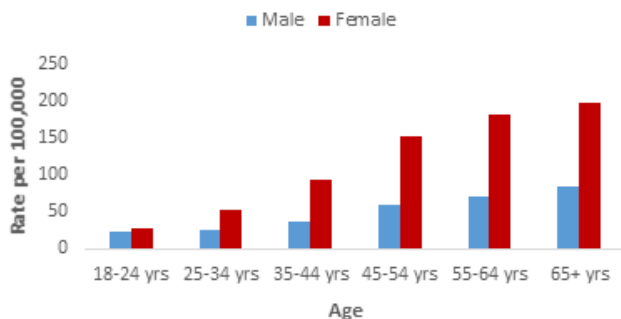


Figure 5. Rate of ER visits Among Adults due to Asthma, by Age and Sex, Georgia, 2014

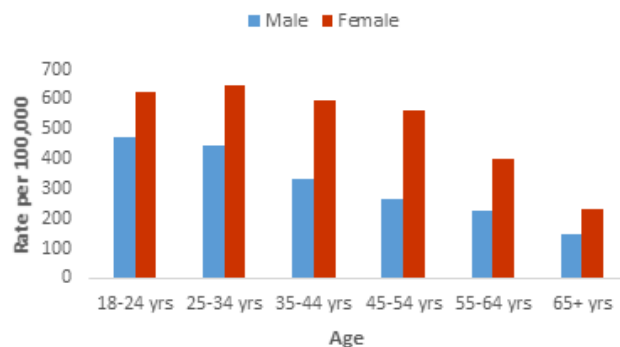


Figure 4. Rate of Asthma Hospitalizations Among Adults, by Age and Race, Georgia, 2014

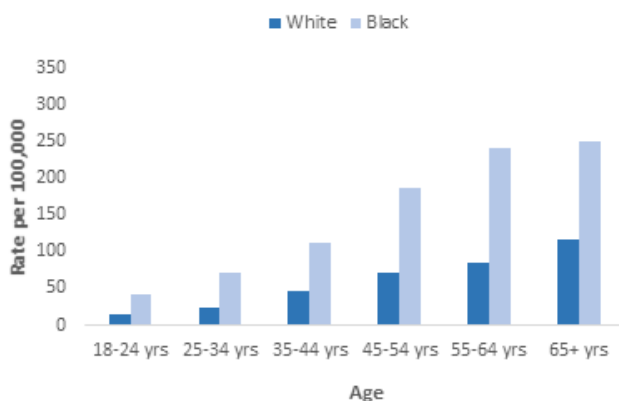
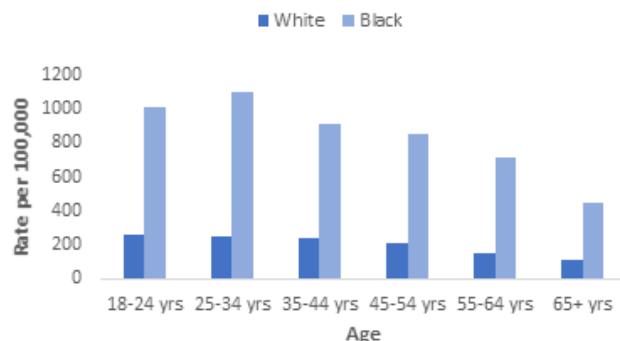


Figure 6. Rate of ER visits Among Adults due to Asthma, by Race and Sex, Georgia, 2014



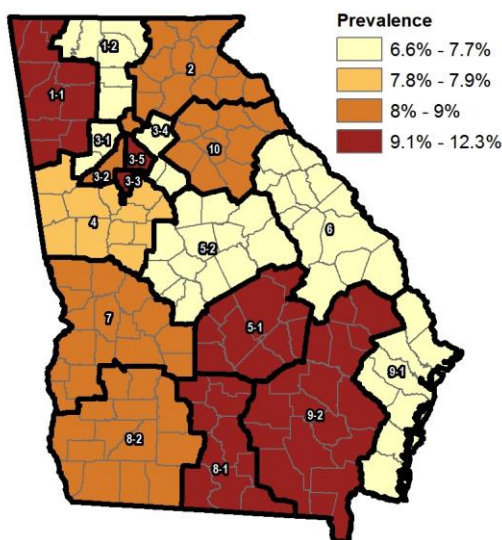
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REGIONAL DIFFERENCES IN ASTHMA PREVALENCE^{a-d}:

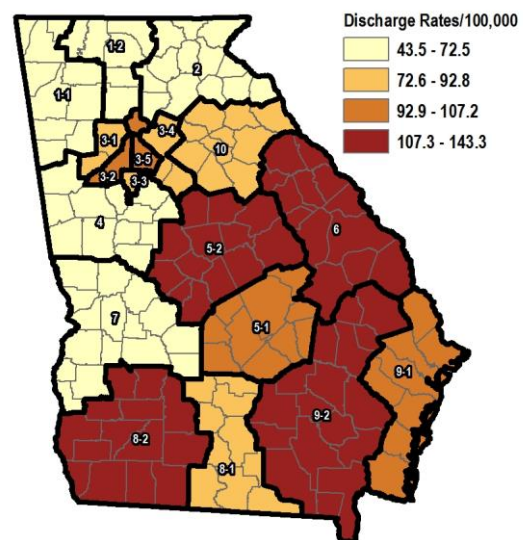
In Georgia, adult asthma prevalence differed by region (Public Health District).

- From 2012-2014, 7 of 18 Districts had an asthma prevalence higher than 8.5%. The five Public Health Districts with the highest prevalence were Dublin (5-1), Waycross (9-2), Jonesboro (3-3), Valdosta (8-1) and Dekalb (3-5). (Figure 7).
- In 2014, the five Public Health Districts with the highest asthma hospitalization rates were Macon (5-2), Albany (8-2), Augusta (6), Waycross (9-2), and Dekalb (3-5).
- In 2014, the five Public Health Districts with the highest asthma ED visit rates were Jonesboro (3-3), Fulton (3-2), Albany (8-2)

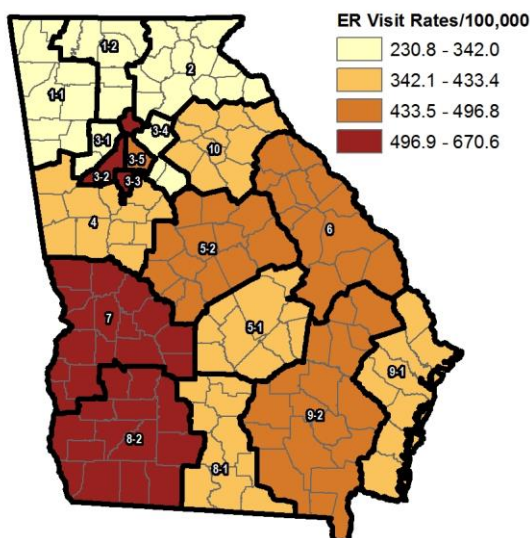
Map 1. Asthma Prevalence, by Health District, Georgia, 2012-2014



Map 2. Asthma Hospitalization Rates, by Health District, Georgia, 2012-2014



Map 3. Asthma ED Visit Rates, by Health District, Georgia, 2012-2014



Health Districts in Georgia

- | | |
|-----|----------------------------|
| 1-1 | Northwest (Rome) |
| 1-2 | North Georgia (Dalton) |
| 2 | North (Gainesville) |
| 3-1 | Cobb/Douglas |
| 3-2 | Fulton |
| 3-3 | Clayton County (Jonesboro) |
| 3-4 | East Metro (Lawrenceville) |
| 3-5 | Dekalb |
| 4 | LaGrange |
| 5-1 | South Central (Dublin) |
| 5-2 | North Central (Macon) |
| 6 | East Central (Augusta) |
| 7 | West Central (Columbus) |
| 8-1 | South (Valdosta) |
| 8-2 | Southwest (Albany) |
| 9-1 | Coastal (Savannah) |
| 9-2 | Southeast (Waycross) |
| 10 | Northeast (Athens) |

Data Sources

a. 2014 Georgia Behavioral Risk Factor Surveillance Survey (BRFSS)

The BRFSS is a stratified random-digit dial telephone inter-view conducted among Georgia non-institutionalized residents 18 years and older to ascertain their health conditions, behaviors, and the use of preventive services. The survey is conducted in conjunction with the Centers for Disease Control and Prevention (CDC).

b. 2011-2014 Georgia Asthma Call Back Survey (ACBS)

This survey is conducted approximately two weeks after the BRFSS. BRFSS respondents who report ever being diagnosed with asthma are eligible to participate in the asthma call-back survey. However, call back is made only to individuals who consented to be called back for this special survey.

c. 2012 Georgia Hospital Inpatient Discharge Data

Hospitalization data are based on hospital discharge data for Georgia residents who were hospitalized in non-federal acute care hospitals with asthma as the primary diagnosis. The ICD-9 codes (493.0-493.9) were used to select hospitalizations.

d. 2012 Georgia Emergency Department Visit Data

Emergency department (ED) visit data are from Georgia residents who were seen in the ED of non-federal acute care hospitals in Georgia with asthma as the primary diagnosis. The ICD-9 codes (493.0-493.9) were used to select ED visits.

Definitions:

Well controlled asthma – Had asthma symptoms ≤ 8 days in the past 30 days, or ≤ 2 days of nighttime awakening in past 30 days, or an average of ≤ 0.29 uses of a short acting beta-agonist (SABA) per day.

Not well controlled asthma – Had asthma symptoms more than 8 days in the past 30 days but not throughout the day, or between 3 and 12 days of nighttime awakening in past 30 days, or an average of 0.29 to 1.99 uses of a SABA per day.

Very poorly controlled asthma – Had asthma symptoms everyday in the past 30 days and throughout the day, or ≥ 13 days of nighttime awakening in the past 30 days or ≥ 2 use of a SABA per day.

Note: These definitions are based on the Expert Panel Report (EPR-3) recommendations by the National Asthma Education and Prevention Program (NAEPP).

Statistical Significance: In this report, estimates were considered statistically significantly different if their 95% confidence intervals did not overlap.