

2016 GEORGIA DATA SUMMARY | ASTHMA IN CHILDREN

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:

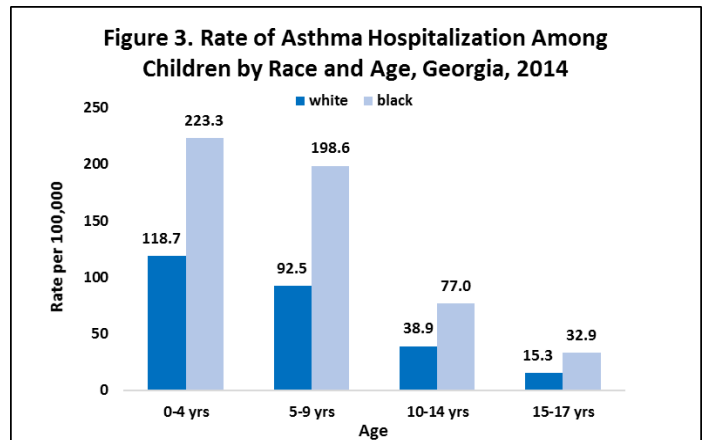
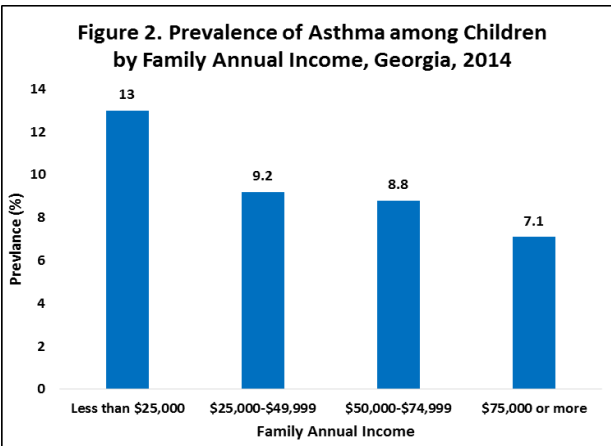
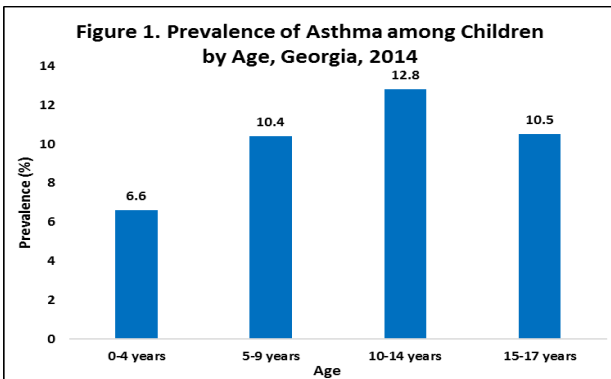
In 2014, the overall asthma prevalence among children in Georgia (aged 0-17 years) was 10.2%. Overall, 13.9% of children in Georgia had been told at some point they had asthma. Differences in asthma prevalence existed by demographic characteristics.

- Asthma prevalence was significantly higher among boys (14.1%; 95% CI: 11.1-17.8) than among girls (5.6%; 95% CI: 3.9-7.9).
- Asthma prevalence was lowest among younger children aged 0-4 years old (6.6%) and highest in children 10-14 years old (12.8%) (Figure 1).
- Asthma prevalence was higher among children whose family annual household income was less than \$25,000 (13.0%; 95% CI: 9.2-18.1) than among children from families making \$75,000 or more per year (7.1%; 95% CI: 4.7-10.5) (Figure 2).

ASTHMA HOSPITALIZATIONS:

In 2014, there were 2,452 asthma-related hospitalizations among children 0-17 years of age in Georgia.

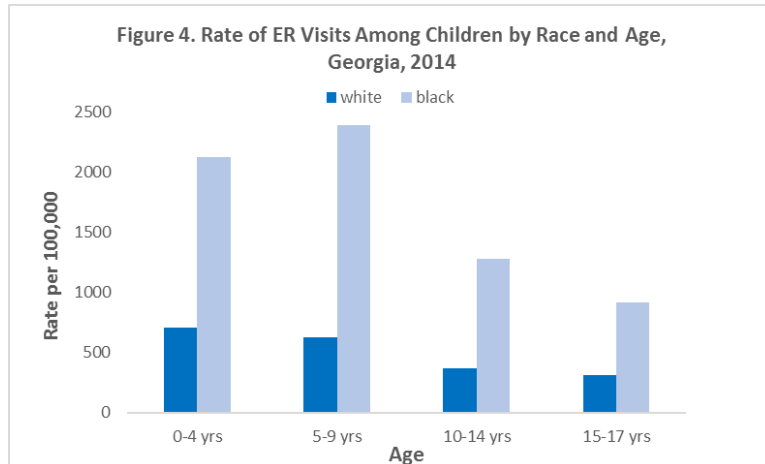
- These hospitalizations represented an overall asthma-related hospitalization rate of 98 per 100,000 per year.
- The total charges for asthma-related hospitalizations among Georgia children in 2014 amounted to \$29.6 million. This is a \$2.3 million decrease in total charges (unadjusted) compared to total asthma-related hospital charges in 2012.
- The asthma-related rate of hospitalization among children decreased as age increased (Figure 3). Children aged 0-4 years had the highest hospitalization rate (159 per 100,000). This is in contrast to the lower prevalence of asthma found among children in this age group. The discrepancy between asthma prevalence and hospitalization rates could be due to the difficulty in properly diagnosing asthma among younger children until they are hospitalized or go to the Emergency Room (ER).
- The annual rate of asthma hospitalization was higher among boys (123/100,000) than girls (73/100,000) 17 years of age and younger.
- The overall asthma hospitalization rate was two times higher for black children (142/100,000) than for white children (71/100,000). This trend was consistent by gender and across age groups (Figure 3).



ASTHMA EMERGENCY DEPARTMENT (ED) VISITS^c:

In 2014, there were 25,141 asthma-related ED visits among children 0-17 years of age in Georgia.

- This represents an overall asthma-related ED visit rate of 1009 per 100,000 per year.
- The total charges for asthma-related ED visits among children amounted to more than \$44.4 million. This was about the same amount of total charges for ED visits in 2012.
- Children 5-9 years had the highest asthma ED visit rate of 1327 per 100,000 but dropped to 550 per 100,000 in children 15 to 17 years old (Figure 4).
- The ED visit rate was higher among males (1212/100,000) than among females (797/100,000).
- The overall asthma ED visit rate was over three times higher for black children (1755/100,000) than for white children (522/100,000). This trend was consistent across genders and age groups (Figure 4).

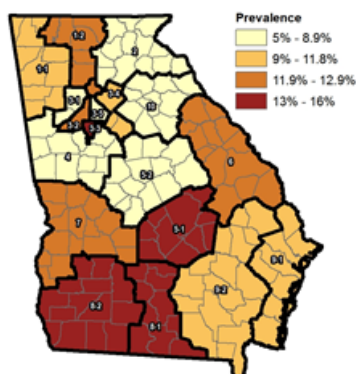


REGIONAL DIFFERENCES IN ASTHMA PREVALENCE, HOSPITALIZATIONS, AND ER VISITS^a:

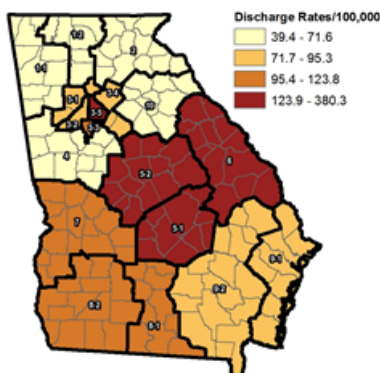
In Georgia, the rates of child asthma prevalence differed by region (Public Health District). See Figure 5.

- From 2012-2014, 10 of 18 Districts had an asthma prevalence higher than 10.5%. In four Districts, prevalence was higher than 14%: Jonesboro (3-3; 16%), Albany (8-2; 14.8%), Dublin (5-1; 14.7%), and Valdosta (8-1; 14.5%). The lowest prevalence was 5% in the Macon District (5-2).
- In 2014, Dublin (5-1) had an asthma-related hospitalization rate among children of 380 per 100,000, while in Macon (5-2) it was 176 per 100,000. These were the only two Public Health Districts (PHDs) that exceeded 175 per 100,000, compared to four PHDs that exceed that same rate in 2012.
- In 2014, six of 18 PHDs had asthma-related ED visits rates among children that exceeded 1150 per 100,000, compared to eight PHDs that exceeded that same rate in 2012. The six PHDs in 2012 with the highest asthma ED visit rates were DeKalb (3-5), Augusta (6-0), Columbus (7), Albany (8-2), Cobb (3-1) and Waycross (9-2).

Map 1. Asthma Prevalence, Among Children 0-17 Years, by Health District, Georgia, 2012-2014



Map 2. Rate of Asthma Hospitalization among Children 0-17 Years, by Health District, Georgia, 2014



Map 3. Rate of Asthma ER Visits among Children 0 - 17 Years, by Health District, Georgia, 2014

