

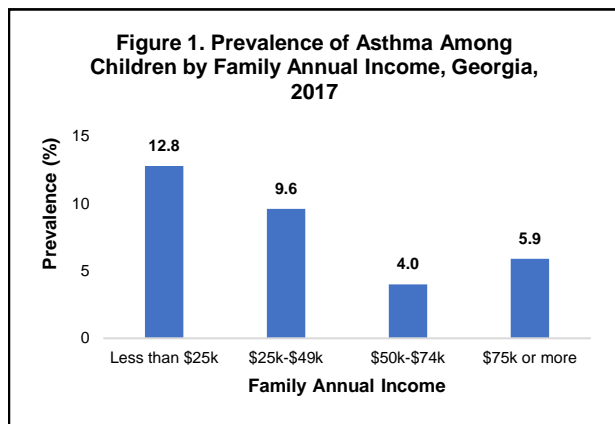
Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airways narrowing and obstruction. These episodes can range in severity from mild to life threatening¹.

ASTHMA PREVALENCE^a:

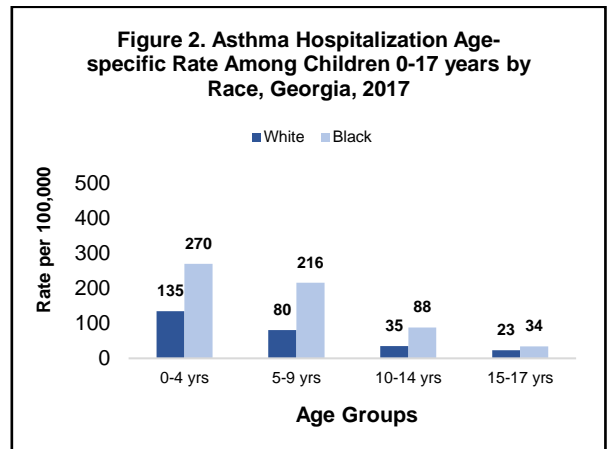
In 2017, the overall asthma prevalence among children in Georgia aged 0-17 years was 9.1%. Overall, 13.5% of children in Georgia had been told at some point in their lives that they had asthma. Differences in asthma prevalence existed by demographic characteristics.

- Boys had a higher prevalence (10.4%) of asthma than girls (7.8%), but the difference is not significant
- Non-Hispanic Blacks had a significantly higher prevalence (14.5%) of asthma compared to non-Hispanic Whites (3.4%)
- Children of non-Hispanic origin had a significant higher prevalence (10.0%) of asthma compared to those of Hispanic origin (4.1%)

Asthma prevalence was significantly higher among children whose family annual household income was less than \$25,000 than among children from families whose family income is more than \$75,000 (12.8% vs 5.9%) (**Figure 1**).



- The annual asthma hospitalization rate was higher among boys (127/100,000) than girls (80/100,000)
- The overall asthma hospitalization rate was higher for black children (162/100,000) than for white children (71/100,000). This trend was consistent across age groups (**Figure 2**)



ASTHMA EMERGENCY DEPARTMENT (ED) VISITS^c:

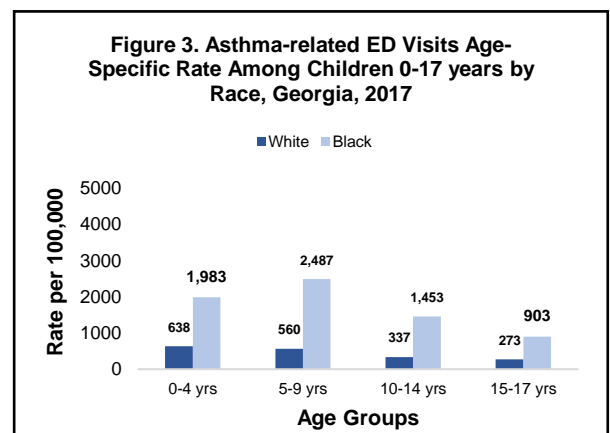
In 2017, there were 24,271 asthma-related ED visits among children 0-17 years of age in Georgia.

- This represents an overall annual asthma-related ED visit rate of 968 per 100,000
- The total charges for asthma-related ED visits among children amounted to more than \$55.7 million

ASTHMA HOSPITALIZATIONS:

In 2017, there were 2,614 asthma-related hospitalizations among children 0-17 years of age in Georgia.

- These hospitalizations represented an overall asthma-related hospitalization rate of 104 per 100,000 per year
- The total charges for asthma-related hospitalizations among Georgia children amounted to \$37.4 million
- The asthma-related hospitalization rate among children decreased as age increased (**Figure 2**). Children aged 0-4 years had the highest hospitalization rate (183 per 100,000 population)



- Children 5-9 years of age had the highest asthma ED visit rate of 1289 per 100,000 but dropped to 515 per 100,000 in children 15 to 17 years of age (**Figure 3**)
- The ED visit rate was higher among boys (1152/100,000) than among girls (776/100,000).
- The overall asthma ED visit rate was over three times higher for black children (1782/100,000) than for white children (465/100,000). This trend was consistent across each age group (**Figure 3**)

REGIONAL DIFFERENCES IN ASTHMA PREVALENCE, HOSPITALIZATION RATES, AND ED VISIT RATES:
In Georgia, child asthma prevalence, hospitalization rates and ER visit rates differed by region (Public Health District; PHD).

Prevalence: In 2015-2017, four PHDs with the highest prevalence of children asthma were Clayton County (3-3), West Central (7), South (8-1), and Southwest (8-2), with rates of 12.3%, 19.4%, 12.4, and 18.6% respectively. (**Map 1, Table 1**)

Map 1. Asthma Prevalence, Children 0-17 Years, by PHD, Georgia, 2015-2017

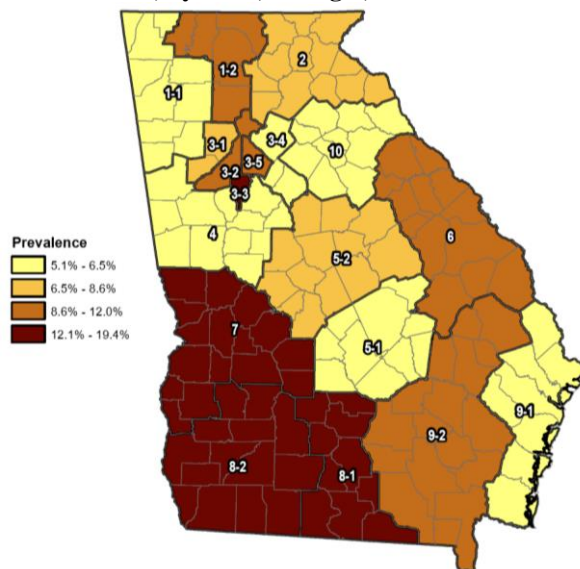


Table 1. Asthma Prevalence among children by Public Health Districts from 2015 to 2017

District	County	Prevalence
1-1 Northwest (Rome)	Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, Walker	6.2%
1-2 North Georgia (Dalton)	Cherokee, Fannin, Gilmer, Murray, Pickens, Whitefield	10.7%
2 North (Gainesville)	Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, White	8.3%
3-1 Cobb/Douglas	Cobb, Douglas	7.7%
3-2 Fulton	Fulton	10.4%
3-3 Clayton County (Jonesboro)	Clayton	12.3%
3-4 East Metro (Lawrenceville)	Gwinnett, Newton, Rockdale	5.5%
3-5 DeKalb	DeKalb	9.8%
4 LaGrange	Butts, Carroll, Coweta, Fayette, Henry, Lamar, Meriwether, Pike, Spalding, Troup, Upson	6.5%
5-1 South Central (Dublin)	Bleckley, Dodge, Johnson, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, Wilcox	5.3%
5-2 North Central (Macon)	Baldwin, Bibb, Crawford, Hancock, Houston, Jasper, Jones, Monroe, Peach, Putnam, Twiggs, Washington, Wilkinson	8.6%
6 East Central (Augusta)	Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, Wilkes	10.0%
7 West Central (Columbus)	Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Muscogee, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor, Webster	19.4%
8-1 South (Valdosta)	Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, Turner	12.4%
8-2 Southwest (Albany)	Baker, Calhoun, Colquitt, Decatur, Dougherty, Early, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, Worth	18.6%
9-1 Coastal (Savannah)	Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh	5.8%
9-2 Southeast (Waycross)	Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, Wayne	10.0%
10 Northeast	Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, Walton	5.1%

Hospitalizations: In 2017, six PHDs with the highest asthma hospitalization rates were South Central (5-1), DeKalb (3-5), Clayton County (3-3), Fulton (3-2), North Central (5-2), and Cobb/Douglas with rates of 236, 190, 177, 177, 127 and 124 per 100,000 respectively. (Map 2, Table 2)

Map 2. Asthma Hospitalization, Children 0-17 Years, by PHD, Georgia, 2017

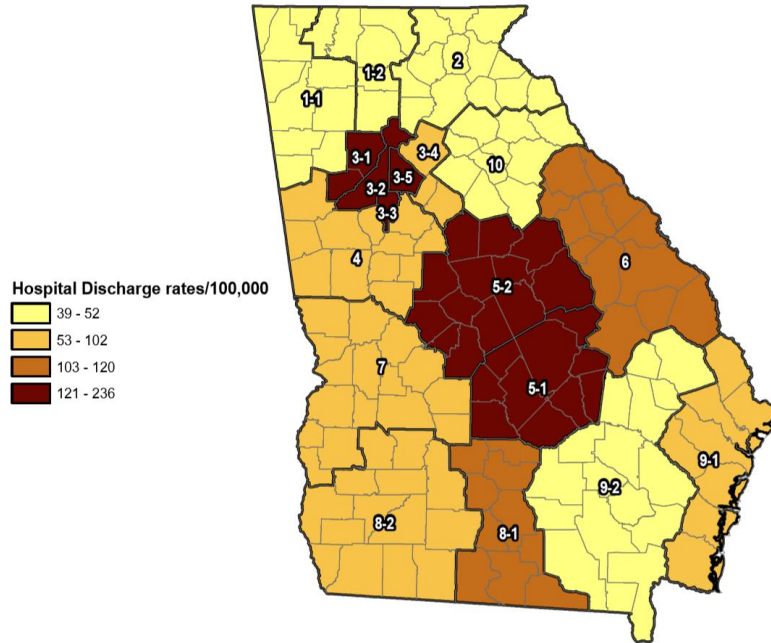


Table 2. Asthma Hospitalization among children by Public Health Districts in 2017

District Name	County	Hospitalization Rate (per 100,000)	Total Numbers
1-1 Northwest (Rome)	Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, Walker	47	75
1-2 North Georgia (Dalton)	Cherokee, Fannin, Gilmer, Murray, Pickens, Whitefield	47	54
2 North (Gainesville)	Banks, Dowson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, White	39	67
3-1 Cobb/Douglas	Cobb, Douglas	124	272
3-2 Fulton	Fulton	177	410
3-3 Clayton County (Jonesboro)	Clayton	177	141
3-4 East Metro (Lawrenceville)	Gwinnett, Newton, Rockdale	90	271
3-5 DeKalb	DeKalb	190	331
4 LaGrange	Butts, Carroll, Coweta, Fayette, Henry, Lamar, Meriwether, Pike, Spalding, Troup, Upson	81	169
5-1 South Central (Dublin)	Bleckley, Dodge, Johnson, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, Wilcox	236	74
5-2 North Central (Macon)	Baldwin, Bibb, Crawford, Hancock, Houston, Jasper, Jones, Monroe, Peach, Putnam, Twiggs, Washington, Wilkinson	127	157
6 East Central (Augusta)	Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, Wilkes	111	129
7 West Central (Columbus)	Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Muscogee, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor, Webster	102	86
8-1 South (Valdosta)	Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, Turner	117	72
8-2 Southwest (Albany)	Baker, Calhoun, Colquitt, Decatur, Dougherty, Early, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, Worth	98	82
9-1 Coastal (Savannah)	Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh	86	126
9-2 Southeast (Waycross)	Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, Wayne	44	38
10 Northeast	Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, Walton	52	60

ED Visits: In 2017, six PHDs with the highest asthma ED visit rates were DeKalb (3-5), Fulton (3-2), East Central (6), Clayton County (3-3), West Central (7) and Cobb/Douglas (3-1) with rates of 1589, 1466, 1370, 1305, 1119, and 1116 per 100,000 respectively. (Map 3)

Map 3. Asthma ED Visits, Children 0-17 Years, by PHD, Georgia, 2017

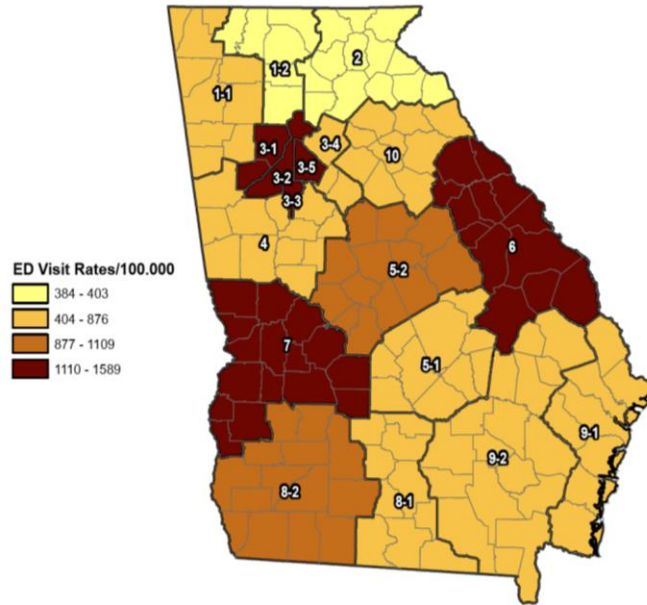


Table 3. Asthma ED visits rate among children by Public Health Districts in 2017

District Name	County	ED Visit Rate (per 100,000)	Total Numbers
1-1 Northwest (Rome)	Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, Walker	683	1101
1-2 North Georgia (Dalton)	Cherokee, Fannin, Gilmer, Murray, Pickens, Whitefield	384	442
2 North (Gainesville)	Banks, Dowson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union, White	403	686
3-1 Cobb/Douglas	Cobb, Douglas	1116	2441
3-2 Fulton	Fulton	1466	3404
3-3 Clayton County (Jonesboro)	Clayton	1305	1038
3-4 East Metro (Lawrenceville)	Gwinnett, Newton, Rockdale	863	2600
3-5 DeKalb	DeKalb	1589	2771
4 LaGrange	Butts, Carroll, Coweta, Fayette, Henry, Lamar, Meriwether, Pike, Spalding, Troup, Upson	711	1477
5-1 South Central (Dublin)	Bleckley, Dodge, Johnson, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler, Wilcox	850	266
5-2 North Central (Macon)	Baldwin, Bibb, Crawford, Hancock, Houston, Jasper, Jones, Monroe, Peach, Putnam, Twiggs, Washington, Wilkinson	1072	1322
6 East Central (Augusta)	Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren, Wilkes	1370	1594
7 West Central (Columbus)	Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Muscogee, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor, Webster	1119	945
8-1 South (Valdosta)	Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, Turner	763	471
8-2 Southwest (Albany)	Baker, Calhoun, Colquitt, Decatur, Dougherty, Early, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, Worth	957	802
9-1 Coastal (Savannah)	Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh	837	1222
9-2 Southeast (Waycross)	Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, Wayne	876	759
10 Northeast	Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe, Walton	814	930



2018 GEORGIA DATA SUMMARY | ASTHMA IN CHILDREN

Data Sources

a. 2015-2017 Georgia Behavioral Risk Factor Surveillance System (BRFSS)

b. 2017 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. In October of 2015, medical coding for inpatient hospital discharges changed from ICD-9 CM to ICD-10 CM. The ICD-10 code: J45 was used to select hospitalizations, based on the Division of Environmental Health Science and Practice, Centers for Disease Control and Prevention (CDC) definition.

c. 2017 Georgia Emergency Department Visit Data

Emergency department (ED) visit data are based on Georgia residents who were seen in the emergency department of non-federal acute care hospitals in Georgia with asthma as the primary diagnosis. In October of 2015, medical coding for emergency room visits changed from ICD-9 CM to ICD-10 CM. The ICD-10 code: J45 was used to select ED visits, based on the Division of Environmental Health Science and Practice, Centers for Disease Control and Prevention (CDC) definition.

Additional Definitions:

Statistical Significance: In this report, estimates were considered statistically significantly different if the chi-square p-value was less than 0.05.

References

1. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Respiratory Diseases. Healthy People 2020. Washington, DC. Accessed on 2/9/2013. Available at <http://www.health.state.ga.us/pdfs/epi/cdiee/2012%20Asthma%20Surveillance%20Report.pdf>.