

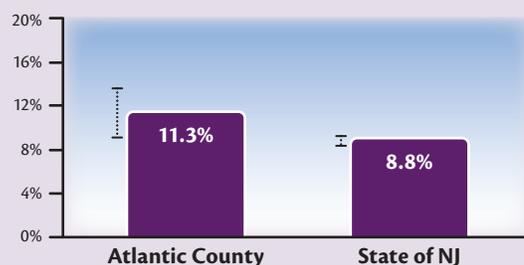
Asthma in New Jersey



Atlantic County Asthma Profile

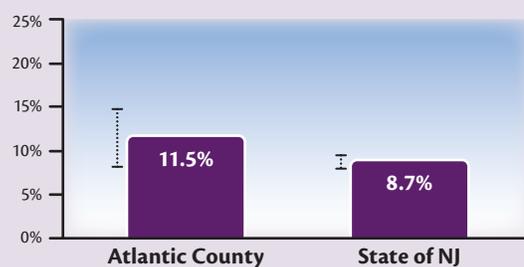
Asthma is a serious chronic disease that is marked by inflammation and bronchoconstriction in the airways. Asthma symptoms can be triggered by many factors and include shortness of breath, coughing, wheezing and chest tightness. Asthma cannot be cured, but it can be controlled. Uncontrolled asthma can lead to emergency department visits, hospitalization and even death. This series of profiles is designed to give an overview of the prevalence of asthma and hospital utilization due to asthma (emergency department and inpatient admissions) in each New Jersey county. The purpose is to inform community based organizations, health care organizations, program planners, and policy makers about geographic areas and demographic groups most affected by asthma for application in effective targeting of asthma interventions.

Figure 1 | **Estimated Percent of Adults with Current Asthma**



Population Source: NJ Behavioral Risk Factor Survey (Adults are people 18 and over; children are people under 18)

Figure 2 | **Estimated Percent of Children with Current Asthma**

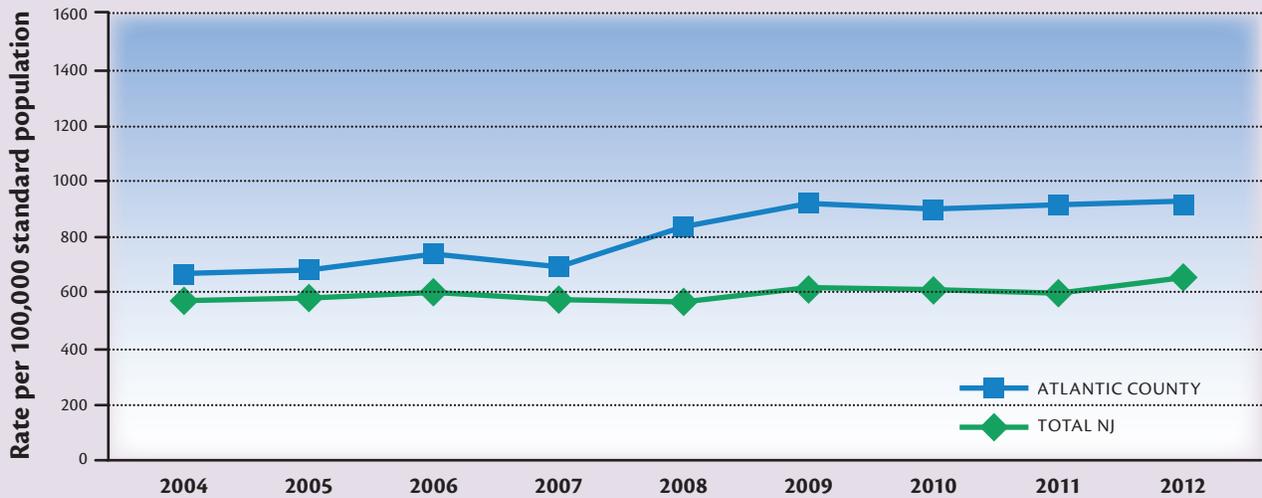


Population Source: NJ Behavioral Risk Factor Survey (Adults are people 18 and over; children are people under 18)

Prevalence

Health survey data show that for 2011–2012, an estimated 23,361 adults (11.3 percent) and 7,093 children (11.5 percent) currently had asthma in Atlantic County. This compares with an estimated 8.8 percent of adults and 8.7 percent of children in the state. Figures 1 and 2 show the 95 percent confidence intervals for the survey measurements. Taking into account measurement error, we cannot say that Atlantic County's current asthma prevalence among adults or children differed from the state average.

Figure 3 | Age-adjusted asthma ED visits per 100,000 population



Direct method of age-adjustment using the 2000 U.S. standard population
 Data source: 2004–2012 New Jersey ED Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

Emergency Department (ED) Visits¹

With appropriate management, asthma can be controlled so that most visits to the ED are avoided. In 2012, residents of Atlantic County had 2,367 total asthma ED visits, or 859 per 100,000 residents, compared with the state average of 637 asthma ED visits per 100,000 residents. Atlantic County contains 3.1 percent of the state’s population and accounted for 4.2 percent of the state’s asthma ED visits in 2012. Figure 3 shows Atlantic County’s

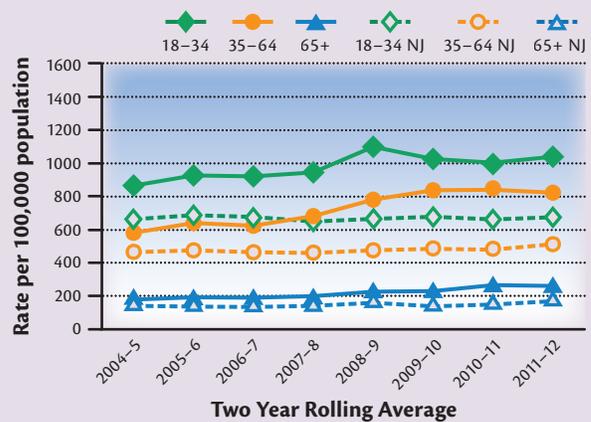
asthma ED visit rates compared with the overall rate in the state of New Jersey for the years 2004–2012 (adjusted to standardize for age differences in the population). Atlantic County’s rate of asthma ED visits was above the state average by 12 to 49 percent during the period, and increased by 38 percent over the period, compared with a 14 percent increase in the state average.

Figure 4 | Asthma ED visits per 100,000 population for children, Atlantic County and State of NJ



Data source: 2004–2012 New Jersey ED Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

Figure 5 | Asthma ED visits per 100,000 population for adults, Atlantic County and State of NJ

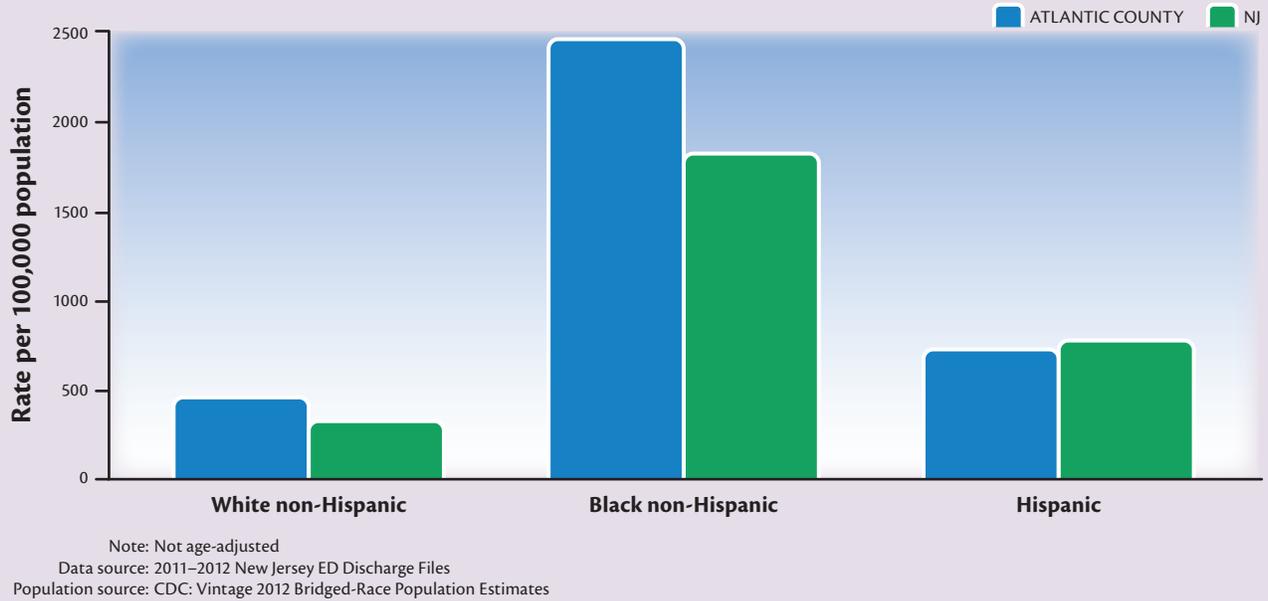


Data source: 2004–2012 New Jersey ED Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

Asthma ED visits tend to vary by age, with children having higher visit rates than adults. Figures 4 and 5 show asthma ED visit rates per 100,000 population for Atlantic County children and adults, and children and adults in the state of New Jersey from 2004–2012 (rolling averages are used for comparability because of low numbers in some age groups in some counties). Rates for all age groups grew faster than the state average over the period,

and all groups ended the period above their state averages. The largest relative increase was in rates for adults ages 35–64, which increased by 45 percent over the period, compared with a nine percent increase in the state average for that age group. The smallest relative increase was in rates for adults 18–34, which increased 20 percent over the period, compared with a one percent increase in the state average.

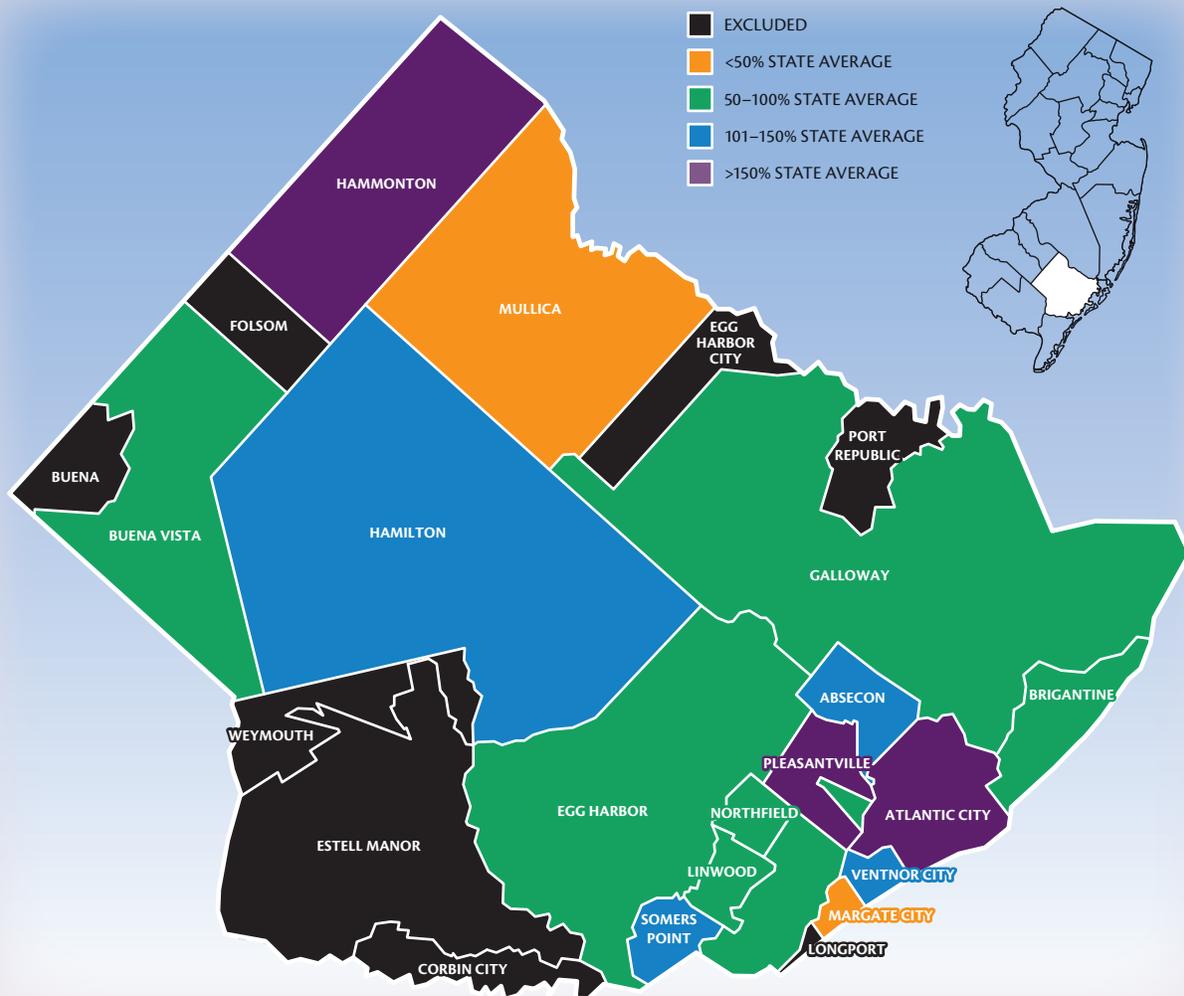
Figure 6 | Asthma ED visit rate per 100,000 population, 2011-2012



Asthma ED visits also vary quite a bit among racial and ethnic groups. Figure 6 shows asthma ED visit rates per 100,000 population for select racial/ethnic groups in Atlantic County and the state of New Jersey for 2011–2012.² The highest rate was for non-Hispanic black residents of Atlantic County, at 5.4 times the rate for non-Hispanic white residents and 3.4 times the rate for Hispanic residents. The asthma ED visit rate for Hispanic residents was 1.6 times the rate for non-Hispanic white residents. When comparing Atlantic County racial and ethnic groups to their state averages, the rate for non-Hispanic black residents was above their state average by 35 percent and the rate for non-Hispanic white residents was above their state average by 45 percent. Rates for Hispanic residents were six percent below the state average for Hispanic people.

The following map and table show the asthma ED visit rate by municipality of residence in Atlantic County from 2008–2012 (only municipalities with a population of 5,500 or greater are shown). Atlantic City, Hammonton and Pleasantville were each more than 1.5 times the state average, accounting for 60 percent of Atlantic County’s asthma ED visits while only holding 27 percent of the population. Absecon, the collective total of municipalities with populations under 5,500, Somers Point, Ventnor City and Hamilton were also above the state average.

Figure 7 | Asthma Emergency Department Visits for Atlantic County Residents, 2008–2012



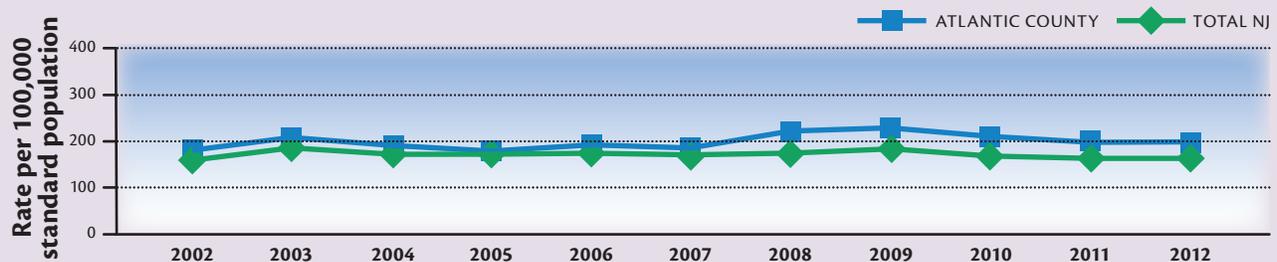
Municipality	Average population, 2008–2012	Asthma ED visits, 2008–2012	Percent of County ED visits	Percent of County Population	Asthma ED visit rate per 100,000 residents, 2008–2012	Age-adjusted* asthma ED visit rate per 100,000 residents, 2008–2012
Absecon city	8,425	313	2.7%	3.1%	743	831
Atlantic City	39,520	4,881	41.8%	14.5%	2,470	2,493
Brigantine city	10,712	160	1.4%	3.9%	299	412
Buena Vista township	7,484	199	1.7%	2.7%	532	558
Egg Harbor township	42,127	842	7.2%	15.4%	400	399
Galloway township	36,984	705	6.0%	13.5%	381	420
Hamilton township	25,716	826	7.1%	9.4%	642	628
Hammonton town	14,228	867	7.4%	5.2%	1,219	1,236
Linwood city	7,139	90	0.8%	2.6%	252	351
Margate City	7,208	59	0.5%	2.6%	164	279
Mullica township	6,117	14	0.1%	2.2%	46	49
Northfield city	8,334	114	1.0%	3.0%	274	318
Pleasantville city	19,862	1,208	10.4%	7.3%	1,216	1,176
Somers Point city	11,017	382	3.3%	4.0%	693	752
Ventnor City	11,250	326	2.8%	4.1%	580	693
Municipalities below 5,500 population	17,330	684	5.9%	6.3%	789	n/a
Atlantic County	273,454	11,670			854	890
State of NJ	8,774,778	261,822			597	622

*Direct method of age-adjustment using the 2000 U.S. standard population

Data source: 2008–2012 New Jersey ED Discharge Files

Population sources: NJ Department of Labor and Workforce Development: Municipal Estimates; US Bureau of the Census, 2010 Census Summary File 2 (QT-P2)

Figure 8 | Age-adjusted asthma hospitalizations per 100,000 population



Direct method of age-adjustment using the 2000 U.S. standard population

Data source: 2002–2012 New Jersey Hospital Discharge Files

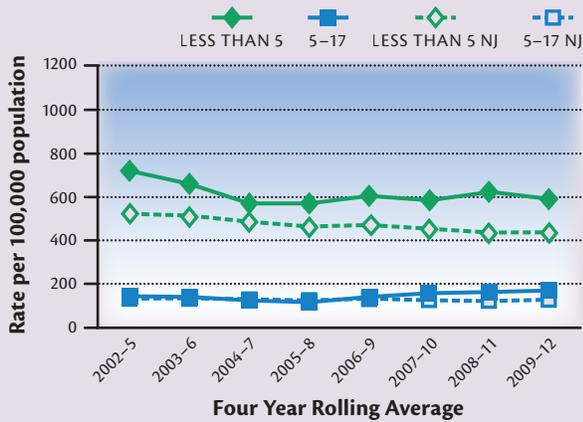
Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

Hospitalizations¹

As with ED visits, most asthma-related hospitalizations can be avoided through appropriate management. In 2012, residents of Atlantic County had 546 total asthma hospitalizations, or 198 per 100,000 residents, compared with the state average of 168 asthma hospitalizations per 100,000 residents. Atlantic County contains 3.1 percent of the state’s population and accounted for 3.7 percent of the state’s asthma hospitalizations in 2012. Figure 8 shows Atlantic

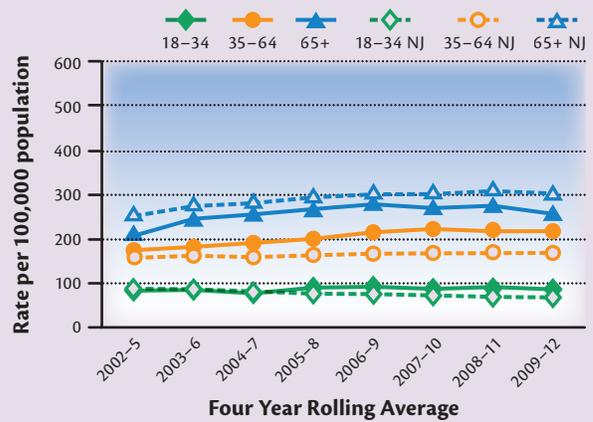
County’s asthma hospitalization rates compared with the overall rate in the state of New Jersey for the years 2002–2012 (adjusted to standardize for age differences in the population). Atlantic County’s rate was above the state average by seven percent to 31 percent over the period, and increased by six percent over the period, compared with a four percent increase in the state average.

Figure 9 | Asthma hospitalizations per 100,000 population for children, Atlantic County and State of NJ



Data source: 2002–2012 New Jersey Hospital Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates;
 July 1, 2000–July 2009 Revised Bridged-Race Intercensal
 Population Estimates

Figure 10 | Asthma hospitalizations per 100,000 population for adults, Atlantic County and State of NJ

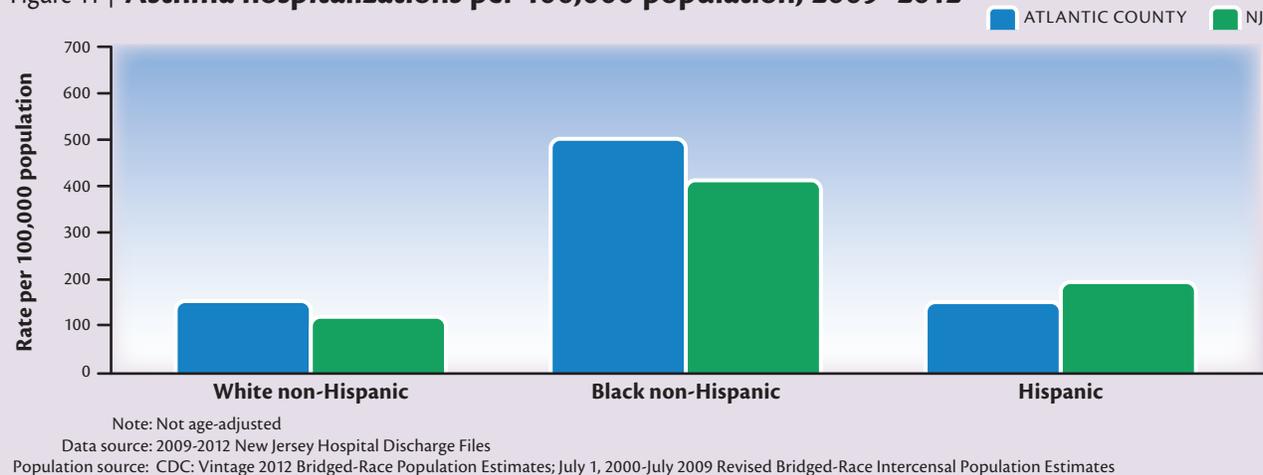


Data source: 2002–2012 New Jersey Hospital Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates;
 July 1, 2000–July 2009 Revised Bridged-Race Intercensal
 Population Estimates

Asthma hospitalizations tend to be highest among the youngest and oldest residents. Figures 9 and 10 show asthma hospitalization rates per 100,000 population for Atlantic County children and adults, and children and adults in the state of New Jersey from 2002–2012 (rolling averages are used for comparability because of low numbers in some age groups in some counties). Only rates for adults ages 65 and over were consistently below their state average—rates for all other age groups were above their respective state averages over the period. The largest difference was in rates for children under age five in Atlantic County, which

averaged 32 percent higher than the state average for children under age five over the period. Rates for all groups except children under five (where trends over the period were similar to the state average) showed either more growth or less of a decline than their respective state averages. The largest relative increase was in rates for adults ages 18–34, which increased by one percent, compared with a 22 percent decline in the state average. Asthma hospitalization rates for children under age five declined by 18 percent over the period, compared with a decline of 16 percent in the state average.

Figure 11 | **Asthma hospitalizations per 100,000 population, 2009–2012**



Asthma hospitalizations also vary quite a bit among racial and ethnic groups. Figure 11 shows asthma hospitalization rates per 100,000 population for select racial/ethnic groups in Atlantic County and the state of New Jersey from 2009–2012.² Non-Hispanic black residents of Atlantic County had the highest asthma hospitalization rate—3.4 times the rate for non-Hispanic white residents and 3.4 times the rate for Hispanic residents. The asthma hospitalization rate for Hispanic residents was 0.99 times

(one percent below) the rate for non-Hispanic white residents. When comparing Atlantic County racial and ethnic groups to their state averages, the rate for non-Hispanic black residents was 22 percent above the state average for non-Hispanic black people, and the rate for non-Hispanic white residents was 24 percent above their state average. The rate for Hispanic residents was 23 percent below their state average.

Summary

Atlantic County's asthma prevalence in 2011–2012 does not differ significantly from the state average when looking at current asthma among adults and children. Rates of asthma-related emergency department (ED) visits in the past decade were consistently above the state average and increased by 38 percent over the period, compared with a 14 percent increase in the state average. Rates of asthma-related hospitalizations were also consistently above the state average in the past decade.

Asthma ED visit rates for all age groups grew faster than the state average from 2004–2012, and all age groups ended the period above their state averages.

Asthma hospitalization rates for all age groups except adults ages 65 and over were consistently above their state averages from 2002–2012. The largest difference was in rates for children under age five in Atlantic County, which averaged 32 percent higher than the corresponding state rate over the period. Rates for all groups except children under five showed either more growth or less of a decline than their respective state averages. Asthma hospitalization rates for children under age five declined by 18 percent over the period, compared with a decline of 16 percent in the state average.

Non-Hispanic black residents of Atlantic County had the highest rates of both asthma ED visit rates (2011–2012) and asthma hospitalizations (2009–2012) compared with non-Hispanic white and Hispanic residents. The asthma ED visit rate for non-Hispanic black residents was 5.4 times the rate for non-Hispanic white residents and the asthma hospitalization rate was 3.4 times as high. The asthma ED visit rate for Hispanic residents was 1.6 times the rate for non-Hispanic white residents, and the asthma hospitalization rate for Hispanic residents was 0.99 times (one percent below) the rate for non-Hispanic white residents.

An analysis of asthma-related ED visits by municipality from 2008–2012 showed that rates for residents of Atlantic City, Hammonton and Pleasantville were more than 1.5 times the state average, accounting for 60 percent of Atlantic County's asthma ED visits while only holding 27 percent of the population. Absecon, the collective total of municipalities with populations under 5,500, Somers Point, Ventnor City and Hamilton were also above the state average.

For more information:

New Jersey Asthma Awareness and Education Program: www.nj.gov/health/asthma

For asthma resources and tools:

Pediatric Adult Asthma Coalition of New Jersey (PACNJ): www.pacnj.org

Notes:

- ¹ Data on asthma-related ED visits and hospitalizations are derived from hospital uniform billing (UB) information, which is used to submit claims for health care. Some variables are not required for claim processing (such as race, ethnicity, and municipality of residence), and should be interpreted with caution. Our figures also use population estimates, which are subject to measurement error that may differ across population subgroups (for example, people who are homeless, move frequently or lack legal documentation for residence may be more difficult to measure).
- ² There are many racial and ethnic groups in addition to the three shown in the figure. However, not all groups are adequately captured in the uniform billing data over time, and many groups do not have sufficient numbers across all counties to allow for a standard presentation. In addition, data on Hispanic ethnicity should be interpreted with caution as it may conceal important differences among sub-groups.

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