

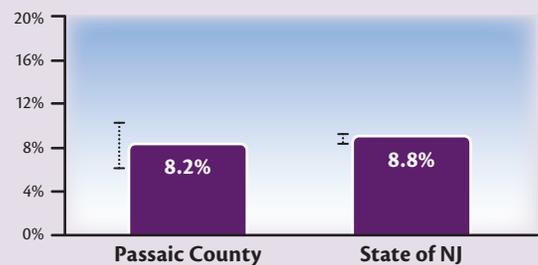
Asthma in New Jersey



Passaic County Asthma Profile

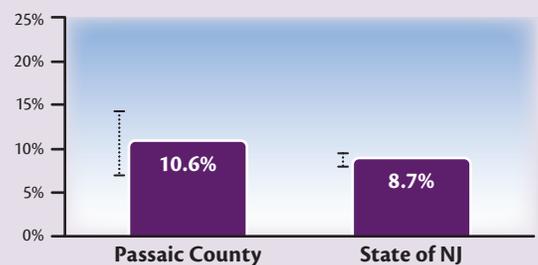
Asthma is a serious chronic disease that is marked by inflammation and bronchoconstriction in the airways. Asthma symptoms can be triggered by many factors and include shortness of breath, coughing, wheezing and chest tightness. Asthma cannot be cured, but it can be controlled. Uncontrolled asthma can 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**

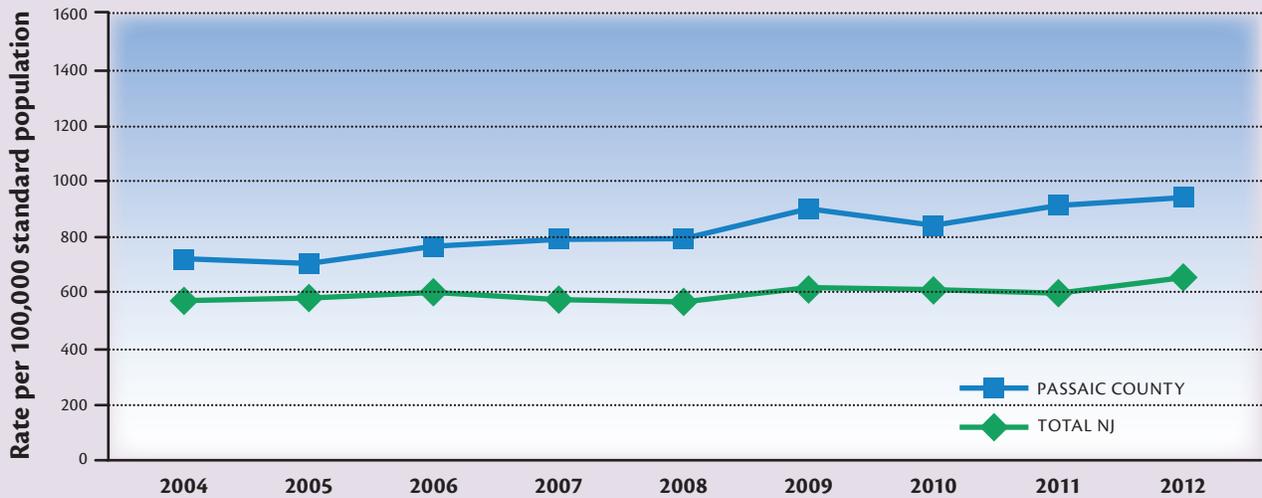


Population Source: NJ Behavioral Risk Factor Survey (Adults are people 18 and over; children are people under 18)

Prevalence

Health survey data show that for 2011–2012, an estimated 29,795 adults (8.2 percent) and 13,074 children (10.6 percent) currently had asthma in Passaic 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 Passaic 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 Passaic County had 4,706 total asthma ED visits, or 936 per 100,000 residents, compared with the state average of 637 asthma ED visits per 100,000 residents. Passaic County contains 5.7 percent of the state’s population and accounted for 8.3 percent of the state’s asthma ED visits in 2012. Figure 3 shows Passaic County’s

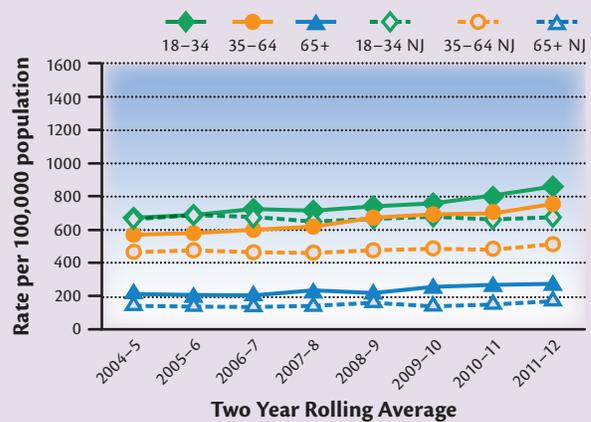
asthma ED visit rates compared with the overall rate in the state of New Jersey for the years 2004–2012 (adjusted to standardize for age differences in the population). Passaic County’s rate of asthma ED visits was above the state average by 18 to 49 percent during the period, and increased by 32 percent while the state average increased 14 percent.

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

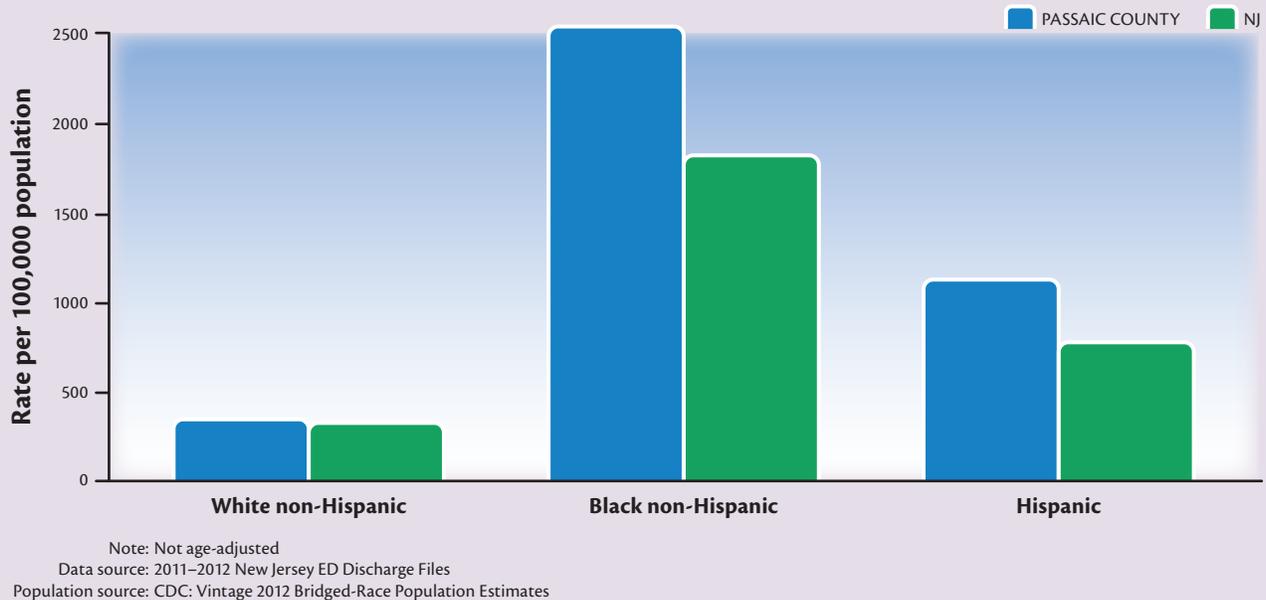


Data source: 2004–2012 New Jersey ED Discharge Files
 Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

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 Passaic County children and adults, and children and adults in the state of New Jersey. Rates for all age groups were at or above the state average for similar groups, and all grew faster than their respective state averages

from 2004–2012 (rolling averages are used for comparability because of low numbers in some age groups in some counties). Children under age five had the highest asthma ED visit rate and exceeded the state average for their age group by the highest amount (1.8 times, on average, from 2004–2012).

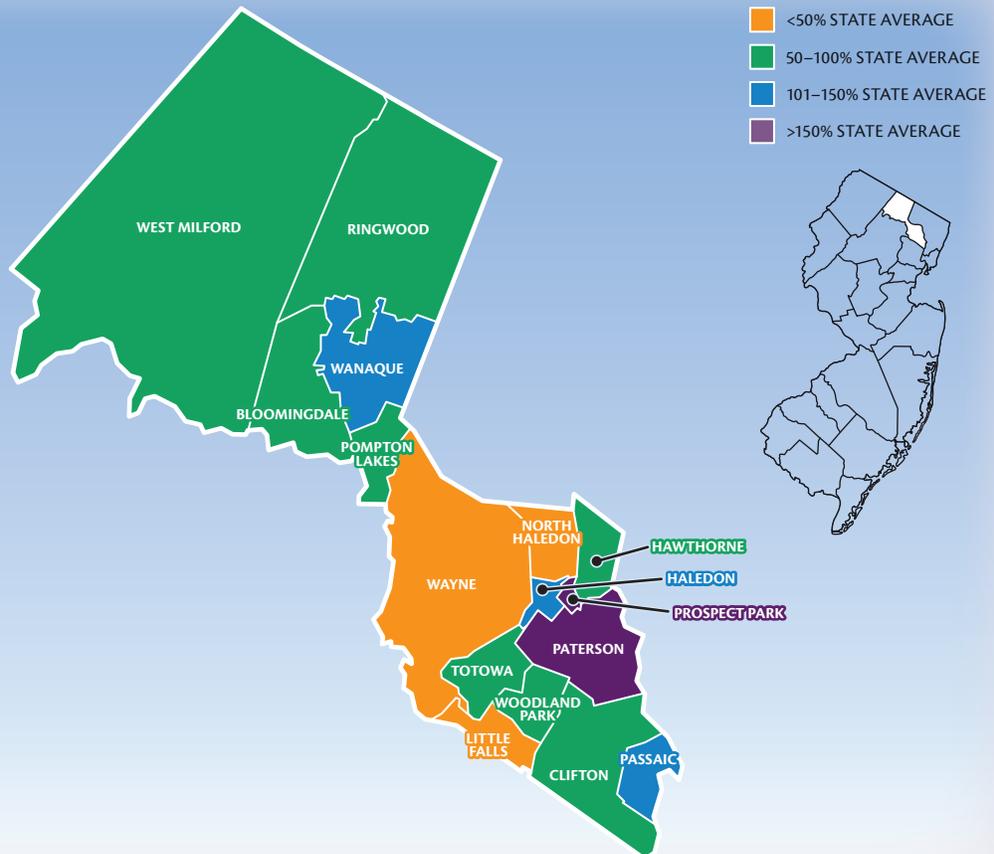
Figure 6 | Asthma ED visit rate per 100,000 population, 2011–2012



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 Passaic County and the state of New Jersey for 2011–2012.² All groups had rates larger than the state average for similar groups—non-Hispanic white residents by 7 percent, non-Hispanic black residents by 40 percent and Hispanic residents by 47 percent. The asthma ED visit rate for non-Hispanic black residents of Passaic County was 7.6 times the rate for non-Hispanic white residents, and 2.2 times the rate for Hispanic residents. The asthma ED visit rate for Hispanic residents was 3.4 times the rate for non-Hispanic white residents.

The following map and table show the asthma ED visit rate by municipality of residence in Passaic County from 2008–2012. Paterson accounted for 62 percent of Passaic County’s asthma ED visits during that time, while only holding 29 percent of the population. The asthma ED visit rate was also more than 1.5 times the state average in Prospect Park. Haledon, Passaic and Wanaque had rates above the state average, and other municipalities were below the state average. Little Falls, Wayne and North Haledon were less than half the state average.

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



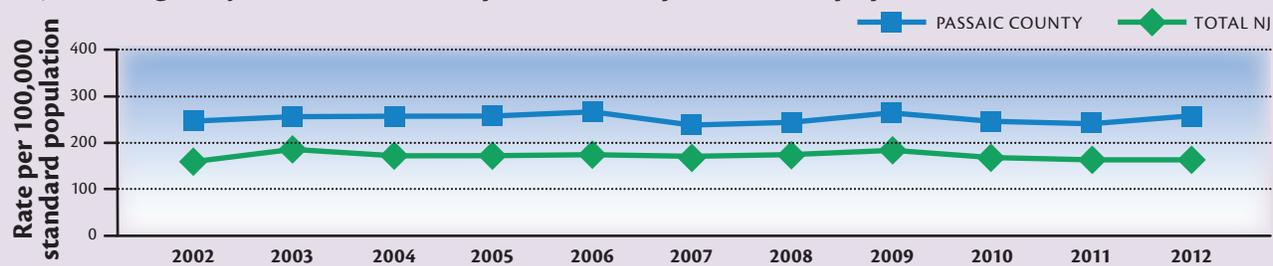
Municipality	Average population, 2008–2012	Asthma ED visits, 2008–2012	Percent of County ED visits	Percent of County Population	Asthma ED visit rate per 100,000 residents, 2008–2012	Age-adjusted* asthma ED visit rate per 100,000 residents, 2008–2012
Bloomingdale borough	7,584	187	0.9%	1.5%	493	569
Clifton city	81,917	1,832	8.4%	16.5%	447	471
Haledon borough	8,509	377	1.7%	1.7%	886	910
Hawthorne borough	18,494	289	1.3%	3.7%	313	328
Little Falls township	13,325	152	0.7%	2.7%	228	292
North Haledon borough	8,613	66	0.3%	1.7%	153	180
Passaic city	68,770	2,845	13.0%	13.8%	827	780
Paterson city	145,546	13,449	61.6%	29.3%	1848	1773
Pompton Lakes borough	11,080	196	0.9%	2.2%	354	380
Prospect Park borough	5,764	300	1.4%	1.2%	1041	970
Ringwood borough	12,441	239	1.1%	2.5%	384	409
Totowa borough	10,776	182	0.8%	2.2%	338	398
Wanaque borough	11,530	290	1.3%	2.3%	503	627
Wayne township	54,406	601	2.8%	10.9%	221	241
West Milford township	26,639	575	2.6%	5.4%	432	500
Woodland Park borough	12,092	245	1.1%	2.4%	405	485
Passaic County	497,487	21,825			877	882
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

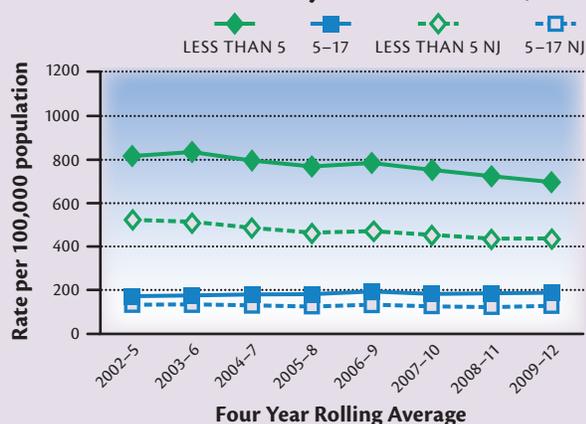
Population source: CDC: Vintage 2012 Bridged-Race Population Estimates; July 1, 2000–July 2009 Revised Bridged-Race Intercensal Population Estimates

Hospitalizations¹

As with ED visits, most asthma-related hospitalizations can be avoided through appropriate management. In 2012, residents of Passaic County had 1,292 total asthma hospitalizations, or 257 per 100,000 residents, compared with the state average of 168 asthma hospitalizations per 100,000 residents. Passaic County contains 5.7 percent of the state’s population and accounted for 8.7 percent of

the state’s asthma hospitalizations in 2012. Figure 8 shows Passaic 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). Passaic County’s rate of asthma hospitalizations averaged 1.5 times the state average over the period.

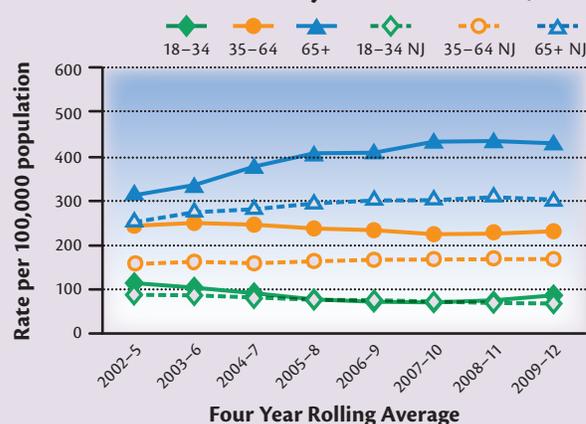
Figure 9 | **Asthma hospitalizations per 100,000 population for children, Passaic County and State of NJ**



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 Passaic County children and adults, and children and adults in the state of New Jersey. Rates for all age groups were above the state average for comparable age groups throughout the 2002–2012 period (rolling averages are used for comparability because of low numbers in some age groups in some counties). The largest difference was for children under age five, where Passaic County children averaged

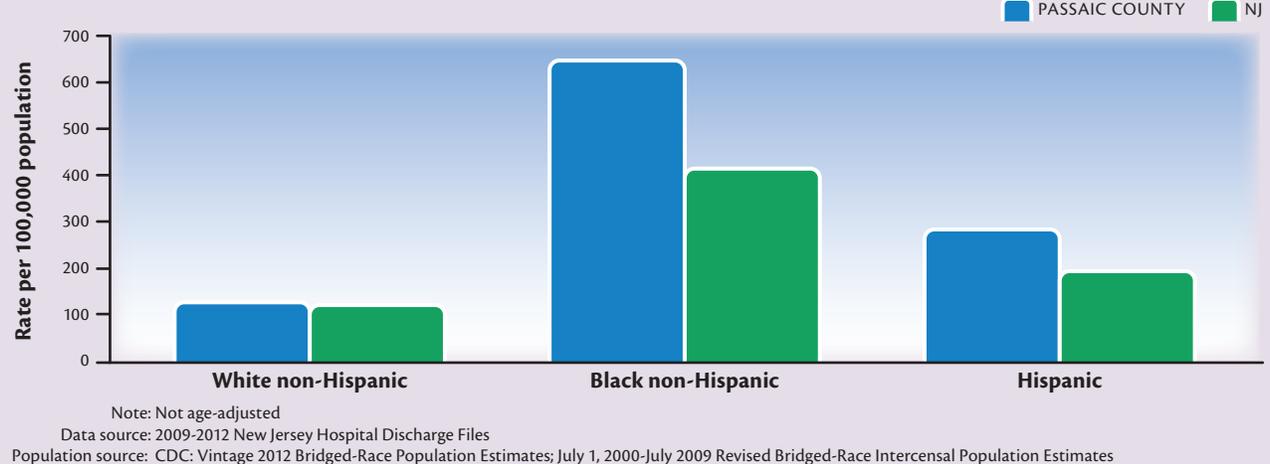
Figure 10 | **Asthma hospitalizations per 100,000 population for adults, Passaic County and State of NJ**



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

65 percent higher than the state rate over the period. The smallest difference was for young adults aged 18–34 in Passaic County, who averaged 23 percent above the state rate over the period. Asthma hospitalization rates for most Passaic County age groups declined somewhat over the period. However, two groups increased: 1) adults 65 and over increased 35 percent, versus an 18 percent increase for the state average; 2) children age five to 17 increased nine percent, versus a three percent decline 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 Passaic County and the state of New Jersey for 2009–2012.² All groups had rates larger than the state average for similar groups—non-Hispanic white residents by four percent, Hispanic residents by 47 percent and non-Hispanic black residents by 56 percent.

Non-Hispanic black residents had the highest rates, 5.1 times the rate for non-Hispanic white residents and 2.3 times the rate for Hispanic residents. The asthma hospitalization rate for Hispanic residents of Passaic County was 2.2 times the rate for non-Hispanic white residents.

Summary

Passaic County's asthma prevalence in 2011–2012 does not differ significantly from the state average when looking at current asthma among adults and children. Passaic County was consistently above the state average for asthma-related emergency department (ED) visits from 2004–2012 and asthma-related hospitalizations for 2002–2012.

Asthma ED visit rates for all age groups in Passaic County were at or above their state averages and grew faster than their respective state averages from 2004–2012. Asthma hospitalization rates for all Passaic County age groups were also above their state averages from 2002–2012, but most age groups had declining rates over the period (exceptions were adults 65 and over and children aged five to 17). Children under age five in Passaic County had the highest asthma ED visit rates and asthma hospitalization rates.

All racial and ethnic groups examined were above their respective state averages for asthma ED visits and asthma

hospitalizations. The asthma ED visit rate in 2011–2012 was highest for non-Hispanic black residents (7.6 times the rate for non-Hispanic white residents and 2.2 times the rate for Hispanic residents). The asthma ED visit rate for Hispanic residents was 3.4 times the rate for non-Hispanic white residents. The disparities in asthma hospitalizations were less pronounced than for ED visits—for 2009–2012, the rate for non-Hispanic black residents of Passaic County was 5.1 times the rate for non-Hispanic white residents and 2.3 times the rate for Hispanic residents. The asthma hospitalization rate for Hispanic residents was 2.2 times the rate for non-Hispanic white residents.

Paterson accounted for 62 percent of Passaic County's asthma ED visits from 2008–2012, while only holding 29 percent of the population. The asthma ED visit rate was also above the state average in Prospect Park, Haledon, Passaic and Wanaque.

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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