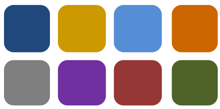


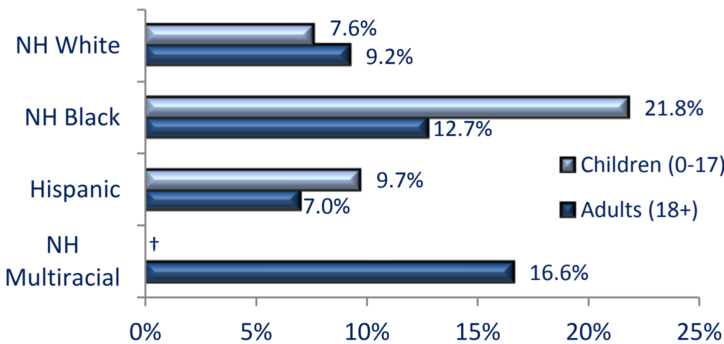
ASTHMA AND MINORITY HEALTH

Indiana State Department of Health

ASTHMA is a chronic respiratory condition that affects the lungs and causes repeated episodes of wheezing, chest tightness, shortness of breath and nighttime or early morning coughing. The cause of asthma is unknown, but is thought to be influenced by the environment and genetics. In 2011, 9.6% of Indiana adults and 9.5% of Indiana children currently had an asthma diagnosis, but some racial groups had disproportionately higher rates of asthma diagnoses than others [Fig. 1].[1] Non-Hispanic (NH) black children (21.8%) and NH multiracial adults (16.6%) have the highest prevalence of asthma, respectively.[1]

Figure 1. Current asthma* prevalence by race/ethnicity, Indiana, 2011[1]

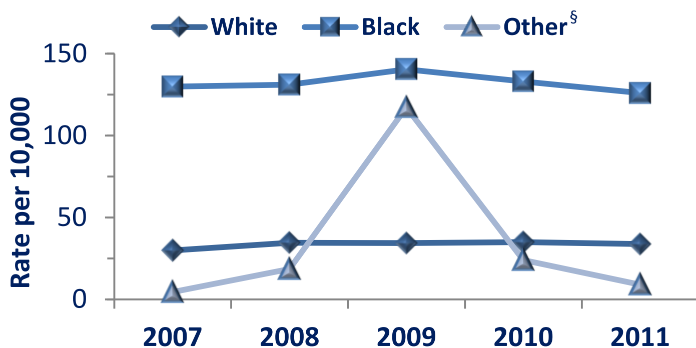
Source: CDC and ISDH Data Analysis Team.



Since 2007, the overall age-adjusted rate of emergency department (ED) visits has been significantly higher for blacks than other races. In 2011, 124.4 per 10,000 black Indiana residents visited the ED compared to rates of 32.3 for whites and 7.9 for other races [Fig. 2].[2]

Figure 2. Asthma emergency department visit‡ age–adjusted rates, by race, Indiana, 2007–2011[2]

Source: ISDH Data Analysis Team.



Mortality Rates

Nationally, 1.0 person per 100,000 dies from asthma each year.[3]

- Compared to other races, blacks (2.3 deaths per 100,000 population) had the highest age-adjusted rate for asthma in the United States.
  - Asian or Pacific Islander: 1.0
  - White: 0.9
  - Hispanic: 0.9
  - American Indian or Alaskan Native: 0.8

Economic Disparities

Asthma disproportionately affects low-income populations in Indiana.

- During 2011, 19.8% of adults with an annual household income of less than $15,000 currently have asthma compared to 6.5% of adults with an income of $50,000 or more.[1]
- Poor housing conditions contribute to asthma exacerbations. Modifications to the indoor environment can substantially decrease asthma episodes and increase the number of symptom free days.[4]
  - In 2011-2012, 18.9% of Indiana children lived in neighborhoods with poorly kept or rundown housing.[5]
  - During 2006-2010, 9.0% of children with current asthma lived where someone smoked inside the home.[6]

Hospitalizations

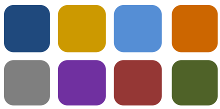
As with ED visits, hospitalization rates vary between racial groups.

- In 2011, black Indiana residents (33.0 per 10,000 people) were hospitalized over three times more often than whites (9.4 per 10,000).[2]
- In the 2011 Medicaid population with persistent asthma (see note),# 5.9% of black children had at least one asthma hospitalization compared to 4.3% of Hispanic children and 2.6% of white children.[7]

**Measured by asking if the child/adult ever had asthma and still had asthma.*
†Data suppressed due to low counts.
‡Primary diagnosis.
§Other category includes American Indian-Alaskan Native, Asian, Hawaiian or Pacific Islander.
#2011 Medicaid enrollees; continuous enrollment (11+ months); children (0-17), adults (18-64) with persistent asthma.

NOTE: Persistent asthma is based on NCQA HEDIS definition: At least 1 ED visit with asthma as the principal diagnosis; or, at least 1 acute inpatient claim with asthma as the principal diagnosis; or, at least 4 outpatient asthma visits with asthma as one of the listed diagnoses and at least 2 asthma medication dispensing events; or, at least 4 asthma medication dispensing events.

For additional information on the impact of asthma in Indiana, please visit: www.asthma.in.gov



Asthma and Minority Health

Indiana State Department of Health

Medication management of asthma among 2011 Medicaid enrollees with persistent asthma[7#]

- Short-acting $beta_2$-agonist medications (SABAs) are intended to provide prompt relief of symptoms. Overuse of these medications can be an indicator of uncontrolled asthma.[8,9]
  - Among child (0-17 years) Medicaid enrollees, 20.1% of whites and 19.2% of blacks overused SABAs compared to 13.6% of Hispanic children.
  - Among adult (18-64 years) Medicaid enrollees, 40.3% of whites overused SABAs compared to 34.8% of Hispanics and 33.0% of black adults.
- Inhaled corticosteroids (ICS) are the most effective long-term control medication for asthma.
  - Among child Medicaid enrollees, 93.1% of whites had at least one ICS prescription claim during the year compared to 92.6% of Hispanic children and 90.6% of black children.
  - Among adult Medicaid enrollees, 90.3% of Hispanic adults had at least one ICS prescription claim during the year compared to 89.2% of whites and 85.6% of black adults.

Take Action: Steps you can take to prevent or manage asthma

- To find out how well controlled your asthma is, take the Asthma Control Test:
  - Test for children ages 4 to 11 years
  - Test for those 12 years and over
- During routine medical visits, talk with your health care provider about your asthma symptoms, triggers, medications and side effects.
- Identify and avoid asthma triggers that can cause symptoms or attacks.
- Avoid smoking or secondhand smoke.
- Take medications as prescribed by your health care provider.
- Work with your health care provider to create an Asthma Action Plan—these plans include information concerning daily treatment, medications, short and long-term control measures and explain when to seek medical treatment.
- Ensure students and employees have immediate access to quick-relief medications.
- Encourage school staff, child care providers and employers to maintain asthma friendly environments.

Community resources

- For resources and programs concerning minority health, visit the Indiana Office of Minority Health.
- To be connected with Indiana asthma programs and resources, visit the Indiana State Department of Health Asthma Program webpage at www.asthma.in.gov or call the Indiana Family Helpline at 1-855-Help-1ST (855-435-7178). Additional information can be found at the Asthma Community Network, Centers for Disease Control and Prevention and the American Lung Association in Indiana.
- To get help with tobacco cessation, call the Indiana Tobacco Quitline at 1-800-QUIT-NOW (800-784-8669) or visit www.quitnowindiana.com.
- The Indiana Minority Health Coalition is a statewide non-profit organization that exists to eliminate health disparities through research, education, advocacy and access to health care services for minority populations.
- The American Lung Association Asthma Clinical Research Centers regularly recruit asthma patients for their studies.

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