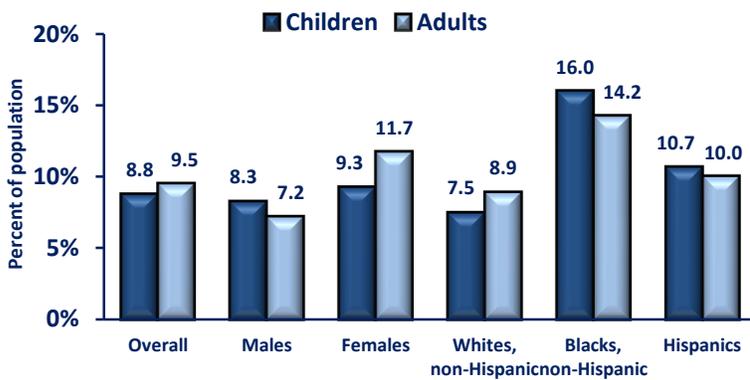




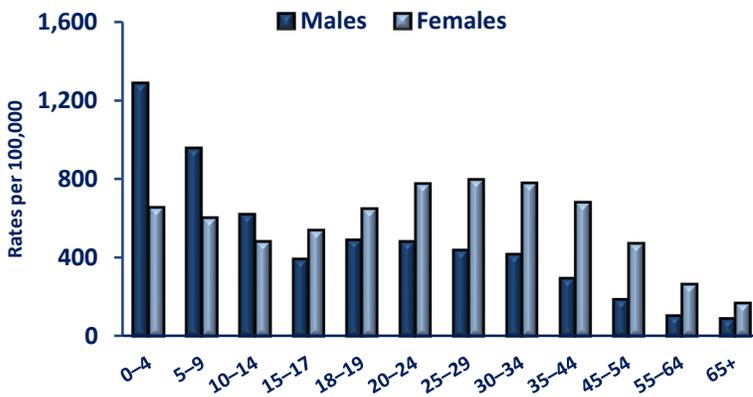
ASTHMA is a chronic inflammatory disease that affects the airways and lungs, causing recurring periods of wheezing, chest tightness, shortness of breath and coughing. It is a serious public health concern that affects approximately 7 million children and 18.7 million adults in the United States.¹ In Indiana, an estimated 136,202 (1 in 13) children and 457,670 (1 in 11) adults currently* have asthma.² The burden of asthma is highest among black children and adults [Fig 1].

Figure 1. Current asthma* prevalence, adults and children, Indiana, 2010²



The rates of emergency department (ED) visits among males and females are different across the lifespan. Most male ED visits occur during childhood, and the highest rate of female ED visits occurs during the middle adult years [Fig 2]. In 2010, the age-adjusted asthma ED visit rate among females was 541.6 per 100,000 and 417.7 per 100,000 among males.³

Figure 2. Asthma emergency department rates by age and sex, Indiana, 2010³



*Current asthma was measured by asking if the child/adult still had asthma

Asthma triggers

The cause of asthma is unknown, but people with asthma have inflamed airways which cause them to be more reactive and sensitive to triggers.

Common triggers include:

- Pet hair or dander
- Changes in weather, usually cold weather
- Chemical irritants
- Cockroaches, dust mites and pests
- Exercise
- Food
- Mold
- Outdoor air pollutants and ozone
- Pollen
- Respiratory infections, such as the common cold
- Stress
- Tobacco and wood smoke

Emergency department (ED) visits

ED visits have increased among Indiana residents significantly since 2004, but leveled off during the past 3 years. During 2010:³

- 30,192 people visited the ED with a principal diagnosis of asthma—a decrease of nearly 1,000 visits from 2009.
- The overall age-adjusted ED visit rate was 481.1 cases per 100,000 people.
- 38.0% of the asthma-related ED visits were among children.
- Black residents (1,340.6 per 100,000 people) visited the ED for asthma at a much higher rate than white residents (289.7 per 100,000 people).

Hospitalizations

While the rate of asthma-related hospitalizations in 2010 was the lowest since 2007, it was still the 4th leading cause of hospitalization due to illness among Indiana children under age 18. During 2010:³

- 8,351 asthma-related hospitalizations occurred, down 8.7% from 2009.
- Overall, females had higher rates of hospitalization than males (153.2 versus 98.5 per 100,000 people); however, male children had higher rates than female children (44.4 versus 26.6 per 100,000 people).
- Black residents (361.0 per 100,000 people) were hospitalized nearly 4 times more often than white residents (96.2 per 100,000 people).



Mortality⁴

- ❑ In 2009, 71 Indiana residents' deaths had asthma listed as the underlying cause.
 - 31 were males and 40 were females
 - 46 were whites and 25 were blacks
 - 9 were children

Management among persons with current asthma⁵

- ❑ Although asthma is rarely fatal, poorly controlled asthma can lead to missed school or work and the inability to participate in daily activities.
 - During 2006–2010, 60.5% of Indiana children had their usual activities limited due to their asthma, and 44.7% of school-aged children missed 1 or more days of school because of it.
 - In 2010, 34.7% of Indiana adults missed work or could not participate in daily activities due to their asthma.
- ❑ Creating an Asthma Action Plan is important in learning how to control asthma long-term and in recognizing early symptoms of an attack, yet only 28.6% of adults and 47.7% of children with asthma had an action plan during 2006–2010.
- ❑ Routinely seeing a health care provider is one way to manage one's asthma. During 2006–2010, 50.0% of adults and 24.0% of children did not see their doctor for routine visits concerning their asthma.

TAKE ACTION: Steps you can take to prevent or control asthma

- ❑ While there is no cure for asthma, make sure to manage your (or your child's) asthma by knowing and attempting to avoid asthma triggers
- ❑ Avoid smoking or secondhand smoke
- ❑ Limit outdoor exercise on Ozone Action Days or days with poor air quality
- ❑ Take medications 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
- ❑ Know early asthma warning signs to head off an episode before it gets worse
- ❑ Ensure students and employees have immediate access to quick-relief medications
- ❑ Encourage schools, child care centers, and workplaces to participate in [no-idle zones](#), [Ozone Action Days](#) and other environmental health actions

Community resources

- ❑ [Fly a Flag for Clean Air Program](#): a program for schools to create public awareness of outdoor air quality conditions so children can continue to play while protecting themselves.
- ❑ [Indiana Joint Asthma Coalition](#) (InJAC): a voluntary group of people and organizations working to reduce the burden of asthma in Indiana.
- ❑ For a list of asthma coalitions, programs and resources in Indiana, go to [InJAC's Resources page](#), or call the [Indiana Family Helpline](#) at 1-855-HELP-1ST (855-435-7178). Additional information can be found at the [Asthma Community Network](#).
- ❑ To get help with tobacco cessation, call the [Indiana Tobacco Quitline](#) at 1-800-QUIT-NOW (800-784-8669), or visit www.quitnowindiana.com.
- ❑ [AIRNow](#): an index for reporting daily air quality in local regions.
- ❑ [Knozone](#): a program to improve Indianapolis' air quality.

References

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