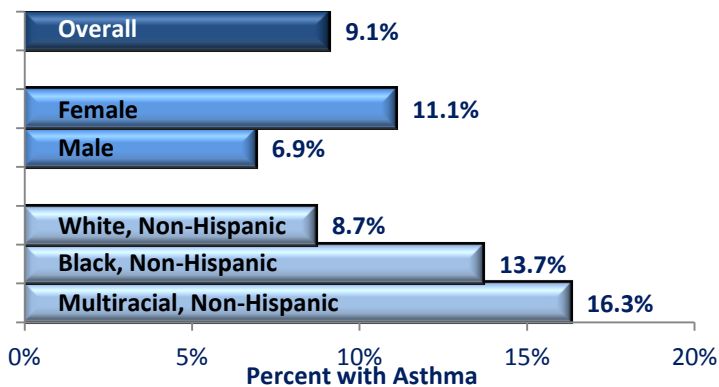




ASTHMA is a common chronic inflammatory disease that affects the airways and lungs, causing recurring periods of wheezing, chest tightness, coughing and shortness of breath. It is a serious public health concern that currently affects 9.1%, or approximately 450,000, of Indiana adults.¹ More adult females (11.1%) than adult males (6.9%) currently have asthma*. More multiracial non-Hispanic (NH) adults (16.3%) have a current asthma diagnosis than any other racial or ethnic group [Fig 1].

Figure 1. Current asthma* prevalence among adults by sex and race, Indiana, 2012¹

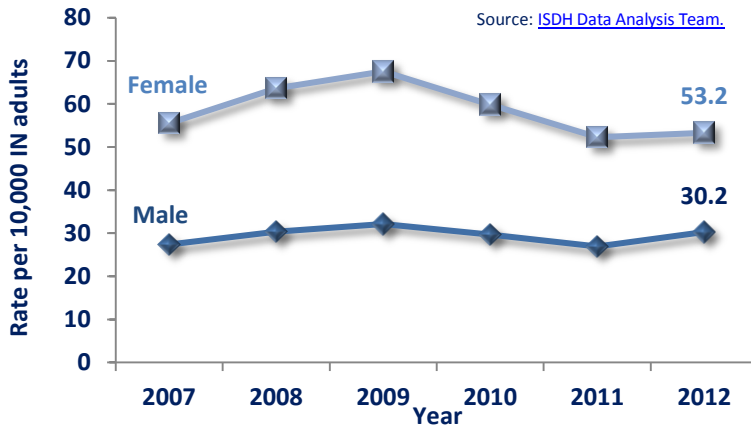
Source: [CDC](#) and [ISDH Data Analysis Team](#).



Since 2007, adult females have had higher rates of asthma emergency department (ED) visits than adult males [Fig 2]. In 2012, the age-adjusted asthma ED visit rates by sex were 53.2 per 10,000 Indiana adult females and 30.2 per 10,000 adult males.² While adult females' asthma ED visit rates have declined since 2007, adult males have seen a slight increase.

Figure 2. Adult asthma emergency department rates[†] by sex, Indiana, 2012²

Source: [ISDH Data Analysis Team](#).



*Current asthma was measured by asking if the adult still had asthma
[†]Age-adjusted rates using the US Standard 2000 Population.

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:

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

Emergency department (ED) visits²

ED visits declined from 2009 to 2011, but in 2012 increased 3.2% from 2011 numbers. During 2012:

- 30,570 ED visits were reported with a principal diagnosis of asthma.
- The overall age-adjusted rate was 48.8 asthma ED visits per 10,000 Indiana residents.
- 35.9% of asthma ED visits were for children (0–17 years).
- Black residents visited the ED for asthma at a higher rate (129.3 per 10,000) than white residents (34.4 per 10,000).

Hospitalizations²

The 2012 rate of asthma hospitalizations was the lowest since 2007. During 2012:

- 7,707 primary diagnosis asthma hospitalizations occurred, down 7.8% from 2011.
- The overall age-adjusted rate was 11.6 asthma hospitalizations per 10,000 Indiana residents.
- Females had higher rates of hospitalization than males (14.0 versus 8.9 per 10,000).
- Black Indiana residents (30.6 per 10,000) were hospitalized nearly 4 times more often than white residents (8.5 per 10,000).

Mortality³

- In 2011, 73 Indiana residents' deaths had asthma listed as the leading cause of death.
 - 26 were male and 47 were female
 - 54 were white and 18 were black
 - 49.3% were 65 years and older at time of death



Management of asthma among Indiana adults with a current asthma diagnosis

- ❑ Maintaining control over asthma is essential to prevent exacerbations and emergency situations.
 - 27.2% have well controlled asthma⁴
- ❑ Although asthma is rarely fatal, poorly controlled asthma can lead to decreased productivity, missed work and the inability to participate in daily activities.
 - 33.6% missed work or could not participate in daily activities due to their asthma in the past 12 months⁴
 - 9.6% said their activity was limited a lot during the past 30 days, 16.7% had moderate activity limitations and 37.2% reported “a little” activity limitation⁴
- ❑ Having and using an Asthma Action Plan is important for learning how to control asthma long-term and in recognizing early symptoms of an attack.
 - 35.5% had a health care professional give them an asthma action plan⁴
 - 67.1% were taught how to recognize early signs or symptoms by a health care professional⁴
- ❑ National asthma guidelines recommend persons with asthma seek at least two routine asthma visit per year.⁵
 - 61.8% had at least 2 routine checkups in the past 12 months⁴

TAKE ACTION: Steps you can take to prevent or control 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 and being around others who are smoking.
- ❑ 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, such as: [No-Idle Zones](#), and [Ozone Action Days](#).

Community resources

- ❑ To be connected with Indiana asthma programs and resources, visit the [Indiana State Department of Health Asthma Program’s Resource Guide](#) 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](#) websites.
- ❑ 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 [American Lung Association Asthma Clinical Research Centers](#) regularly recruit asthma patients for their studies.
- ❑ [AIRNow](#): an index for reporting daily air quality in local regions.
- ❑ To find participating American Lung Association [Breathe Well](#), [Live Well](#) programs in your area, visit the [In My Community](#) page and enter your zip code.

References

1. [Centers for Disease Control and Prevention](#) and [Indiana State Department of Health Data Analysis Team](#) [ISDH DAT]. (2013). *Behavioral Risk Factor Surveillance System Prevalence Data, 2012*.
2. ISDH DAT. (2013). *Indiana Hospital Discharge Data Files, 2012*.
3. ISDH DAT. (2013). *Indiana Mortality Report, 2011*.
4. CDC and ISDH DAT. (2013). *BRFSS Asthma Call-back Survey, 2012 adults*.
5. National Asthma Education and Prevention Program. (2007). Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. Bethesda (MD): National Heart, Lung and Blood Institute.