

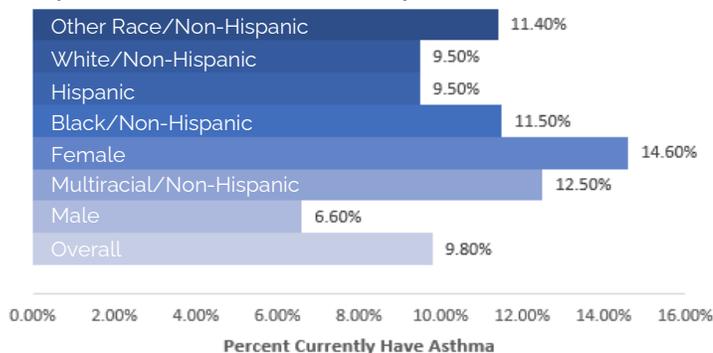
Asthma's Impact in Indiana

May 2022

Asthma is a chronic, inflammatory disease that affects the lungs. Asthma causes your airways to narrow and swell making breathing difficult. It is one of the most common long-term diseases in the United States and affects people of all ages, incomes, races and ethnicities. Asthma can be severe and even life-threatening if not well-controlled.

For the residents of Indiana, asthma is a serious public health concern that currently affects 9.8%, or approximately 648,729 Indiana adults.¹

Figure 1. Prevalence of Current Asthma* Among Adults [18+], Indiana and United States, 2020



Source: [CDC BRFSS](#) and [IDOH Data Analytics Team](#)

Emergency Department (ED) Visits²

Emergency department (ED) visits declined[†] from 2018 to 2019.

For 2019:

- ED visits reported with a principal diagnosis of asthma was 24,815 patients. While in 2018, 25,010 patients visited the ED with a principal diagnosis of asthma.
- The overall age-adjusted rate was 39.3 per 10,000 Indiana residents for asthma ED Visits.
- Of those ED visits, 33.8% were for children (0-17 years of age).
- African American residents visited the ED for asthma at a higher rate** (142.9 per 10,000) than white residents (24.9 per 10,000).

Mortality³

In 2019, 86 Indiana residents' deaths had asthma listed as the leading cause of death. Mortality increased[†] from 2017 (78 deaths) to 2019.

- 49 of those deaths were female, 37 were male
- 55 of those deaths were in white residents, 27 in African Americans
- With the average age for mortality falling at 56 years of age.

Asthma Fast Facts

- Approximately 1 in 10 (9.8%) of Indiana adults (18 years and older) are diagnosed with asthma.¹
- Adult females in Indiana are more likely than males to have asthma.¹
- Multiracial adults in Indiana have a higher prevalence rate than other races in the state.¹
- An asthma diagnosis is more likely with an annual household income less than \$15,000 in comparison to those households with incomes greater than \$15,000¹

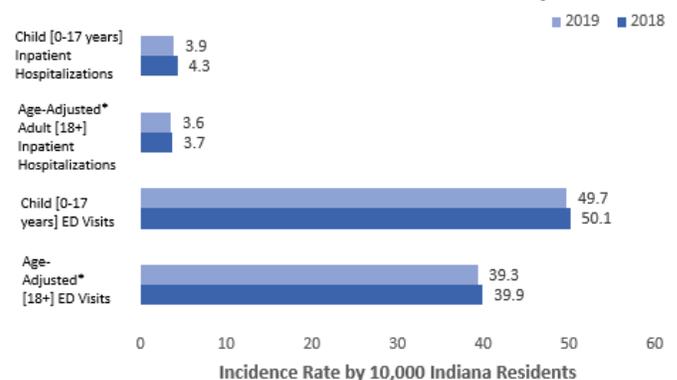
Inpatient Hospitalizations²

Inpatient hospitalization rates due to asthma declined[†] from 2018 to 2019.

For 2019:

- Inpatient hospitalizations reported with a primary diagnosis of Asthma was 2,393 patients. While in 2018, 2,439 patients were reported to be hospitalized for asthma.
- The overall age-adjusted rate was 3.6 per 10,000 Indiana residents for inpatient hospitalizations for asthma.
- Females had a higher rate of hospitalization (4.6 per 10,000) than males (2.6 per 10,000).
- Black, non-Hispanic Indiana residents were hospitalized five times more often (11.3 per 10,000) than white Indiana residents (2.6 per 10,000).

Figure 2. Incidence Rate of Emergency Department (ED) Visits and Inpatient Hospitalizations in Indiana Residents, Indiana and United States, 2019



Source: [IDOH Epidemiology Resource Center](#) and [IDOH Data Analytics](#)

Asthma Triggers

People with Asthma often deal with inflamed and constricted airways which cause more reactivity and sensitivity to certain triggers. Some of the common triggers being:

- Allergens, such as pollen, pet hair or dander, and mold
- Changes in weather
- Chemical Irritants
- Pests such as cockroaches or dust mites
- Exercise
- Outdoor air pollutants
- Respiratory infections such as common cold, flu, or COVID-19
- Stress
- Tobacco and Wood Smoke Inhalation

Disparities in Asthma

While Asthma impacts all ages, genders, races, ethnicities, and income levels, it would be irresponsible to not highlight the health disparities seen in Asthma.

The highest burden of asthma is faced by those residents of color. These disparities are caused by complex factors that include systemic and structural racism.⁵

In Indiana, multiracial and black residents have higher prevalence of current asthma.

When you factor in a residents sex, women have higher rates than men.

References

1. CDC and Indiana Department of Health Data Analysis Team (ISDH DAT). (2021). *Behavioral Risk Factor Surveillance System Prevalence Data, 2020*.
2. Indiana Department of Health Data Analysis Team. (2021). *Indiana Hospital Discharge Data Files, 2015-2019*.
3. CDC and Indiana Department of Health Data Analysis Team. (2021). *Death Reports (Mortality, 2019)*.
4. CDC and ISDH Data Analysis Team. (2021). *Behavioral Risk Factor Surveillance System Asthma Call-back Survey, 2017*.
5. Asthma and Allergy Foundation of America. (2021). *Asthma Disparities in America, 2020*.

Asthma Self-Management⁴

If Asthma is classified as poorly controlled, it can lead to decreased productivity, missed work days, or even the inability to participate in daily activities. When Indiana residents^{***} were asked about their self-management:

- 35.4% of those surveyed had missed work or could not participate in daily activities due to their Asthma in the past 3 months.
- 6.5% shared that their activity was limited a lot during the past 30 days, 13.4% had moderate activity limitations, and 30.3% reported “a little” activity limitation.

When asked about Self-Management Education received:

- 63.1% of respondents were taught to recognize signs and symptoms
- 76.3% of respondents were taught what to do during an asthma attack
- 41.6% of respondents were taught how to use a peak flow meter.
- 33.3% were given an Asthma Action Plan

40.9% Of Current Asthma Cases in Indiana are seen in residents who make less than \$ 35,000 year⁴



Figure 3. Prevalence of Current Asthma* Among Adults [18+] By Income Level, Indiana and United

Source: CDC BRFSS and IDOH Data Analytics Team

Community Resources

- AAFA’s Asthma Action Plan Templates ([English](#)) ([Spanish](#))
- AAFA’s “[How to Properly Use Your Asthma Devices](#)”
- Allergy and Asthma Network’s [Understanding Asthma Booklet](#)
- Centers for Disease Control and Prevention’s [Asthma Resources](#)
- [Get help with Tobacco Cessation](#), call the Indiana Tobacco Quitline at 1-800-QUIT-NOW (800-784-8669) or visit www.quitnowindiana.com
- [IDEM Smog Watch](#)—Air Quality Forecasts Daily

* BRFSS 2020 Question CCHC.05 ASTHNOW—Do you still have asthma?

** Age-adjusted prevalence rates using the [US Standard 2000 Population](#)

*** [BRFSS Asthma Call-Back Survey for 2017](#)

† Indiana Hospital Discharge Data [ICD-10 code](#) used J45: Asthma

To **promote, protect, and improve** the health and safety of all Hoosiers

For additional information on Asthma and other Chronic Respiratory Diseases:

www.asthma.in.gov



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