

Asthma in Michigan

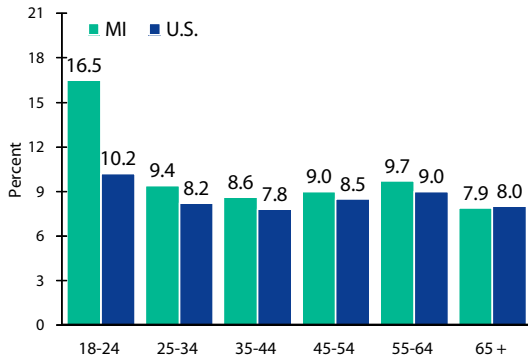
Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 18 years)¹ and 7.0 million children (aged < 18 years)¹ in the United States (U.S.), regardless of age, sex, race, or ethnicity. Although the exact cause of asthma is unknown and it cannot be cured, it can be controlled with self-management education, appropriate medical care, and avoiding exposure to environmental triggers. The following data provide an overview of the burden of asthma in Michigan (MI) compared with the U.S. **All stated comparisons (e.g., higher, lower, similar) indicate that the group is statistically significantly different than the reference group (e.g., adults aged 18-24 years, men, non-Hispanic whites, children aged 15-17 years, and boys).**

Asthma Prevalence

In 2008, an estimated 750,954 adults in Michigan had asthma. Adult lifetime asthma prevalence was 15.4% and adult current asthma prevalence was 9.9% compared with U.S. rates of 13.3% and 8.5%, respectively².

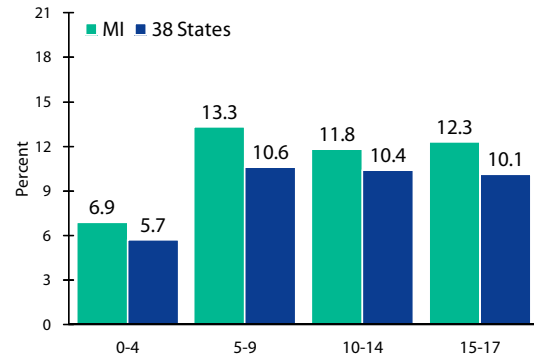
In 2008, an estimated 254,583 children in Michigan had asthma. Child lifetime asthma prevalence was 15.5% and child current asthma prevalence was 10.7% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively².

Adult Current Asthma Prevalence by Age, BRFSS, 2008



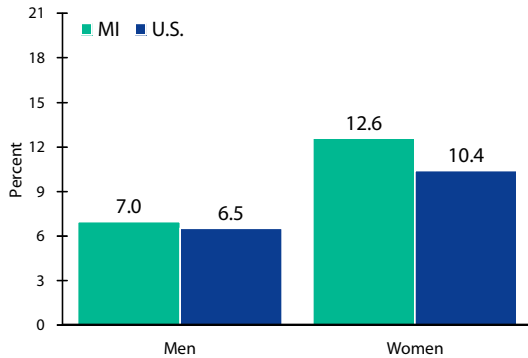
Adult current asthma prevalence was lower among adults aged 25+ years than adults aged 18-24 years in Michigan. A similar pattern occurred throughout the U.S.

Child Current Asthma Prevalence by Age, BRFSS, 2008



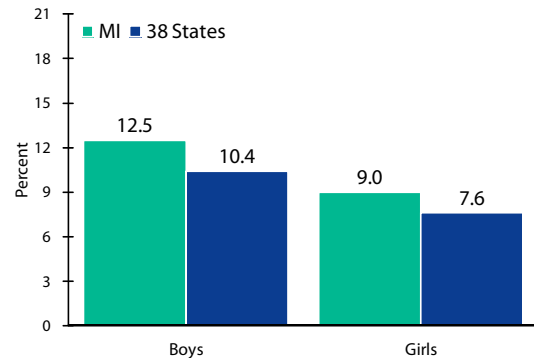
Child current asthma prevalence was lower among children aged 0-4 years than children aged 15-17 years in Michigan. A similar pattern occurred throughout the 38 participating states.

Adult Current Asthma Prevalence by Sex, BRFSS, 2008



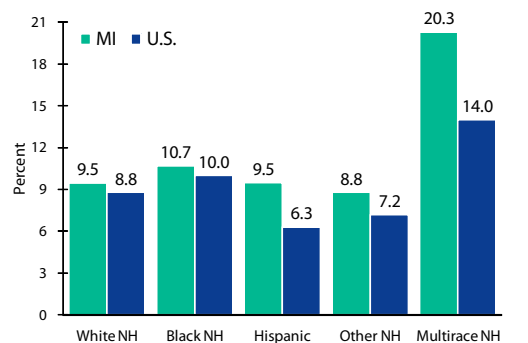
Adult current asthma prevalence was higher among women than men in Michigan. A similar pattern occurred throughout the U.S.

Child Current Asthma Prevalence by Sex, BRFSS, 2008



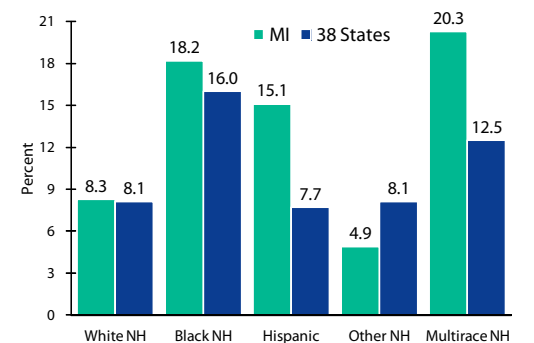
Child current asthma prevalence was higher among boys than girls in Michigan. A similar pattern occurred throughout the 38 participating states.

Adult Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008



Adult current asthma prevalence was higher among non-Hispanic multirace persons than non-Hispanic whites in Michigan; however, rates were higher among non-Hispanic multirace persons and non-Hispanic blacks throughout the U.S.

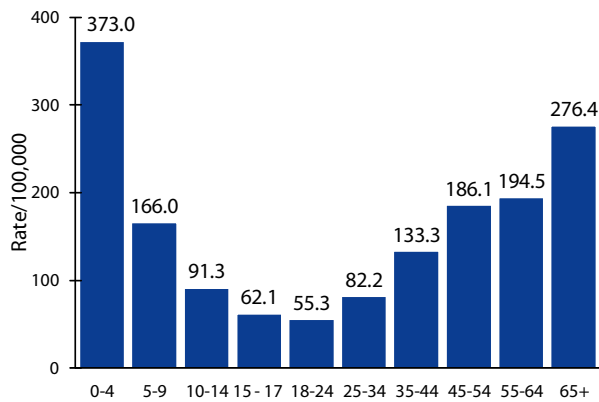
Child Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008



Child current asthma prevalence was higher among non-Hispanic multirace persons and non-Hispanic blacks than non-Hispanic whites in Michigan. A similar pattern occurred throughout the 38 participating states.

Asthma Hospitalizations

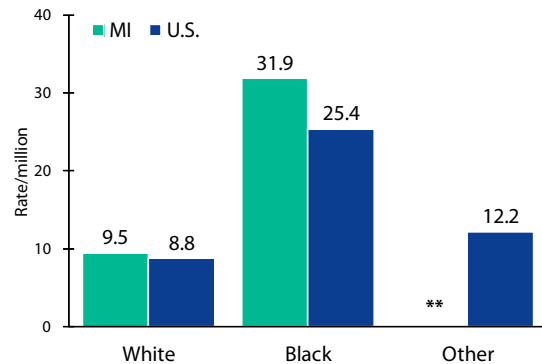
Michigan Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Michigan was 162.3/100,000 persons³ compared with the U.S. rate of 144/100,000 persons⁴. In Michigan, the hospitalization rate for children was 179.6/100,000 persons³ and for adults was 159.6/100,000 persons³.

Asthma Deaths

Age-Adjusted Asthma Mortality Rate by Race, NVSS, 2007



Asthma was the underlying cause of death for 120 adults and 12 children in Michigan⁵. The age-adjusted mortality rate in Michigan was 12.7/million and the U.S. rate was 11.0/million⁵.
****The estimate is suppressed.**

Asthma Patient Education and Medication Use

The National Heart, Lung, and Blood Institute (NHLBI) Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma includes recommendations by medical and public health experts to aid in the clinical practice of managing asthma. The NHLBI Guidelines focus on four areas of asthma management and care: Assessment and Monitoring, Patient Education, Control of Environmental Factors Contributing to Asthma Severity, and Pharmacologic Treatment. Items included in the following table are related to asthma patient education and medication use for adults with current asthma in Michigan.

Patient Education: Adults with Current Asthma ⁶	Respondents	Yes
Ever taught how to recognize early signs or symptoms of an asthma episode	510	58%
Ever told what to do during an asthma attack	503	70%
Ever taught how to use a peak flow meter to adjust daily medications	511	37%
Ever given an asthma action plan	502	21%
Ever taken a course on how to manage asthma	517	4%

Medication Use: Adults with Current Asthma ⁶	Respondents	Yes
Used a prescription asthma medication in the past 3 months ⁷	512	74%

NOTES:

- National Health Interview Survey (NHIS), 2008
- Behavioral Risk Factor Surveillance System (BRFSS), 2008
 When the sample size is fewer than 50, prevalence estimates are considered unstable and should be interpreted with caution. Indicated with an asterisk (*)
 All stated comparisons (e.g., higher, lower, similar) indicate that the group is statistically significantly different than the reference group (e.g., adults aged 18-24 years, men, non-Hispanic whites, children aged 15-17 years, and boys).
- State Hospital Discharge Data, 2008
- National Hospital Discharge Survey, 2008
 When estimates are based on fewer than 60 hospitalizations, they are considered unstable and should be interpreted with caution. Indicated with an asterisk (*)
- National Vital Statistics System (NVSS), 2007
 When estimates are based on fewer than 20 deaths in the numerator, they are considered unstable and should be interpreted with caution. Indicated with an asterisk (*)
 When estimates are based on fewer than 10 deaths in the numerator, data are suppressed due to confidentiality. Indicated with double asterisks (**)
- Asthma Call-back Survey, 2008
- Medication includes inhalers, pills, syrups, and nebulizers.

CDC's National Asthma Control Program

For more information on asthma:

<http://www.cdc.gov/asthma>

<http://www.getastmahelp.org/>