



HIGHLIGHTS FROM THE ASTHMA SURVEILLANCE SYSTEM

JUNE 5, 2018



REPORTS FOCUSING ON SPECIAL POPULATIONS

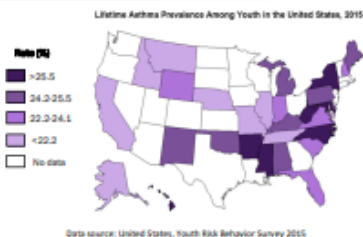
YOUTH RISK BEHAVIOR SURVEY

The Youth Risk Behavior Survey (YRBS) is an ongoing national school-based survey. YRBS is conducted every two years and uses a representative sample of 9th through 12th grade students. The purpose of the survey is to learn about various health-risk behaviors among youth. These behaviors include alcohol and tobacco use, dietary behavior, and physical activity. YRBS also measures the prevalence of asthma and obesity. This report shows the findings related to asthma from 2015.

Asthma in Youth

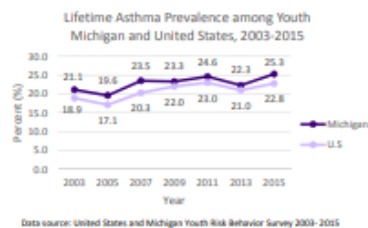
Lifetime Asthma

- The corresponding figure shows the lifetime (ever told) prevalence of asthma among youth in 2015 by state.
- The United States prevalence for youth who have ever been told they have asthma was 22.8%. Michigan's prevalence was 25.3%, tenth highest in the country.
- Hawaii had the highest prevalence at 31.3% and Idaho had the lowest prevalence at 19.3%.



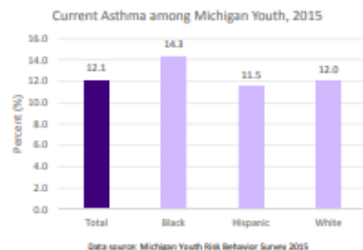
Trends in Lifetime Asthma

- Michigan's lifetime asthma prevalence was significantly higher than the national rate from 2003 through 2007.
- Michigan's lifetime asthma prevalence increased by 4.2% between 2003 and 2015.
- In 2015, the Michigan prevalence of lifetime asthma among Black youth (30.8%) was significantly higher than in White youth (24.0%) (Data not shown).



Current Asthma

- In 2015, 12.1% of Michigan youth reported having current asthma. Black youth (14.3%) had a slightly higher prevalence rate compared to White and Hispanic youth, 12.0% and 11.5% respectively.
- 11.2% of male youth reported having current asthma compared to 13.0% of female youth (Data not shown).



The Current Status of the Asthma Burden in Saginaw County

Michigan Department of Health and Human Services

October 2017



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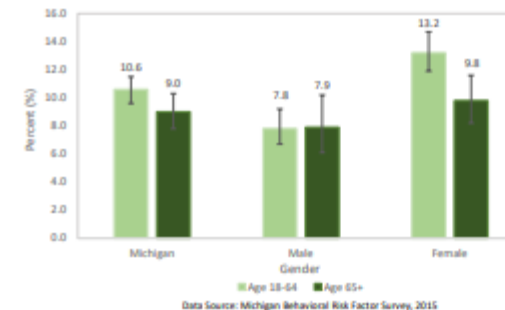
Asthma in the Elderly Population

January 2018

Asthma is a chronic breathing problem that is caused by inflammation of the airways of the lungs. The following report depicts asthma rates for Michigan's elderly population (persons 65+ years old) using data collected from the Michigan Behavioral Risk Factor Survey (MBRFS) and Michigan Inpatient Database (MIDB).

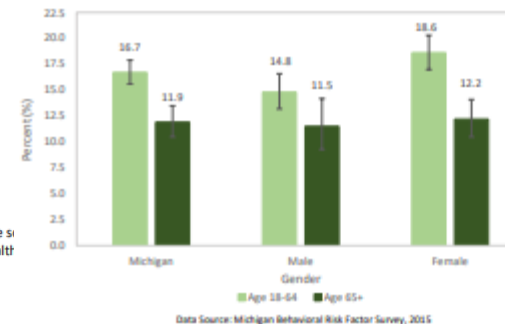
Asthma Prevalence by Age and Gender

Current Asthma Prevalence among Michigan Adults by Age and Gender, 2015



- Michigan residents who were 65+ years old reported a lower rate of current asthma (9.0%) in comparison to residents who were 18-64 years old (10.6%).
- Female respondents who were 65+ years old reported a significantly lower rate of current asthma (9.8%) in comparison to female respondents who were 18-64 years old (13.2%).

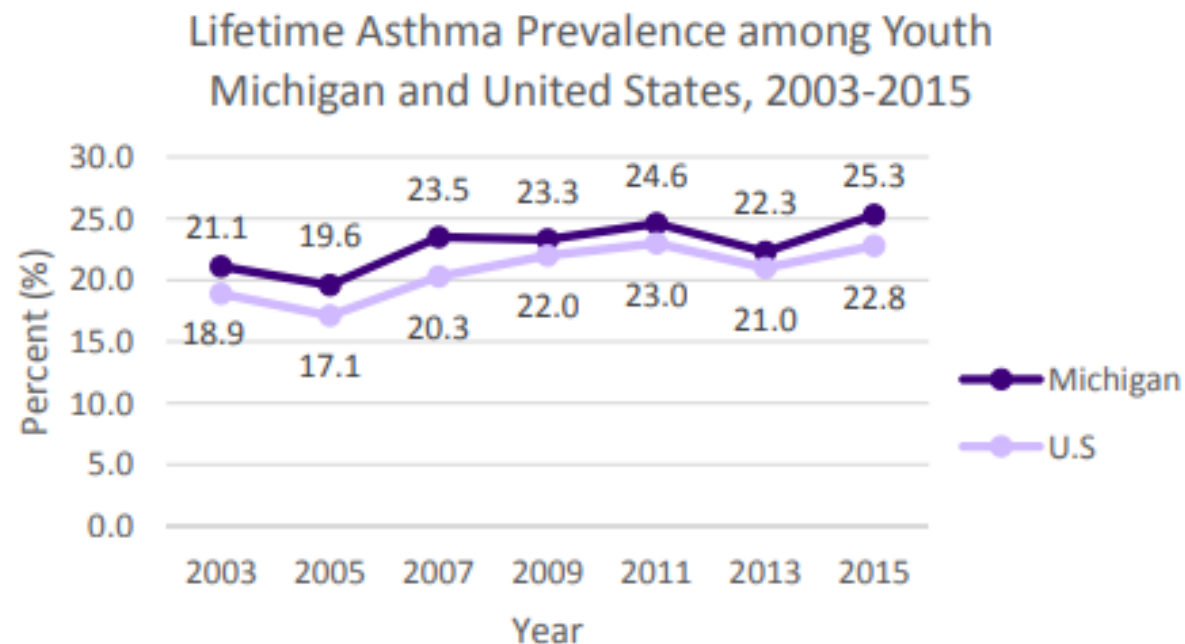
Lifetime Asthma Prevalence among Michigan Adults by Age and Gender, 2015



- Michigan residents who were 65+ years old reported a significantly lower rate of lifetime asthma (11.9%) in comparison to residents who were 18-64 years old (16.7%).
- Female respondents who were 65+ years old reported a significantly lower rate of lifetime asthma (12.2%) in comparison to female respondents who were 18-64 years old (18.6%).

YOUTH RISK BEHAVIOR SURVEY – GRADES 9-12

- Youth Risk Behavior Survey-Grades 9-12
- Lifetime Asthma
 - Michigan has the TENTH highest lifetime asthma prevalence (25.3%).
- Current Asthma
 - 12.1% of Michigan youth reported having current asthma.
 - Black youth (14.3%) had a slightly higher prevalence rate compared to White and Hispanic youth, 12.0% and 11.5% respectively.

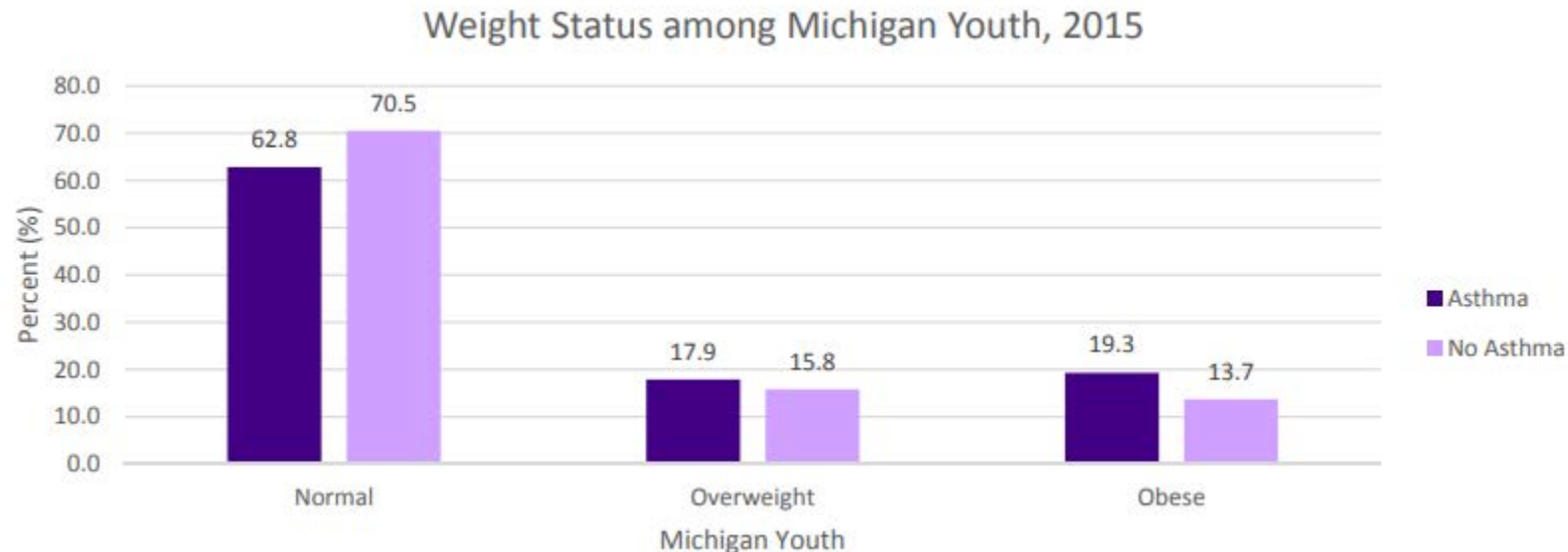


Data source: United States and Michigan Youth Risk Behavior Survey 2003- 2015

YOUTH

- Over 70.5% of youth without asthma were at a normal body mass index (BMI) compared to 62.8% among youth with asthma.
- The odds of having current asthma were significantly higher among youth who were obese compared to those who were a normal weight (adjusted OR=1.6).

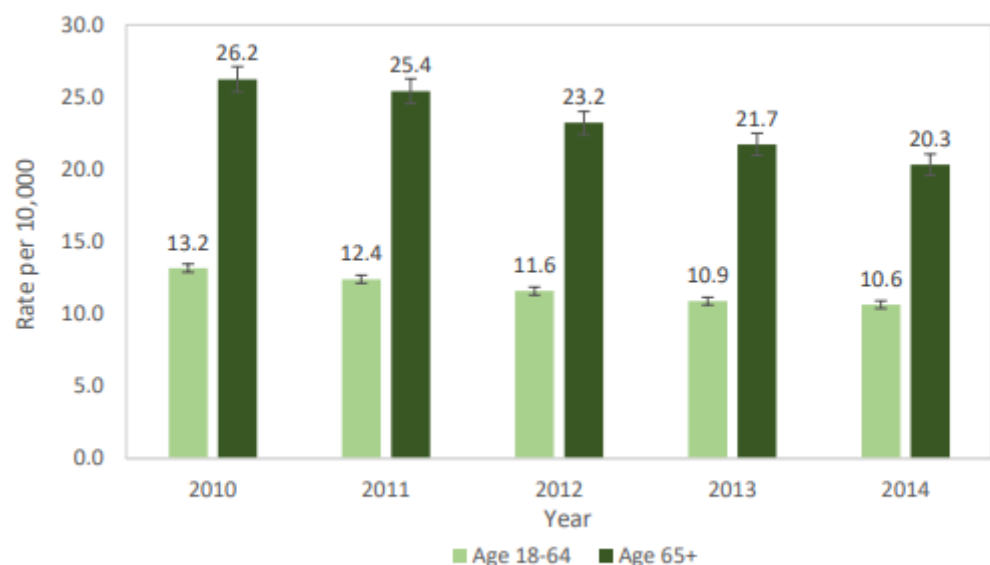
- Other youth report topics include
 - Physical activity and sedentary activities
 - Drug and alcohol use



Data source: Michigan Youth Risk Behavior Survey 2015

OLDER ADULTS – ASTHMA HOSPITALIZATION

Asthma Hospitalization among Michigan Residents by Age, 2010-2014



Data Source: Michigan Inpatient Database, MDHHS, 2010-2014

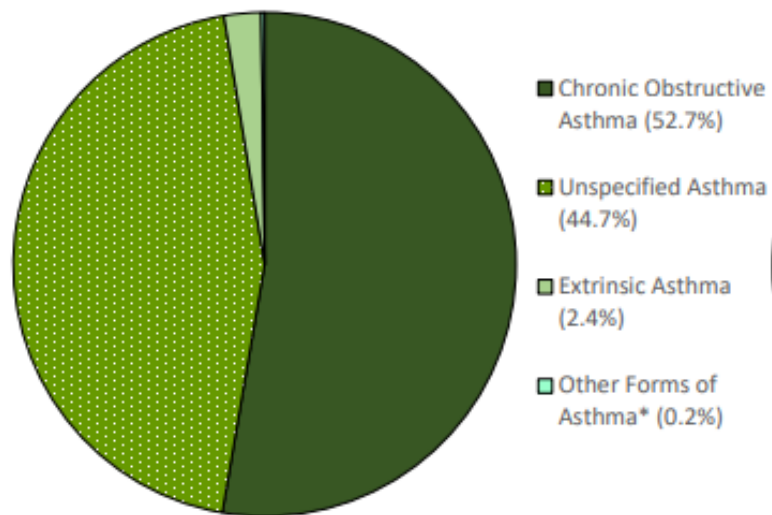
- In 2014, the asthma hospitalization rate for individuals who were 65+ years old was 20.3 per 10,000.
- Decreased 22.5% between 2010 and 2014.
- Significantly higher than those 18-64 years old.

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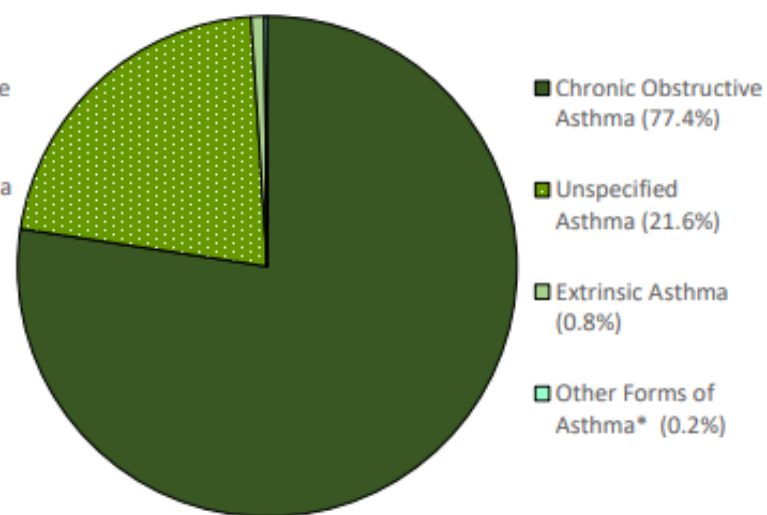
OLDER ADULTS

- Chronic obstructive asthma is defined as asthma with chronic obstructive pulmonary disease (COPD). Extrinsic asthma refers to allergic asthma, or asthma caused by the inhalation of an allergen.
- In 2014, 77.4% of individuals age 65+ and 52.7% of individuals ages 18-64 were hospitalized for asthma and had a diagnosis of chronic obstructive asthma

Asthma Diagnosis at Hospitalization,
Ages 18-64, 2014



Asthma Diagnosis at Hospitalization,
Ages 65+, 2014

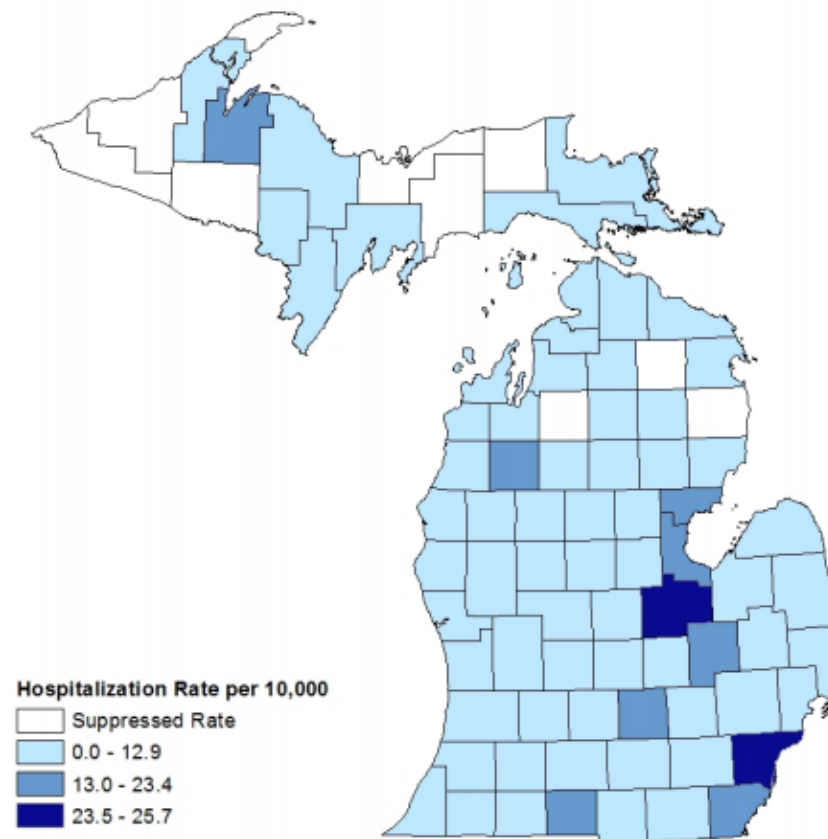


Data Source: Michigan Inpatient Database, MDHHS, 2014

SAGINAW COUNTY – RATE OF HOSPITALIZATION

- Wayne County and Saginaw County had the highest asthma hospitalization rates (25.7 and 23.5 per 10,000, respectively).
- 10 counties had asthma hospitalization rates above the state rate (12.9 per 10,000).

Rates of Asthma Hospitalization by County, Michigan, 2012-2014



- From 2012 to 2014, Wayne County and Saginaw County experienced the highest asthma hospitalization rates (25.7 and 23.5 per 10,000, respectively).
- Michigan's asthma hospitalization rate was 12.9 per 10,000 during this period; ten counties had asthma hospitalization rates above the state rate.

Data Notes:
Source: Michigan Inpatient Database, 2012-2014
1. Age-adjusted to the 2000 US Standard Population
2. Asthma as primary diagnosis, ICD-9-CM
3. Rate suppressed if hospitalization count is zero

SAGINAW COUNTY

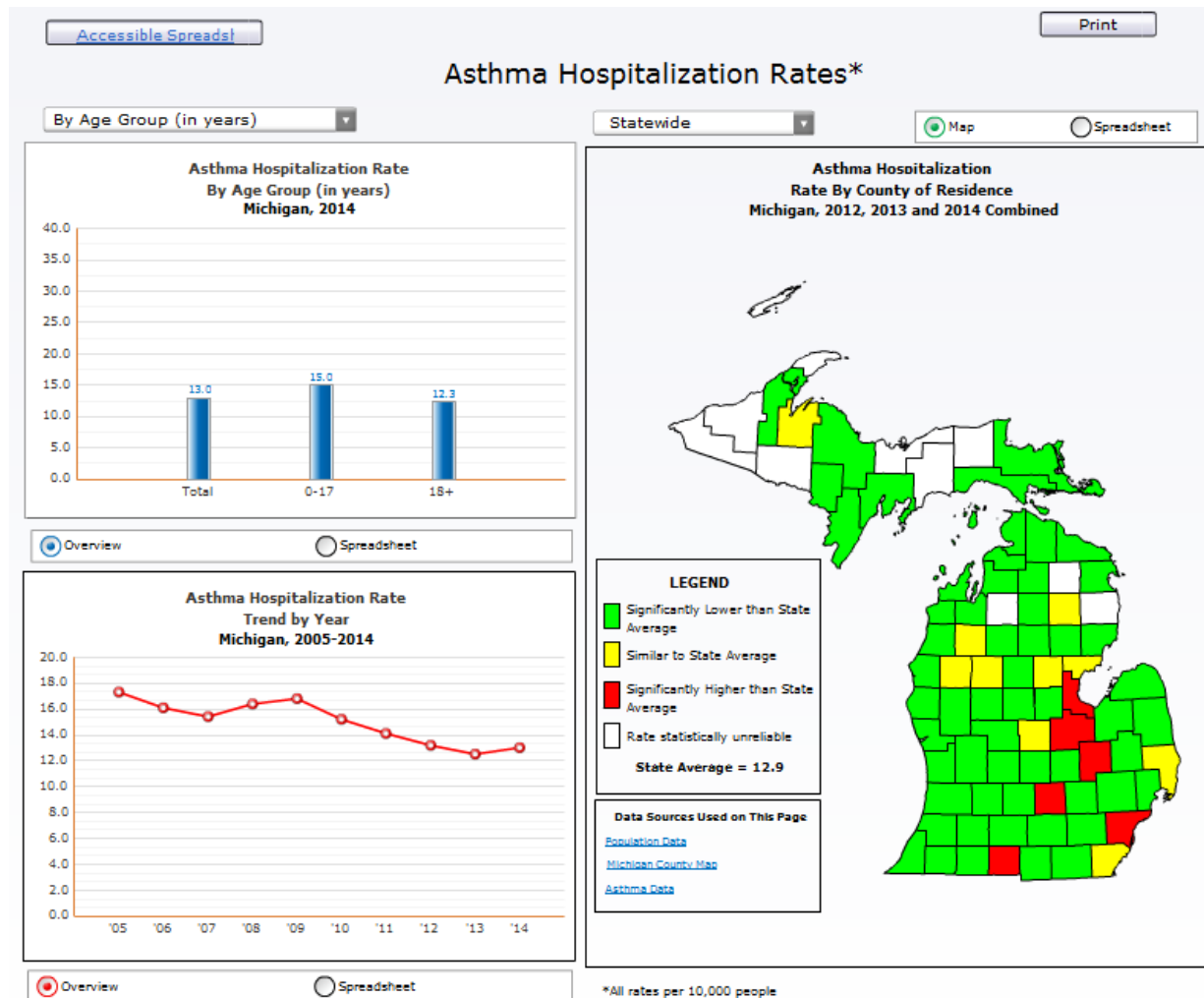
Other Key Findings:

- The asthma mortality rate in Saginaw County is twice as high as Michigan's asthma mortality rate.
- Fewer Saginaw children on Medicaid attended primary care office visits for asthma in comparison to all Michigan children on Medicaid.
- More Saginaw children on Medicaid visited the emergency department for asthma in comparison to all Michigan children on Medicaid.

OTHER NEW ITEMS

- Asthma Call Back Survey Tables JUST RELEASED
 - Symptom-free days
 - Comorbid conditions
 - Cost barriers
 - Asthma triggers in the home
 - Missed work or school days due to asthma

INTERACTIVE WEBSITES-MICHIGAN.GOV



- Hospitalization
- Mortality
- Prevalence
- Call Back Survey
- Medicaid

https://www.michigan.gov/mdhhs/0,5885,7-339-73970_2944_67827-360115--,00.html

INTERACTIVE WEBSITES-GETASTHMAHELP.ORG

View Statewide Medicaid Data: Select Indicator and Years then click

For more detailed data pick demographic(s) and/or county(ies).

Select 1 or More

- Select All/None
- Persistent Asthma (%) [i](#)
- Emergency Department Rate per 10,000 People
- Hospitalization Rate per 10,000 People
- Had Two or More Office Visits (%)
- Had One or More Emergency Department Visit (%) [i](#)
- Had Two or More Emergency Department Visits (%) [i](#)
- Emergency Department Reliance for Primary Care (%) [i](#)
- Had One or More Hospitalization (%) [i](#)
- Seven or More Prescription Refills for Short-Acting Beta-Agonist (SABA) (%) [i](#)
- Had One or More Inhaled Corticosteroid (%)
- Had One or More Long Term Controller (%) [i](#)
- Had Two or More Oral Corticosteroid (%)
- Appropriate Medication Use During at Least 50% of Treatment Period (%)
Data available for 2011, 2012 and 2013
- Appropriate Medication Use During at Least 75% of Treatment Period (%)
Data available for 2011, 2012 and 2013
- Had One or More Spirometry (%) [i](#)

Select Years

- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013

Demographics

- Urban/Rural
- Gender
- Race

Counties

- Select All/None
- Alcona
- Alger
- Allegan
- Alpena
- Antrim
- Arenac
- Baraga
- Barry
- Bay
- Benzie
- Berrien
- Branch
- Calhoun
- Cass
- Charlevoix
- Cheboygan
- Chippewa
- Clare
- Clinton

<http://getasthmahelp.org/medicaid-data-multiple-years.aspx>

WHERE TO FIND MICHIGAN ASTHMA DATA

www.michigan.gov/asthmaepi

<http://getastmahelp.org/michigan-asthma-surveillance.aspx>

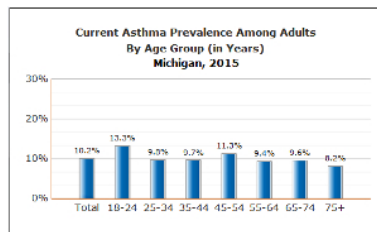
Michigan Asthma Surveillance, Data and Reports

Asthma is a serious, chronic disease of the lungs that is caused by swelling (inflammation) in the airways. There is no cure for asthma, but symptoms can be prevented and controlled with proper care. For more information, read the [MDHHS Asthma Fact Sheet](#) or visit the [MDHHS Asthma Program](#) website.

This page includes links to asthma surveillance reports, presentations, fact sheets, infographics, and other data products produced by the staff of the [MDHHS Chronic Disease Epidemiology Section](#). It also includes links to other sources of statewide and national asthma data that will help you better understand asthma's impact on our residents.

Check out our special [Michigan Asthma Indicators](#) section for Michigan-based data on asthma-related health behaviors and vital statistics specific to Michigan children and adults, as well as Michigan residents in general.

Within each indicator, use the interactive features to choose the data set you'd like to explore. Data sets can be viewed as easy-to-use bar charts, line graphs, and maps, or downloaded as Microsoft Excel files.



Michigan Asthma Indicators

[Reports and Presentations](#)

[Fact Sheets, Infographics, Surveillance Briefs](#)

[Data Tables](#)

[Sources of National Asthma Statistics](#)

Michigan Asthma Surveillance, Data and Reports

The Michigan Department of Health & Human Service's Bureau of Disease Control, Prevention and Epidemiology have compiled surveillance information and created comprehensive reports on the epidemiology of asthma in Michigan.

Asthma in the Elderly Population – 2018

This brief describes asthma prevalence and hospitalization statistics for the elderly population in Michigan.

Asthma by Race and Ethnicity – 2017

Summary of asthma prevalence, hospitalization, and mortality rates among different racial and ethnic populations in Michigan, including American Indian, Asian, and Arab populations.

Youth Risk Behavior Survey – 2017

This surveillance brief summarizes asthma-related data from the 2015 Youth Risk Behavior Survey. It includes national and state level lifetime asthma rates as well as data on certain health behaviors such as obesity, drug and alcohol use among those with current asthma.

Michigan Asthma Statistics Fact Sheet – 2016