Asthma in Ohio

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 Ohio (OH) 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 831,787 adults in Ohio had asthma. Adult lifetime asthma prevalence was 14.2% and adult current asthma prevalence was 9.6% compared with U.S. rates of 13.3% and 8.5%, respectively2.

![Adult Current Asthma Prevalence by Age, BRFSS, 2008](chart)

Adult current asthma prevalence was similar among all age groups when compared with adults aged 18-24 years in Ohio; however, the rate was highest among adults aged 18-24 years throughout the U.S.

![Adult Current Asthma Prevalence by Sex, BRFSS, 2008](chart)

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

![Adult Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008](chart)

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

In 2008, an estimated 252,944 children in Ohio had asthma. Child lifetime asthma prevalence was 13.6% and child current asthma prevalence was 9.4% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively2.

![Child Current Asthma Prevalence by Age, BRFSS, 2008](chart)

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

![Child Current Asthma Prevalence by Sex, BRFSS, 2008](chart)

Child current asthma prevalence was similar among boys and girls in Ohio; however, the rate was higher among boys throughout the 38 participating states.

![Child Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008](chart)

Child current asthma prevalence was higher among non-Hispanic blacks compared with non-Hispanic whites in Ohio; however, rates were higher among non-Hispanic multirace persons throughout the 38 participating states.
Asthma in Ohio

Asthma Hospitalizations
Ohio Hospital Discharge Data, 2008

The age-adjusted asthma hospitalization rate in Ohio was 164.8/100,000 persons3 compared with the U.S. rate of 144/100,000 persons4. In Ohio, the hospitalization rate for children was 154.6/100,000 persons3 and for adults was 175.0/100,000 persons3.

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

Asthma was the underlying cause of death for 135 adults and 10 children in Ohio5. The age-adjusted mortality rate in Ohio was 11.6/million and the U.S. rate was 11.0/million5.

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 Ohio.

<table>
<thead>
<tr>
<th>Patient Education: Adults with Current Asthma6</th>
<th>Respondents</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever taught how to recognize early signs or symptoms of an asthma episode</td>
<td>347</td>
<td>72%</td>
</tr>
<tr>
<td>Ever told what to do during an asthma attack</td>
<td>349</td>
<td>86%</td>
</tr>
<tr>
<td>Ever taught how to use a peak flow meter to adjust daily medications</td>
<td>346</td>
<td>45%</td>
</tr>
<tr>
<td>Ever given an asthma action plan</td>
<td>348</td>
<td>31%</td>
</tr>
<tr>
<td>Ever taken a course on how to manage asthma</td>
<td>349</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication Use: Adults with Current Asthma6</th>
<th>Respondents</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used a prescription asthma medication in the past 3 months7</td>
<td>342</td>
<td>74%</td>
</tr>
</tbody>
</table>

NOTES:
1. National Health Interview Survey (NHIS), 2008
2. 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).
3. State Hospital Discharge Data, 2008
   When estimates are based on fewer than 60 hospitalizations, they are considered unstable and should be interpreted with caution. Indicated with an asterisk (*)
   When estimates are based on fewer than 60 hospitalizations, 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 (**) 
7. 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.odh.ohio.gov/odhPrograms/eh/asthma/asthma1.aspx