Asthma in Kentucky

Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 18 years) and 7.0 million children (aged < 18 years) 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 Kentucky (KY) 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 312,561 adults in Kentucky had asthma. Adult lifetime asthma prevalence was 14.7% and adult current asthma prevalence was 9.7% compared with U.S. rates of 13.3% and 8.5%, respectively.

In 2008, an estimated 92,652 children in Kentucky had asthma. Child lifetime asthma prevalence was 13.8% and child current asthma prevalence was 9.4% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively.

National Center for Environmental Health
Division of Environmental Hazards and Health Effects

CS223980_F
Asthma in Kentucky

Asthma Hospitalizations
Kentucky Hospital Discharge Data, 2008

The age-adjusted asthma hospitalization rate in Kentucky was 153.6/100,000 persons\(^3\) compared with the U.S. rate of 144/100,000 persons\(^4\). In Kentucky, the hospitalization rate for children was 197.4/100,000 persons\(^3\) and for adults was 142.8/100,000 persons\(^3\).

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

Asthma was the underlying cause of death for 36 adults and less than 10** children in Kentucky\(^5\). The age-adjusted mortality rate in Kentucky was 8.2/million and the U.S. rate was 11.0/million\(^5\).

**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. The state of Kentucky does not have data available from the Asthma Call-back Survey.

Patient Education: Adults with Current Asthma\(^6\)

<table>
<thead>
<tr>
<th>Question</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>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Ever told what to do during an asthma attack</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Ever taught how to use a peak flow meter to adjust daily medications</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Ever given an asthma action plan</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Ever taken a course on how to manage asthma</td>
<td>not available</td>
<td>not available</td>
</tr>
</tbody>
</table>

Medication Use: Adults with Current Asthma\(^6\)

<table>
<thead>
<tr>
<th>Question</th>
<th>Respondents</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used a prescription asthma medication in the past 3 months?</td>
<td>not available</td>
<td>not available</td>
</tr>
</tbody>
</table>

NOTES:

1. National Health Interview Survey (NHIS), 2008
2. Behavioral Risk Factor Surveillance System (BRFSS), 2008
3. State Hospital Discharge Data, 2008
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.chfs.ky.gov/dph/info/dpqicd/Asthma.htm