Asthma in Pennsylvania: Epidemiological Synopsis

Asthma Control Program
Bureau of Epidemiology
Pennsylvania Department of Health

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Vadim Drobin, M.D., M.P.H
Topics of Discussion

- Asthma Prevalence
- Asthma Hospitalization
- Charges for Asthma Hospitalizations
- Asthma Mortality
- Pennsylvania Asthma Partnership
# Self-Reported Current Asthma Prevalence Among Adults, PA 2006-2010

<table>
<thead>
<tr>
<th>Selected Characteristics</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>95%CI</td>
<td>Percent</td>
<td>95%CI</td>
<td>Percent</td>
</tr>
<tr>
<td>Overall</td>
<td>9</td>
<td>8-9</td>
<td>9</td>
<td>8-10</td>
<td>9</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>5-7</td>
<td>7</td>
<td>6-9</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>10-12</td>
<td>11</td>
<td>10-13</td>
<td>12</td>
</tr>
<tr>
<td>Age: 18-29</td>
<td>12</td>
<td>10-15</td>
<td>15</td>
<td>11-20</td>
<td>10</td>
</tr>
<tr>
<td>Age: 30-44</td>
<td>8</td>
<td>7-10</td>
<td>8</td>
<td>7-10</td>
<td>9</td>
</tr>
<tr>
<td>Age: 45-64</td>
<td>8</td>
<td>7-9</td>
<td>8</td>
<td>7-10</td>
<td>9</td>
</tr>
<tr>
<td>Age: GE 65</td>
<td>7</td>
<td>6-8</td>
<td>7</td>
<td>6-8</td>
<td>8</td>
</tr>
</tbody>
</table>

Data Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS)
CI denotes confidence interval
Self-Reported Current Asthma Prevalence Among Children, PA 2005-2010

Data Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS)
CI denotes confidence interval
Rates for Inpatient Hospitalizations with Asthma Among Children and Adults, PA 2006-2010

Data Source: Pennsylvania Health Care Cost Containment Council (PHC4)
CI denotes confidence interval
Rates for Inpatient Hospitalizations with Asthma by Age Group and Gender, PA 2006-2010

Data Source: Pennsylvania Health Care Cost Containment Council (PHC4)
CI denotes confidence interval
Average Charge Per Hospitalization Among Children and Adults Due To Asthma, PA 2006-2010

Data Source: Pennsylvania Health Care Cost Containment Council (PHC4)
### Number of Admissions, Length of Stay (LOS) and Average Charges per Hospitalization Due to Asthma by Type of Asthma, PA 2008-2010

<table>
<thead>
<tr>
<th>Type of Asthma</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of admissions</td>
<td>LOS</td>
<td>Average charge per admission</td>
</tr>
<tr>
<td>Extrinsic and Intrinsic</td>
<td>969</td>
<td>3.1</td>
<td>$19,088</td>
</tr>
<tr>
<td>Chronic obstructive</td>
<td>8,839</td>
<td>4.9</td>
<td>$28,098</td>
</tr>
<tr>
<td>Other and Unspecified</td>
<td>14,097</td>
<td>2.7</td>
<td>$17,279</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23,905</td>
<td>3.6</td>
<td>$21,845</td>
</tr>
</tbody>
</table>

Data Source: Pennsylvania Health Care Cost Containment Council (PHC4)
Rates* of Inpatient Hospitalization with Asthma Among Children and Adults by Day of the Week, PA 2006-2010

Data Source: Pennsylvania Health Care Cost Containment Council (PHC4)

*Only indicates admissions to the hospital through the Emergency Room
Age-Adjusted Asthma Death* Rates Among Pennsylvania Residents, 2000-2009

Data Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research

* Only includes death with asthma listed as the underlying cause
Vertical bars on the graph denote the 95% confidence interval
Age-Adjusted Asthma Death* Rates by Race and Ethnicity, 1998-2009

Data Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research

*Only includes death with asthma listed as the underlying cause
Vertical bars on the graph denote the 95% confidence interval
Pennsylvania Asthma Control Programs-Interventions

- **Asthma 101 Program** teaches school personnel through online Learning Management System (LMS)

- **Pediatric Asthma Toolkit** provides educational materials, referral resources for providers, schools, community organizations

- **Chronic Care Model**: practice systems change for asthma/chronic disease, e.g. performance indicators -- utilized in:
  - Healthy Home Environmental Program (HHEP) educates people with asthma symptoms, and helps to identify possible asthma triggers in their homes, adding CCM component to improve outcomes
  - PA cAARds (Ask-Advise-Refer) integrates tobacco prevention and chronic disease control; 2010-2011: diabetes, new 2012: asthma
Disclaimer:

These data were provided by the Bureau of Health Statistics and Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions. The Pennsylvania Department of Health disclaims responsibility for any analyses, interpretations or conclusions made by the user based on presented data.
Disclaimer:

The Pennsylvania Health Care Cost Containment Council (PHC4) is an independent state agency responsible for addressing the problem of escalating health costs, ensuring the quality of health care, and increasing access to health care for all citizens. While PHC4 has provided data for this study, PHC4 specifically disclaims responsibility for any analyses, interpretations or conclusions.
Asthma Resources

Online:
Pennsylvania Asthma Control Program:
www.health.state.pa.us or www.PAasthma.org
You can download:
- 2011 Asthma Burden in CHIP Population Report
- Previous asthma focus reports
- Asthma resources for national, state and local levels

Printed Copies of:
- Educational materials for asthma
- Asthma reports
- Asthma Fact Sheets
- Asthma presentations
Acknowledgments

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If you have any questions please contact:

Vadim Drobin, M.D., M.P.H.
Asthma Control Program Epidemiologist
vdrobin@state.pa.us  (717) 772-3262

In addition you may contact:

Karen Green, MBA/MS-CRP,
Asthma Control Program Administrator
kargreen@state.pa.us  (717) 346-3968

Thank you!