Asthma is a common chronic respiratory disease that affects people of all ages. Symptoms may include wheezing, breathlessness, chest tightness and coughing. The National Heart, Lung and Blood Institute Guidelines for the Diagnosis and Management of Asthma apply to all ages, but the elderly population may require more attention as they have the second highest asthma hospitalization rate nationally and in Indiana, respectively.\(^1,2\) There are approximately 858,000 adults aged 65 and older in Indiana. Of those, 8.9% currently have asthma [see Fig 1].\(^3\)

**Figure 1. Current asthma\(^1\) prevalence among adults aged 65 years and older, Indiana, 2011\(^3\)**

<table>
<thead>
<tr>
<th>Percent</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
<th>NH* White</th>
<th>NH* Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.9</td>
<td>7.0</td>
<td>10.3</td>
<td>8.5</td>
<td>13.3</td>
<td>10.3</td>
<td></td>
</tr>
</tbody>
</table>

\*NH= non-Hispanic

Source: CDC and ISDH Data Analysis Team.

Disease management in elderly adults with current asthma

Asthma in older adults is under-diagnosed and undertreated.\(^4\) Of those diagnosed with asthma:

- 22.8% received an asthma action plan from a health professional\(^5\)
- 44.4% were told by a health professional to make a change to their environment\(^5\)
- 57.5% reported having at least 2 routine checkups for asthma during the past 12 months\(^5\)

**Healthy People 2020**

**Respiratory Disease (RD) Objectives\(^7\)**

- **RD-2.3: Reduce hospitalizations for asthma\(^1\)**
  - Target rate: 20.3 per 10,000
  - Current Indiana rate: 21.8 per 10,000 (2011)\(^2\)

- **RD-3.3: Reduce emergency department (ED) visits for asthma\(^2\)**
  - Target rate: 13.8 per 10,000
  - Current Indiana rate: 15.1 per 10,000 (2011)\(^2\)

\(^1\)Measured by asking if the adult ever had asthma and still had asthma

\(^2\)Principal diagnosis of asthma (ICD-9-CM codes 493) among adults aged 65+

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**Asthma Mortality**

Asthma deaths are rare, but they are more common in the elderly.

- Since 2006, 41.5% of all asthma deaths occurred in adults aged 65 years and older.\(^6\)

**Asthma Symptoms and Comorbid Conditions**

Controlling asthma symptoms is crucial for people of all ages. Among Indiana adults aged 65 years and older with current asthma:

- 34.5% of those who had symptoms during the past 30 days reported experiencing symptoms every one of those days\(^5\)
- 10.8% reported experiencing a lot of activity limitation during the past 12 months\(^5\)
- 55.6% said they had been diagnosed with COPD\(^3\)
- 25.8% said they had been diagnosed with depression\(^3\)
- 3.4% were first diagnosed with asthma when they were 65 years or older\(^5\)

**Figure 2. Hospitalization and ED visit rates for adults aged 65 years and older with asthma\(^4\), Indiana, 2007–2011\(^2\)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospitalizations</th>
<th>Hospital Target</th>
<th>ED Visits</th>
<th>ED Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>26.3</td>
<td>21.8</td>
<td>20.7</td>
<td>15.1</td>
</tr>
<tr>
<td>2008</td>
<td>20.7</td>
<td>15.1</td>
<td>20.7</td>
<td>15.1</td>
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<tr>
<td>2009</td>
<td>15.1</td>
<td>15.1</td>
<td>15.1</td>
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<tr>
<td>2010</td>
<td>15.1</td>
<td>15.1</td>
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<tr>
<td>2011</td>
<td>15.1</td>
<td>15.1</td>
<td>15.1</td>
<td>15.1</td>
</tr>
</tbody>
</table>

Source: ISDH Data Analysis Team.

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References