CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) is a group of progressive diseases, including emphysema and chronic bronchitis, characterized by airflow blockage and breathing-related problems. Symptoms of COPD include chronic coughing, excessive mucus production, shortness of breath, wheezing and chest tightness. In Indiana, an estimated 8.3% of adults reported having a diagnosis of COPD compared to the national prevalence of 6.3%. More Indiana females reported a COPD diagnosis in 2011 than males [Fig. 1].

**Figure 1. Prevalence of COPD by sex and age groups, Indiana, 2011**

<table>
<thead>
<tr>
<th>Age</th>
<th>Overall</th>
<th>25–34</th>
<th>35–44</th>
<th>45–54</th>
<th>55–64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10.1%</td>
<td>5.4%</td>
<td>5.4%</td>
<td>6.4%</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Female</td>
<td>6.4%</td>
<td>3.4%</td>
<td>3.4%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

§Data suppressed due to low response.

COPD is the third leading cause of death in the United States. Known risk factors for COPD include:
- Smoking
- History of asthma
- Genetics
- Exposure to air pollutants at home or work

**Tobacco**
Smoking is the most common risk factor associated with COPD. Of the adults who reported a COPD diagnosis in Indiana: 1
- 45.0% currently smoke
- 33.4% smoked at some point during their life
- 21.6% indicated that they had never smoked

**Healthy People 2020 Respiratory Disease (RD) Objectives**

RD-11: Reduce hospitalizations for COPD*
- Target: 50.1

RD-12: Reduce emergency department (ED) visits for COPD*
- Target: 57.3

*Principal diagnosis of COPD (ICD-9-CM codes 490-492, 496) among adults aged 45 years and older.
†Age-adjusted to the 2000 standard population.

**Asthma and COPD**
While they exhibit similar symptoms, asthma and COPD are two distinct conditions. In asthma, airways become inflamed and irritable in response to an allergen. In COPD, chronic exposure to certain irritants leads to lung obstruction and hyperinflation.
- Asthma can affect people of any age whereas COPD is more likely to affect older adults.
- In Indiana, 46.7% of adults who reported a COPD diagnosis had asthma during their lifetime and 40.4% currently have asthma.
- Nationally, 20.3% of adults with COPD reported having asthma during their lifetime.
- While airway obstruction in asthma is typically reversible, airway obstruction in COPD is only partially reversible.

**COPD Management and Impact**
- 41.5% of people with a COPD diagnosis were seen by a physician in the previous 12 months for their COPD symptoms
- 62.5% of COPD diagnosed individuals indicated that shortness of breath affected their quality of life

**Figure 2. Hospitalization and ED visit age-adjusted† rates for adults aged 45 years and older with COPD*, Indiana, 2007–2011**

**References**

For additional information on the impact of chronic respiratory disease in Indiana, please visit: www.chronicdisease.isdh.in.gov