Asthma Prevalence

Asthma prevalence is one of the foremost indicators to measure and track the burden of disease among population groups. Tracking asthma prevalence across age groups, gender, geographic areas, income and education levels, and by racial and ethnic groups makes it possible to target the most vulnerable sections of the population. For example, Utah has a higher prevalence of asthma in certain urban and rural health districts when compared to the overall asthma prevalence in the state. Since 2001, asthma prevalence has been on an upward trend in Utah, which is similar to increasing trends nationwide.

**Key Findings**

- In 2010, 6.9% of children and 9.1% of adults had current asthma.
- Male children appeared to have a higher prevalence of lifetime and current asthma compared to female children, whereas adult females seemed to have a higher lifetime and current asthma prevalence compared to adult males.
- Asthma prevalence has followed an increasing trend during the past decade, both in Utah and nationally.
- Among adults of different ethnicities, the current asthma prevalence for the Hispanic population (5.2%) was the lowest compared to the state and other ethnic populations.
- The following three geographic small areas reported current asthma prevalence that was significantly higher compared to the state: Carbon/Emery Counties, Magna, and West Valley West.
Asthma Prevalence

Figure 1. Prevalence of Lifetime and Current Asthma, Utah, 2010

Lifetime asthma is defined as having ever been diagnosed with asthma by a doctor or other health professional, regardless of whether or not that individual still has asthma. Current asthma is defined as those who have ever been diagnosed with asthma by a doctor or other health professional and who report that they still have asthma. In 2010, 6.9% of children and 9.1% of adults reported having current asthma. Significantly higher percentages reported having lifetime asthma.

Figure 2. Prevalence of Lifetime Asthma by Age and Sex, Utah, 2010

In 2010, adult females appeared to have a higher prevalence of lifetime asthma when compared to males for every age group. The opposite appeared to be true among children ages 0-17. However, differences were not statistically significant.
Asthma Prevalence

Figure 3. Prevalence of Current Asthma by Age and Sex, Utah, 2010

Males ages 0-17 appeared to have a higher prevalence of current asthma when compared to females. For adults ages 18 and older, females seemed to have a higher prevalence of asthma for every age group. However, the only significant difference in asthma prevalence between males and females was found among adults ages 65 and older.

Figure 4. Prevalence of Current Asthma Among Adults Ages 18 and Older, U.S. and Utah, 2001-2010

From 2001 to 2010, asthma prevalence increased among adults both in Utah and nationwide. Adult asthma prevalence increased by 28.6% in Utah during that time period, from 7.0% to 9.0%. Utah adult asthma prevalence has remained similar to national adult asthma prevalence.
Asthma Prevalence

Approximately half of Utah adults who have ever been diagnosed with asthma were diagnosed by age 17 (55.3%), and four-fifths (80.0%) reported being diagnosed by age 34.

Asthma prevalence varied among Utah’s ethnic populations. Hispanic adults reported the lowest asthma prevalence (5.2%), which was 38.8% lower than the statewide adult asthma prevalence (8.5%). 2008-2010 data were combined to obtain reliable estimates. Among children, reliable estimates for ethnicity were unavailable.
**Asthma Prevalence**

**Figure 7. Prevalence of Current Asthma by Race, Utah Adults, 2006-2010**

Adult asthma prevalence appears to vary among populations differing by race. Pacific Islanders reported the lowest asthma prevalence (4.2%), while American Indian/Alaskan Natives reported the highest prevalence (11.5%). However, the only differences that were statistically significant were between White and Pacific Islander populations. True differences may exist between other racial groups, but may be masked due to small populations for some races and resulting large confidence intervals that overlap. Years 2006-2010 were combined to obtain reportable estimates for adults. Reliable estimates were unavailable for children.

**Figure 8. Prevalence of Current Asthma by Education Level, Utah Adults Ages 25 and Older, 2010**

Asthma prevalence was compared based on highest education level achieved among adults ages 25 and older. No significant differences in asthma prevalence were apparent based on education.

Source: Utah BRFSS, 2006-2010 combined. Age-adjusted prevalence is presented with 95% confidence intervals.

* The estimate has a coefficient of variation >30% and does not meet Utah Department of Health standards for reliability.
There were no statistically significant differences in asthma prevalence among Utah adults, based on reported income level.

Source: Utah BRFSS, 2010. Age-adjusted prevalence is presented with 95% confidence intervals.
Asthma Prevalence

Table 1. Small Areas with Significantly Different Asthma Prevalence Compared to State, Utah 2006-2010

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Age-adjusted Prevalence with 95% CI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8.4 (8.0-8.8)</td>
</tr>
<tr>
<td><strong>Lower than State</strong></td>
<td></td>
</tr>
<tr>
<td>Layton</td>
<td>5.5 (3.9-7.7)</td>
</tr>
<tr>
<td>Other Washington County</td>
<td>5.0 (3.3-7.6)</td>
</tr>
<tr>
<td><strong>Higher than State</strong></td>
<td></td>
</tr>
<tr>
<td>Carbon/Emery Counties</td>
<td>11.6 (9.6-14.1)</td>
</tr>
<tr>
<td>Magna</td>
<td>13.4 (8.9-19.7)</td>
</tr>
<tr>
<td>West Valley West</td>
<td>12.8 (9.8-16.5)</td>
</tr>
</tbody>
</table>

*95% Confidence Interval

Source: Utah BRFSS, 2006-2010 combined. Age-adjusted prevalence is presented. Due to small area boundary changes that occurred in 2009, prevalence for the following small areas was calculated using only data from 2009-2010: W. Jordan Northeast, W. Jordan Southeast, and West Jordan West/Copperton.