Childhood Asthma  
Tennessee Fact Sheet

Asthma is the most common chronic illness of children in the U.S.

Approximately 140,000 Tennessee children under the age of 18 have asthma

What is asthma?
Asthma is a chronic lung condition that causes inflammation of the airways (breathing tubes). Inflammation means the airways are swollen and produce mucus. During an asthma flare-up, inflammation increases and the muscles around the airways tighten up, making them narrower. The swelling, mucus and tightness of the airways makes it hard for air to move in and out and causes symptoms such as coughing, wheezing, and shortness of breath.

What causes asthma?
The exact cause of asthma is unclear. However, there are many recognized asthma triggers that can lead to asthma symptoms and flare-ups.

Why is asthma a problem?
- Asthma is a leading cause of missed school days.
- Asthma can interfere with a child’s ability to sleep, play, do well in school and participate fully in school and family activities.
- Asthma is the third leading cause of hospitalizations among Tennessee children 1–17 years old.¹
- Between 2006 and 2010, 23 Tennessee children between the ages of 1 and 17 died as the result of asthma.²

Asthma disproportionately affects low-income and minority children
- Asthma prevalence increases with decreasing family income.³
- Asthma prevalence is over twice as high among black non-Hispanic children compared to white non-Hispanic children.³

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**Common Asthma Triggers**

- Animal dander
- Dust mites
- Cockroaches
- Pollen
- Mold
- Tobacco smoke
- Air pollution
- Strong odors
- Cold air or changes in weather
- Exercise
- Strong emotions or stress
- Some medicines
- Some food preservatives
- Respiratory infections

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**Current Asthma Prevalence by Household Income**

<table>
<thead>
<tr>
<th>Percent of Federal Poverty Level</th>
<th>0-17 Year Olds, Tennessee, 2007</th>
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</thead>
<tbody>
<tr>
<td>0-99%</td>
<td>12.4%</td>
</tr>
<tr>
<td>100-199%</td>
<td>11.0%</td>
</tr>
<tr>
<td>200-399%</td>
<td>8.2%</td>
</tr>
<tr>
<td>≥400%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

**Current Asthma Prevalence by Race**

<table>
<thead>
<tr>
<th>Race</th>
<th>0-17 Year Olds, Tennessee, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Non-Hispanic</td>
<td>16.1%</td>
</tr>
<tr>
<td>White Non-Hispanic</td>
<td>7.6%</td>
</tr>
</tbody>
</table>
What is the healthcare burden of childhood asthma in Tennessee?

- Hospitalizations and emergency department visits are a serious consequence of asthma and an indication of severe and/or poorly managed disease.
- Each year there are approximately 1,900 inpatient hospitalizations and 14,200 emergency department visits for asthma among children aged 1–17 years old.\(^1\)
- In 2010, combined inpatient and outpatient hospital charges for childhood asthma totaled $41.4 million.\(^1\)

How does Tennessee compare to other states?

- 9.5% of Tennessee children aged 0–17 years currently have asthma, compared to 9.0% for the entire United States.\(^3\)
- Among individual states, childhood asthma prevalence ranged from 5.2% in South Dakota to 12.3% in Alabama and Ohio.\(^3\)
- Tennessee had the 20\(^{th}\) highest prevalence rate (tied with Michigan) among the 50 states.\(^3\)

Childhood asthma cannot be cured, but it can be managed and controlled.

Asthma management activities include:

- Regular doctor visits
- Developing and using a written asthma action plan
- Avoiding asthma triggers
- Monitoring symptoms to assess asthma control
- Using medications as directed

With proper management asthma symptoms can be kept under control. By working together to ensure the above steps are followed, parents, health care providers, and schools can ensure that kids with asthma stay healthy and active.

The mission of the State of Tennessee Asthma Taskforce (STAT) is to promote lung health and reduce asthma disease and disparities through agency and community collaborations, advocacy, and education. Additional information about asthma management and STAT may be found at http://health.state.tn.us/MCH/asthma.htm.

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\(^1\) Data Source: Tennessee Department of Health: Division of Health Statistics: Hospital Discharge Data System.
\(^2\) Data Source: Tennessee Department of Health: Division of Health Statistics: Death Statistical System.