Current and Lifetime Childhood Asthma Prevalence, El Paso, Texas, BRFSS 2009-2011

Data Requested by
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Executive Summary

Asthma is a significant public health issue in the United States and Texas. The burden of asthma in Texas varies by demographic factors such as sex, race/ethnicity, and age; and geographic area such as Public Health Region (PHR) and county. This brief report focuses on the prevalence of asthma among children in El Paso, Texas.

• According to the 2009 Texas Behavioral Risk Factor Surveillance System (BRFSS), in El Paso, Texas an estimated 11.8 percent of children had current asthma and an estimated 15.7 percent had ever been diagnosed with asthma.
• In 2010, an estimated 7.6 percent of children in El Paso, Texas had current asthma and an estimated 11.8 percent had ever been diagnosed with asthma.
• In 2011, an estimated 6.4 percent of children in El Paso, Texas had current asthma and an estimated 9.0 percent had ever been diagnosed with asthma.

While this report does not include multiple data sources or demographic subpopulations, the report does provide insight into the burden of asthma among children from 2009-2011 in El Paso compared to children throughout the state of Texas.
Table 1. Current Asthma Prevalence among Children (0-17 years) in El Paso, Texas, BRFSS 2009-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Sample Size</th>
<th>Prevalence (%)</th>
<th>Standard Error</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Estimated Number of Children with Current Asthma</th>
<th>Sample Size</th>
<th>Prevalence (%)</th>
<th>Standard Error</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Estimated Number of Children with Current Asthma</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>315</td>
<td>11.8</td>
<td>2.1</td>
<td>7.7</td>
<td>15.9</td>
<td>25,505</td>
<td>3,391</td>
<td>8.2</td>
<td>0.7</td>
<td>6.7</td>
<td>9.6</td>
<td>537,710</td>
</tr>
<tr>
<td>2010</td>
<td>275</td>
<td>7.6</td>
<td>1.7</td>
<td>4.2</td>
<td>10.9</td>
<td>18,302</td>
<td>5,036</td>
<td>7.6</td>
<td>0.7</td>
<td>6.2</td>
<td>9.0</td>
<td>521,803</td>
</tr>
<tr>
<td>2011*</td>
<td>127</td>
<td>6.4</td>
<td>2.9</td>
<td>0.6</td>
<td>12.1</td>
<td>14,562</td>
<td>3,695</td>
<td>8.0</td>
<td>0.7</td>
<td>6.7</td>
<td>9.3</td>
<td>533,115</td>
</tr>
</tbody>
</table>


Note: Data for children are based on information provided by an adult respondent about a child living in the home.

* Due to methodological changes in data weighting procedures for the 2011 BRFSS, 2011 Texas BRFSS data cannot be compared to 2009 and 2010 Texas BRFSS data.

Current Asthma

Survey questions: “Has a doctor, nurse or other health professional ever said that the child has asthma?” and “Does the child still have asthma?”

Numerator: Respondents who answered “Yes” to the previous survey questions.

Denominator: All respondents excluding refusals and unknowns.

Interpretation for Table 1:

- According to the 2009 Texas BRFSS, the prevalence of current asthma among children in El Paso, Texas was 11.8% (95% Confidence Interval (CI): 7.7-15.9). An estimated 25,505 children in El Paso, Texas had current asthma in 2009.
- According to the 2010 Texas BRFSS, the prevalence of current asthma among children in El Paso, Texas was 7.6% (95% CI: 4.2-10.9). An estimated 18,302 children in El Paso, Texas had current asthma in 2011.
- According to the 2011 Texas BRFSS, the prevalence of current asthma among children in El Paso, Texas was 6.4% (95% CI: 0.6-12.1). An estimated 14,562 children in El Paso, Texas had current asthma in 2011.
- The prevalence of current asthma among children in El Paso, Texas was not significantly different than the prevalence among children in Texas in 2009, 2010, or 2011.
Table 2. Lifetime Asthma Prevalence among Children (0-17 years) in El Paso, Texas, BRFSS 2009-2011

<table>
<thead>
<tr>
<th></th>
<th>El Paso MSA</th>
<th></th>
<th>Texas</th>
<th></th>
<th></th>
<th></th>
<th>Texas</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Sample Size</td>
<td>Prevalence (%)</td>
<td>Standard Error</td>
<td>Lower Limit</td>
<td>Upper Limit</td>
<td>95% CI for prevalence</td>
<td>Estimated Number of Children with Lifetime Asthma</td>
<td>Sample Size</td>
<td>Prevalence (%)</td>
<td>Standard Error</td>
</tr>
<tr>
<td>2009</td>
<td>315</td>
<td>15.7</td>
<td>2.3</td>
<td>11.1</td>
<td>20.3</td>
<td></td>
<td>33,935</td>
<td>3,405</td>
<td>13.3</td>
<td>0.9</td>
</tr>
<tr>
<td>2010</td>
<td>275</td>
<td>11.8</td>
<td>2.1</td>
<td>7.7</td>
<td>16.0</td>
<td></td>
<td>28,416</td>
<td>5,057</td>
<td>11.6</td>
<td>0.9</td>
</tr>
<tr>
<td>2011*</td>
<td>128</td>
<td>9.0</td>
<td>3.1</td>
<td>2.9</td>
<td>15.1</td>
<td></td>
<td>20,478</td>
<td>3,713</td>
<td>14.3</td>
<td>0.9</td>
</tr>
</tbody>
</table>


Note: Data for children are based on information provided by an adult respondent about a child living in the home.

* Due to methodological changes in data weighting procedures for the 2011 BRFSS, 2011 Texas BRFSS data cannot be compared to 2009 and 2010 Texas BRFSS data.

Lifetime Asthma

Survey question: “Has a doctor, nurse or other health professional ever said that the child has asthma?”

Numerator: Respondents who answered “Yes” to the previous survey question.

Denominator: All respondents excluding refusals and unknowns.

Interpretation for Table 2:

- According to the 2009 Texas BRFSS, the prevalence of lifetime asthma among children in El Paso, Texas was 15.7% (95% CI: 11.1-20.3). In 2009, an estimated 33,935 children in El Paso, Texas had ever been diagnosed with asthma.
- According to the 2010 Texas BRFSS, the prevalence of lifetime asthma among children in El Paso, Texas was 11.8% (95% CI: 7.7-16.0). In 2010, an estimated 28,416 children in El Paso, Texas had ever been diagnosed with asthma.
- According to the 2011 Texas BRFSS, the prevalence of lifetime asthma among children in El Paso, Texas was 9.0% (95% CI: 2.9-15.1). In 2011, an estimated 20,478 children in El Paso, Texas had ever been diagnosed with asthma.
- The prevalence of lifetime asthma among children in El Paso, Texas was not significantly different than the prevalence among children in Texas in 2009, 2010, or 2011.
Limitations of the data used in this report:

- Prevalence estimates from BRFSS may underestimate the true prevalence of asthma among Texas children and adults because the survey does not identify undiagnosed cases of asthma.
- Prevalence estimates for demographic subpopulations are not available for children in El Paso, Texas for individual years of data due to small sample size.
- The numbers of children with current asthma or lifetime asthma in 2009 and 2011 are based on population estimates. The numbers of children with current asthma or lifetime asthma in 2010 are based on population counts from the 2010 US Census which only counts US residents.
- Due to the improvements in BRFSS sampling methods and a change in weighting procedures used for the survey data, 2011 BRFSS data cannot be compared to data from 2009 and 2010 BRFSS to assess trends. Shifts in prevalence estimates for 2011 might not represent trends in risk factor prevalence in the population but instead merely reflect improved methods of measuring risk factors.
- Incidence rates and patterns of newly diagnosed asthma cases are not captured by the data in this report.