The Prevalence of Asthma in Hispanic Adults as compared to Whites in Massachusetts

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What is Asthma?

• Asthma is a chronic disease that affects the tubes that carry air in and out of your lungs.

• Those that have asthma have sore and swollen airways that are quite sensitive.

• Once irritated, the airways may get narrower; therefore, allowing less air in the lungs and causing wheezing, coughing, chest tightness and trouble breathing. These symptoms may occur in the morning or the nights.

• Severe symptoms are term “attacks”. Serious attacks can cause the airways to close and cut off oxygen to vital organs and can cause death.

What is a Health Disparity?

• Health disparities refer to the “differences in the incidence, prevalence, mortality and burden of disease and other adverse health conditions that exists among population groups in the United States.” (Nation Institute of Health)

Who does it affect?

• In Massachusetts, Hispanics have a higher prevalence of asthma as compared to the general public
The Disparity

- The prevalence of lifetime asthma in Massachusetts was higher among Hispanic (17.3%) than White, non-Hispanic (14.6%) adults.

- From 2000 through 2006, Black, non-Hispanics and Hispanics consistently had substantially higher age-adjusted rates of hospitalization due to asthma than White, non-Hispanics.

- The five-year (2002-2006) average age-adjusted death rate due to asthma among Hispanics, the rate was 2.7 times the rate among White, non-Hispanics.

  - Massachusetts Department of Public Health (2009)
How did it develop?

• Socioeconomic disparities in asthma
• Education disparities in asthma
• Geographic disparities in asthma
Triggers

- Animals (pet hair or dander)
- Dust
- Changes in weather (most often cold weather)
- Chemicals in the air or in food
- Exercise
- Mold
- Pollen
- Respiratory infections, such as the common cold
- Strong emotions (stress)
- Tobacco smoke

- National Institute of Health- Medline Plus (2011)
Symptoms

- Cough
- Shortness of breath
- Wheezing
- Abnormal breathing pattern
- Chest pain or tightness
- Lips and face turning blue *
- Rapid Pulse *
Possible Complications:

- Decreased ability to exercise and take part in other activities
- Lack of sleep due to nighttime symptoms
- Permanent changes in the function of the lungs
- Trouble breathing that requires breathing assistance (from a ventilator)
- Death

- National Institute of health- Medline Plus (2011)
Evidence of disparity

Asthma Inpatient Hospitalizations

<table>
<thead>
<tr>
<th>Regions</th>
<th>White</th>
<th>Hispanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worcester</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Lowell</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Springfield</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Fall River</td>
<td>13</td>
<td>18</td>
</tr>
</tbody>
</table>

Prevalence of Current Asthma in Adults

- Worcester
- Lowell
- Springfield
- Fall River

percentage

Cities

- white
- Hispanics

- Massachusetts Department of Public Health, MASSCHIP:BRFSS Data (1995-2010)
Bridging Disparity

• The quality of medical care
• Self-management support
• Outreach and community education
• Surveillance of disparities
• Housing quality
• Ambient air quality

("American lung association," 2012)
Objectives and Goals for 2014

• Goal 1: data collection on asthma

• Goal 2: Improve Asthma Management for Massachusetts Residents

• Goal 3: Reduce Exposure to Environmental Factors that Cause and/or Exacerbate Asthma in the Commonwealth

• Goal 4: Develop a Roadmap for Better Understanding the Causes of Asthma and the Role of Primary Prevention in Massachusetts

• Goal 5: Increase Capacity of the Statewide and Local Partnerships to Implement the *Strategic Plan for Asthma in Massachusetts*

• Goal 6: Evaluate Massachusetts’ Progress on the *Strategic Plan for Asthma in Massachusetts*

• Massachusetts Department of Public Health (2009)
References


