Asthma in New Jersey

Introduction

Asthma is a chronic respiratory disease that is characterized by inflammation and episodic narrowing of the airways. Symptoms may include shortness of breath, coughing, wheezing, chest pain, and chest tightness. Asthma cannot be cured and with the exception of work-related asthma (WRA), research has not identified how to prevent asthma from occurring. However, critical breakthroughs in science have generated a body of information that can be effectively used to control asthma enabling most people who are affected to live active and healthy lives.

Asthma control can usually be achieved through adherence to an effective medical management plan, treatment of coexisting medical conditions and avoidance of environmental and occupational triggers. Since 1991, the National Asthma Education and Prevention Program (NAEPP) of the National Heart, Lung and Blood Institute (NHLBI) has convened three expert panels to develop and update Guidelines for the Diagnosis and Management of Asthma. These Guidelines translate scientific findings into recommendations for patient care. Published in 2007, Expert Panel Report 3 (EPR3): Guidelines for the Diagnosis and Management of Asthma is organized around four essential components of asthma care including assessment and monitoring, patient education, pharmacologic treatment, and control of environmental factors and other health conditions that can affect asthma.1

Despite clinical and pharmacologic advancements related to asthma care, many patients experience uncontrolled asthma which can result in activity limitations, missed school days, missed work days, hospitalizations, emergency department visits, and even death. These outcomes are generally considered avoidable; yet, they occur frequently placing a tremendous burden on patients, their families, and the State in terms of reduced quality of life, lost productivity, occupational impairment, educational disruption, decreased income, and increased health care related expenditures. The Asthma and Allergy Foundation of America estimates the annual total cost of asthma in New Jersey was nearly $324 million in 1998.2

The purpose of this report is to provide statewide surveillance data that will assist individuals and organizations in their efforts to reduce the burden of asthma in New Jersey. With funding from the Centers for Disease Control and Prevention (CDC), the New Jersey Department of Health and Senior Services (NJDHSS) maintains a comprehensive surveillance system to monitor and report on asthma prevalence, emergency department visits, hospitalizations, deaths and various factors that are associated with the disease. NJDHSS also implements a WRA surveillance project that has been funded by the National Institute for Occupational Safety and Health (NIOSH) since 1988. The data included here provides information about the burden of asthma, associated factors, and changes that occur over time. This information can be used to:
Roadmap to Healthy Communities

- Plan, implement, and evaluate interventions
- Target interventions and resources for populations most affected
- Inform legislation or public policies
- Impact school, work, or other institutionally based policies
- Inform clinical practice
- Revise the goals, objectives, or activities of programs or organizations
- Generate hypotheses or stimulate research activities
- Provide support for funding proposals
- Communicate information about asthma

This version of “Asthma in New Jersey” includes the most recent statewide surveillance data on asthma. It is the fourth in a series of planned updates to the information and data that was first presented in “Asthma in New Jersey” (2003). “Asthma in New Jersey” will now be published as individual chapters that can be updated independently and used as stand-alone documents (Table 1).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asthma in New Jersey</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Status</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Completed</td>
<td>2010</td>
</tr>
<tr>
<td>Chapter 1: Lifetime Asthma and Current Asthma</td>
<td>Completed</td>
<td>2010</td>
</tr>
<tr>
<td>Chapter 2: Work-related Asthma</td>
<td>Planned</td>
<td>2012</td>
</tr>
<tr>
<td>Chapter 3: Children Living with Asthma</td>
<td>Planned</td>
<td>2012</td>
</tr>
<tr>
<td>Chapter 4: Adults Living with Asthma</td>
<td>Planned</td>
<td>2012</td>
</tr>
<tr>
<td>Chapter 5: Emergency Department Visits</td>
<td>Planned</td>
<td>2011</td>
</tr>
<tr>
<td>Chapter 6: Hospitalizations</td>
<td>Planned</td>
<td>2011</td>
</tr>
<tr>
<td>Chapter 7: Mortality</td>
<td>Planned</td>
<td>2011</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Planned</td>
<td>2012</td>
</tr>
</tbody>
</table>

**Acronyms:**

- ED – Emergency Department
- EPR3 – Expert Panel Report 3
- NAEPP – National Asthma Education and Prevention Program
- NHLBI – National Heart, Lung and Blood Institute
- NIOSH – National Institute for Occupational Safety and Health
- WRA – Work-Related Asthma
- CDC – Centers for Disease Control and Prevention
- NJDHSS – New Jersey Department of Health and Senior Services

**Definitions:**

**Public Health Surveillance** – “Ongoing, systematic collection, analysis, and interpretation of health-related data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those responsible for prevention and control.”

November 2010 - 2 -
**Lifetime Asthma** – Proportion of the population who reports ever having asthma at a single point in time

**Current Asthma** – Proportion of the population who reports having asthma at a single point in time

**References:**


**Acknowledgements:**

This document was developed by the New Jersey Asthma Awareness and Education Program within the NJDHSS Division of Family Health Services’ Chronic Disease Prevention and Control Services.

**Contributors:**

Melissa Vezina, MPH, Research Scientist, Asthma Awareness and Education Program

**Reviewers:**

Christina Tan, MD, MPH, State Epidemiologist
Celeste Andriot-Wood, Assistant Commissioner, Division of Family Health Services
Lisa A. Holland, RN, BSN, MBA, Director Chronic Disease Prevention and Control Services
Nuris Rodriguez, MSW, Program Manager, Chronic Disease Prevention and Management
Lisa Jones, RN, MSN, Coordinator, Asthma Awareness and Education Program
Uta Steinhauser, MPH, Program Evaluator, Chronic Disease Prevention and Control Services
Donald P. Schill, MS, CIH, Occupational Health Surveillance Program
Katherine Hempstead, PhD, Director, Center for Health Statistics
Kenneth O’Dowd, PhD, BRFSS Coordinator, NJDHSS Center for Health Statistics
David M. Mannino, MD, Centers for Disease Control and Prevention

**Questions and data requests can be directed to:**

Melissa Vezina, MPH
Research Scientist
New Jersey Asthma Awareness and Education Program
PO Box 364
Trenton, NJ 08625-0364
(609) 984-6137

For more information about the NJ Asthma Awareness and Education Program: [www.nj.gov/health/asthma](http://www.nj.gov/health/asthma)
For asthma resources from the Pediatric Adult Asthma Coalition of New Jersey (PACNJ):
www.pacnj.org

For work-related asthma resources from the NJ Occupational Health Surveillance Program:
www.state.nj.us/health/eoh/survweb/wra

Funding for this effort was provided by the CDC Cooperative Agreement entitled *Addressing Asthma from a Public Health Perspective* (5U59EH000491-02). The contents are solely the responsibility of the authors and do not necessarily represent the official view of the CDC.