Delaware’s Asthma Strategic Plan
2014-2017

Prepared by the American Lung Association in Delaware and the Delaware Asthma Consortium
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Dear partners:

It is with a great sense of pleasure and achievement that we announce and release of the 2014-2017 Delaware Asthma Strategic Plan. This plan represents and distills the knowledge, experience and insight of the many dedicated organizations and individuals working collaboratively through the Delaware Asthma Consortium. The Plan is a comprehensive document that includes an overview of the burden of asthma in Delaware, and which delineates program priorities and initiatives. Important topics such as addressing asthma care within a health care setting, creating asthma friendly environments statewide, reducing health disparities in Delaware and setting the stage for future policy and evaluation activities are discussed in the document.

This Strategic Plan will serve as a guide for the many stakeholders in Delaware who will confront the challenge of asthma over the next three years. Asthma continues to be a significant public health and economic burden for the people of Delaware. Roughly 70,755 or 9.9% of Delaware adults report currently having asthma. According to the 2011 Youth Risk Behavior Survey (YRBS), 16.8% of children report currently having asthma. This in of itself is an important issue worth exploring since the rate of Delaware youths who currently have asthma (16.5%) is significantly higher than the national average for children under the age of 18 years old who currently have asthma (9.5%).

Nationwide, asthma is the third leading cause of hospitalization among children under the age of 15 and is a leading cause of school absences from chronic disease – accounting for over 10.5 million lost school days each year. Asthma costs our healthcare system over $50.1 billion annually and indirect costs from lost productivity add another $5.9 billion, for a total of $56 billion dollars annually.

The American Lung Association in Delaware and the stakeholders involved in the Delaware Asthma Consortium are committed to seeking out funding and building partnerships that will enable us to carry out the goals, objectives and actions outlined in this Asthma Strategic Plan, and thereby improve the quality of asthma care and management statewide.

We invite and encourage our partners and stakeholders to join the Delaware Asthma Consortium in working to improve the quality of life for those affected with asthma. Together we can reduce asthma morbidity and mortality in Delaware and ensure a better quality of life for persons with asthma.

Thank you for your support of this important public health initiative.

Sincerely,

Dr. Aaron Chidekel, MD
Division Chief, Division of Pediatric Pulmonology
Nemours/Alfred I. duPont Hospital for Children

Nicole Goldsboro
Delaware Asthma Consortium
American Lung Association
Background:

This plan for Delaware’s Asthma Strategic Plan represents a coordinated effort between the Delaware Health and Social Services: Division of Public Health, key partners, and other stakeholders in asthma prevention and control in Delaware. Our vision is to significantly decrease asthma-related morbidity, mortality, and economic costs in Delaware. By collaborating with our partners to enact this plan, we can leverage resources to raise awareness, provide comprehensive programs, improve health equity, and strengthen asthma control policies in Delaware. By using the best practices guidelines set forth by the Center for Disease Control for Asthma Programming and Healthy People 2020 goals this will help provide an outline for how efforts and resources will lessen the burden of asthma and promote living well with asthma for all Delawareans.

Burden of Asthma in the United States:

Asthma is a chronic lung disease that inflames and narrows the airways. Asthma is characterized by intermittent periods of wheezing, chest tightness, shortness of breath, and coughing. Asthma is one of the most common chronic health conditions and a significant public health concern in the United States.

It is estimated that nearly 18 million adults. According to the 2011 National Health Interview Survey (NHIS), 9.5% of U.S. children (or 7.1 million) currently have asthma. Non-Hispanic black children were more likely to have current asthma (16%) than Hispanic (10%) or non-Hispanic white (8%) children. A further breakdown of the Hispanic population shows that Puerto Rican children are more likely to have asthma than Mexican/Mexican Americans (24.8% versus 7.8%).

It is important to note that while the overall asthma rate for Hispanic children is close to the national average, there is wide rate variation within this group. Past studies have found more than 10% variation in asthma prevalence rates between Puerto Rican children (highest rates) and Mexican children (lowest rates) (Ledogar et al., 2000, p. 993; Lara, Akinbami, Flores, & Morgenstern, 2006). Children in poor families (13%) were more likely to have asthma than children in families that were not poor (8%).

The rates of asthma diagnosis have nearly doubled within the last 20 years. According to a report published by the National Ambulatory Medical Care Survey: 2010, asthma is responsible for over 14 million physician office visits and 1.8 million emergency department visits annually.
B. Burden of Asthma in Delaware

**Adult-State**
Data from the 2012 Delaware Behavioral Risk Factor Survey (BRFS) shows that 13.6% of Delaware adults age 18 and older have, at some time, been diagnosed with asthma; and about 9.9% have been told by a doctor that they currently have asthma. That translates to almost 70,000 Delaware adults with asthma. Asthma is more commonly reported among women (13%) than men (6.5%). African Americans (14.1%) and multi-racial adults (15.4%) report higher prevalence of asthma than non-Hispanic white adults (8.9%) and Hispanics (7.2%). There were no statistically significant differences by age group or educational level.

**Youth-State**
According to the 2011 Youth Risk Behavior Survey (Middle School), 25.9% of middle school children have ever been told by a doctor or nurse that they have asthma. When asked if they still have asthma 16.8% responded “yes”. Unfortunately at this time there is no data for high school students.

**Adult-County**
Adult county data is not yet available for 2012, but in 2011 current asthma prevalence was slightly higher in Kent County (11.2%) than in New Castle or Sussex counties (9.5% and 9.1% respectively). Depending of the level of asthma severity, Delawareans may experience symptoms and complications that result in decreased quality of life, emergency room visits, hospitalizations, and missed school and work days. According to a 2009 report from Delaware Health and Social Services, asthma was among the most common Emergency Department diagnosis, resulting in 1,599 visits for that year.
Development of the Delaware’s Asthma Strategic Plan 2014

The American Lung Association in Delaware enlisted statewide partners through the Delaware Asthma Consortium to begin work on developing the key components within the next three year strategic plan in May 2013. The Delaware Asthma Consortium has been active since 1997 and has an average of 20 members participate in quarterly meetings. The Consortium partners include: public and private healthcare organizations, representatives from public and higher education, city, state and federal government organizations, and other related coalitions, non-profit organizations and asthma sufferers.

In 2005 the Burden of Asthma in Delaware was published. The report shows that asthma places a significant burden for Delaware, for many employers, individuals and their families. It also helped at the time to identify gaps in the healthcare system and communities that lack access to care. The purpose of the report was to provide a context for action. However since 2005, there has not been a subsequent report or a strategic plan to address this issue.

In 2013 the Delaware Asthma Consortium began to facilitate planning meetings and collecting information from statewide stakeholders. Partners were asked to identify areas of strengths and weaknesses of current Delaware asthma programs. Additional planning meetings will be held at Consortium meetings in September 2013, November 2013, and February 2014 where comments and suggestions will be addressed. The “Guide for State Health Agencies in the Development of Asthma Programs” through the CDC was used as a key resource when developing the 2013 Strategic Plan.
History of Asthma Control in Delaware

Delaware Asthma Consortium
The mission of the Delaware Asthma Consortium is to raise awareness of asthma as a priority health concern in the state and reduce morbidity and mortality related to the disease. The Delaware Asthma Consortium commenced in 1997, through the work of Dr. Albert Rizzo and community health organizations such as the American Lung Association. During the first few years the consortium partners met to discuss key concerns in asthma programs. Throughout those discussions, four task forces were established: Environment (triggers), Community Outreach, Delivery of Healthcare, and Public Policy.

American Lung Association in Delaware
Through funds received by the Delaware Division of Health and Social Services the American Lung Association in Delaware provides the state of Delaware with interventions designed to address the increase of asthma prevalence and disparities associated with access to treatment for the disease and build an infrastructure for asthma care to continue.

Nemours Health and Prevention Services
Nemours Health and Prevention Services received in 2012 a three year grant through the Center for Medicaid and Medicare Innovation (CMMI) to help reduce asthma disparities in three key zip codes in Delaware: Wilmington (19801 & 19802), Dover (19901 & 19904) and Seaford (19973 & 19956). The primary goals of the CMMI grant include enhancing integrated health care systems serving children and families; strengthening medical and non-medical partnerships within the community; prepare for future healthcare funding that may be linked to success of integration and improve asthma outcomes.

Asthma Education and Awareness Pilot Project in Claymont 2010
The ALA pilot project from September 2009 through June 2010 was created to help people in the Claymont community learn to live with and control their asthma, as well as provide helpful information on quitting smoking, prevent children from smoking, and many other lung health problems. Over the course of nine months over 750 individuals participated in asthma related activities and events. The pilot program was in collaboration with other community organizations such as DNREC, Claymont Community Coalition, Brandywine School District, and the Delaware Asthma Consortium.

Asthma Action Partnership, 2009
The mission of the Asthma Action Partnership was to empower residents of South Wilmington through community monitoring and documentation of asthma related air pollutants found in their neighborhood. Further, the Partnership seeks to develop and implement asthma outreach, education and treatment plan for individuals in South Wilmington.
The following strategic plan identifies strategies to address 7 goals:

- Improve delivery of healthcare for asthma through collaborative professional and patient education

- Increase the number of Delaware schools, child care centers, workplaces, homes and community settings that assist individuals with asthma and their caregivers and provide awareness and resources about asthma friendly indoor environments.

- Create asthma friendly outdoor environments

- Identify and reduce health disparities in Delaware

- Develop and advocate for public policy that would ensure access to asthma education

- Use evaluation data to define the burden of asthma, guide policy and program planning and assess the impact of the strategic plan process

- Maintain and expand the Delaware Asthma Consortium to increase asthma awareness across Delaware
Long-Term Problems

- Asthma is a chronic, or life long, disease that can be serious—even life threatening.
- About 25.9 million Americans (including 7.1 million children) have asthma; 39.5 million Americans have been diagnosed with asthma by a health professional within their lifetime (NHIS, 2011).
- Since 1999, children 5-17 years of age have had the highest prevalence rates (105.5 per 1,000 population)(NHIS, 2011).
- The costs of asthma in Delaware include lost productivity at work and school, emergency room visits and charges for inpatient services.

Contributing Factors

- **Individual level** - Limited knowledge about best asthma practices, and limited access to preventive health care, especially among those most at risk.
- **Community level** - Physical, social and economic environments that lead to asthma diagnoses and exacerbations. Higher asthma prevalence among low income populations in Delaware (DHSS, 2005).
- **System level** - Lack of benefits/resources focused on prevention and self-management, limited collaboration across sectors. No cure for asthma.

Strategies & Practices

- **Individual level** -
  - Initiate strategies to expand education of workers, health care providers and educators about asthma triggers and best practices for disease management.
  - Improve communication and education with patients admitted to hospitals or treated in the Emergency Department for asthma.

- **Community level** -
  - Identify and implement strategies to reduce outdoor and indoor asthma triggers, including tobacco smoke.
  - Increase educational opportunities and resources available to workplaces, including childcare settings.

- **System level** -
  - Promote legislation that could lead to better education around best practices for asthma care, and improved living, working and learning environments for individuals with asthma.
  - Reduce emissions from mobile and stationary sources to comply with state and national standards.
  - Strengthen clean indoor air laws to reduce exposure to secondhand smoke.

Outcomes & Impacts

- Increased asthma-related knowledge and skills among providers, educators, families, and adults and children with asthma.
- Increased use of best asthma practices by workplaces, schools and daycare facilities.
- Reduction in asthma triggers at work, school, and in the outdoor environment.
- Increased access to preventative and management care.
- New reimbursement options for managed care/private pay
- Increased public awareness about the need for preventive asthma care and healthy environments.

Long-Term Goals

- Improved quality of life for individuals with asthma.
- Fewer asthma exacerbations caused by environmental triggers.
- Healthy homes, workplaces and educational settings.
- Equal access to preventive asthma care for all Delawareans.
- Reduced emergency health care utilization by children and adults with asthma.
- **Reduction in asthma-related morbidity, mortality and economic costs in Delaware.**
Delivery of Health Care

Goal: Improve delivery of healthcare for asthma through collaborative professional and patient education

Objective 1: Improve access to education and resources for healthcare professionals needed to effectively manage their patient’s asthma

Action 1:
1. Provide tools, templates and training to providers to assess knowledge and develop and/or implement effective asthma management principles in their practices
2. Advocate establishing and increasing reimbursement for non-physician provider care coordination and educational services
3. Provide training opportunities on the NHLBI’s new Guidelines for the Diagnosis and Management of Asthma (ER-3) to medical professionals
4. Partner with local institutions of higher learning to incorporate an asthma component within their public health/community health curriculum for health care providers

Objective 2: Improve communication and education for patients presenting to the Emergency Department or hospital inpatient care with a primary diagnosis of asthma

Action 1:
1. Develop and implement a plan that incorporates discharge instructions, education, referral and follow up for people who present with asthma in the ER
2. Provide culturally appropriate materials that are easy to understand for patients with limited English language and comprehension skills
3. Support the conversion of inpatient hospitalizations with asthma as primary diagnosis to outpatient services as medically appropriate
Education

Goal: Increase the number of Delaware schools, child care centers, workplaces, homes and community settings that assist individuals with asthma and their caregivers and provide awareness and resources about asthma friendly indoor environments.

A. School Objectives

Objective 1: Partner with the Department of Education to provide school nurses, school personnel, and staff with educational resources and trainings necessary to prevent and manage asthma

Action 1:
1. Survey school personnel (Superintendents or school nurses) about health and policies surrounding asthma
2. Provide targeted, basic to understand asthma education messages
3. Provide specialized trainings on asthma and environmental asthma triggers to school personnel including but not limited to health professionals, school staff, administrators, teachers, coaches, maintenance, food preparation workers and bus drivers

Objective 2: Increase the number of children statewide who have an Asthma Action Plan in a school setting

Action 2:
1. Communicate with school nurses, health care providers and parents the importance of Asthma Action Plan
2. Encourage healthcare providers to complete Asthma Action Plans on all children with asthma
3. Educate parents on the importance on requesting an Asthma Action Plan from their healthcare provider and sharing the plan with their school nurse.

B. Childcare Objectives

Objective 1: Develop a childcare curriculum to educate childcare staff and administrators on effective policies and practices for an asthma friendly childcare

Action 1:
1. Research current evidence based childcare curriculums
2. Form task force or work group in order to identify needs or gaps in current childcare policies and practices
3. Work with Office of Child Care Licensing to provide comprehensive policies in child care centers
4. Prepare a culturally, linguistically appropriate program for child care professionals and staff to learn more about creating an asthma friendly environment
5. Pilot program in targeted communities
6. Evaluate results and make necessary recommendations

**Objective 2: Outreach to children with asthma and their families through workshops and asthma related materials**

**Action 1:**
1. Provide basic literature to display at child care center to be viewed by parents and/or caregivers
2. Provide workshops for families who have children who have asthma at the child care center
3. Promote parental use of an Asthma Action Plan
4. Partner with other health and housing programs within the State to identify opportunities to improve asthma management and encourage referrals to provide comprehensive asthma management: tobacco control programs, obesity prevention, healthy homes, etc.

**Objective 3: Increase outreach to parents of children 0-4 years old regarding asthma triggers and signs and symptoms**

**Action 1:**
1. Partner with other organizations targeting new parents to provide asthma education
2. Conduct workshops at local hospitals or community venues appropriate for asthma education specific to children 0-4 years old
3. Create and disseminate a flyer with resources about pediatric asthma and allergies

**C. Workplace Objectives**

**Objective 1: Increase awareness and knowledge about workplace asthma and its prevention among health care providers, employers, workers, and communities.**

**Action 1:**
1. Identify occupations and establishments who report work related asthma cases
2. Implement outreach efforts to educate health care providers about work-related asthma
3. Plan to distribute asthma education materials through union and nonunion communications and other advocacy groups that work with high risk occupations
4. Educate employees and employers on work-related asthma, causes and controls

**D. Home, Housing, and Elderly Living Community Objectives**
Objective 1: Improve understanding of asthma and asthma management in the home through evidence based programs

Action 1:
1. Identify current evidence based programs for asthma management and trigger reduction in a residential setting (example: home visiting programs)
2. Increase awareness of trigger reduction in the household through material distribution, presentations and public outreach efforts

Objective 2: Implement strategies to eliminate the exposure to environmental tobacco smoke (second hand smoke) and third hand smoke in public and private venues

Action 1:
1. Promote local tobacco control partners, resources and materials
2. Distribution of educational, outreach materials and provide presentations on the effects of tobacco use
3. Reduce exposure to secondhand smoke by strengthening current clean indoor air laws
4. Promote and support organizational, community and statewide comprehensive tobacco-free policies for preventing exposure to secondhand smoke

Objective 3: Increase awareness of asthma management and resources available for the elderly population

Action 1:
1. Provide materials that address comorbidities, prescription coverage, difficulty with medication management
2. Provide educational opportunities and workshops at senior centers, assisted living communities and nursing homes
3. Provide workshops to caregivers addressing specific concerns regarding asthma and the elderly
4. Provide training opportunities for Community Health Workers or Care Managers who provide assistance to the elderly
Outdoor Environment

Goal: Create asthma friendly outdoor environments

Objective 1: Identify and implement strategies to reduce exposure to outdoor environmental triggers for asthma

Action 1:
1. Implement measures to reduce outdoor environmental exposures
2. Reduce emissions from mobile sources and stationary sources as set forth by the state and national standards
3. Publicize and promote resources to increase awareness about hazardous air pollutants and how air quality affects asthma
4. Increase the number of schools and organizations supporting anti-idling programs
5. Support policies to reduce vehicle traffic through use of Ride Share Programs and other resources available
6. Increase the number of schools in Delaware using the EPA School Flag Program to notify school teachers, coaches, students and others about daily outdoor air quality
Health Disparities

Goal: Identify and reduce health disparities in Delaware

Objective 1: Initiate new and maintain current data sources to address health disparities in Delaware to broaden the scope of services to meet the needs of Delawareans

Action 1:
1. Report new and existing data into DHSS reporting
2. Request and advocate for new and improved data to address gaps and reduce disparities in asthma control and care
3. Utilize available asthma surveillance data to focus on activities on those areas that have been identified as having disparate needs and underserved population
4. Analyze data gathered from Centers for Medicare & Medicaid Services (CMS) activities (e.g. asthma quality improvement projects and demonstrations) to identify potential improvements in asthma care

Objective 2: Support evidence based interventions, program and initiatives that address asthma disparities in Delaware

Action 2:
1. Raise awareness of importance of addressing and reducing asthma disparities while considering cultural and linguistic sensitivities
2. Contribute to activities that promote self-management and improve health literacy in underserved populations
3. Train providers in underserved areas on best practices to include identified needs and burdens for people with asthma and their families
Public Policy

Goal: Develop and advocate for policies and programs that would ensure access to asthma education

Objective 1: Improve asthma outcomes by promoting statewide strategic plan for asthma education and management

Action 1:
1. Implement and evaluate a comprehensive State Asthma Plan among stakeholders in an effort to reduce the burden of asthma statewide
2. Identify and initiate appropriate mechanism to establish reimbursement for providers who complete Asthma Action Plan
3. Encourage support from appropriate professional and community organizations to facilitate system change

Objective 2: Improve asthma control by promoting asthma friendly environments for children

Action 1:
1. Identify asthma related policies and programs that negatively affects people within the state of Delaware
2. Educate state Medicaid providers about proper asthma care for patients
3. Provide education on asthma friendly environments to leaders within all settings that provide services to children
4. Provide asthma education to legislatures through use of American Lung Association's Action on Asthma manual

Objective 3: Address insurance reimbursement policies, eg community health workers, paying for double spacers for school

Action 1:
1. Provide mechanism for reporting asthma insurance reimbursements
2. Implement schedule of reporting
3. Provide results to DHSS
Evaluation

Goal: Use evaluation data to define the burden of asthma, guide policy and program planning and assess the impact of the strategic plan process

Objective 1: Annually report and monitor to help identify asthma trends and disparities

Action 1:
1. Collect data from established sources to measure asthma prevalence, symptoms and management, health care utilization and mortality
2. Develop a guide for defining asthma measures and analysis of data
3. Analyze data to address asthma related comorbidities and risk factors
4. Review results to identify changes in trends and at risk populations

Objective 2: Annually monitor the implementation and impact of the state plan

Action 1:
1. Develop an activity form to collect information from the Delaware Asthma Consortium members on the activities completed to implement the state plan
2. Implement reporting form
3. Summarize information collected from the activity form to track progress toward meeting goals of state plan
4. Develop indicators and methods to evaluate key interventions
5. Summarize data and state plan implementation in annual progress form
**Communication**

**Goal:** Maintain and expand the Delaware Asthma Consortium to increase asthma awareness across Delaware

**Objective 1: Identify diverse new partners for the Delaware Asthma Consortium and request participation**

**Action 1:**
1. Increase the number and diversity of Consortium members
2. Recruit key stakeholders and partners for Consortium membership

**Objective 2: Increase member outreach by building a Delaware Asthma Consortium website and social media outlet**

**Action 1:**
1. Identify funding sources to help support development of Delaware Asthma Consortium
2. Research and utilize free social media websites to help promote the Consortium and related activities
3. Identify key stakeholders to help assist website development

**Objective 3: Promote the Delaware Asthma Consortium for new and existing members to identify, network and collaborate with new and existing asthma partners across Delaware**

**Action 1:**
1. Continue Delaware Asthma Consortium meetings quarterly
2. Increase Delaware Asthma Consortium member participation in programs and activities
3. Increase distribution of Delaware Asthma Consortium literature and resources
4. Develop and expand networking opportunities for Delaware Asthma Consortium members to share information and resources

**Objective 4: Build sustainability for the Consortium and related initiatives through funding requests and stakeholder engagement**

**Action 1:**
1. Work with key stakeholders and community members to identify funding resources
2. Compete for grants and other sources to fund Consortium related activities, programs and initiatives.
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