New Jersey Asthma Strategic Plan 2008-2013

Addressing Asthma through the Lifespan

Jon S. Corzine
Governor

NEW JERSEY DEPARTMENT of HEALTH and SENIOR SERVICES

Heather Howard
Commissioner

State of New Jersey
DEPARTMENT OF HEALTH AND SENIOR SERVICES
PO BOX 360
TRENTON, N.J. 08625-0360

JON S. CORZINE
Governor

www.nj.gov/health

HEATHER HOWARD
Commissioner

Asthma continues as a major public health epidemic, warranting dedication of resources to address prevention of the disease and its complications. A new framework is required to facilitate comprehensive asthma care in New Jersey. Approximately 8% of New Jersey adults (516,088) have asthma while approximately 10% of New Jersey children (218,914) have asthma. There are significant disparities in the burden of asthma among specific populations in New Jersey. Although asthma affects people of all ages, races, and ethnic groups; low-income and minority populations experience substantially higher rates of fatalities, hospital admissions and emergency room visits due to asthma.

Over the last decade, federal, state and local agencies have implemented initiatives to address the asthma epidemic. In recognition of the status of asthma as a major public health issue that disproportionately impacts children and minorities, the State of New Jersey has developed a statewide collaborative that aspires to increase the length and quality of life for residents, and to reduce or eliminate racial/ethnic disparities in asthma prevalence, mortality, and hospitalization rates, especially among children, minorities, and low-income individuals.

The New Jersey Department of Health and Senior Services (NJDHSS) is pleased to announce the release of the second *New Jersey Asthma Strategic Plan 2008-2013*. The focus of the plan is the reduction of the burden of asthma through implementation of strategies to eliminate asthma disparities and improve asthma management. This goal will be accomplished through a collaborative effort of government and community-based partners.

The Department extends its appreciation and gratitude to those individuals who served on the State Asthma Committee and contributed their time and expertise to the Plan.

Sincerely,

Heather Howard
Commissioner

Special Acknowledgements

The Asthma Strategic Plan is a project that reflects the investment of time and expertise by many colleagues. There are some contributors whose enthusiastic and generous assistance warrants special mention:

Celeste Andriot-Wood, Assistant Commissioner, Division of Family Health Services
Doreleena Sammons-Posey, SM, Director, Chronic Disease Prevention & Control Services
Nuris Rodriguez, MSW, Program Manager, Chronic Disease Prevention & Management
Lisa Jones, RN, MSN, Coordinator, Asthma Awareness & Education Program
Melissa Vezina, MPH, Epidemiologist, Asthma Awareness and Education Program

Funding for this effort was provided by Centers for Disease Control and Prevention Cooperative Agreement *Addressing Asthma from a Public Health Perspective* (5U59/EH000206-3).

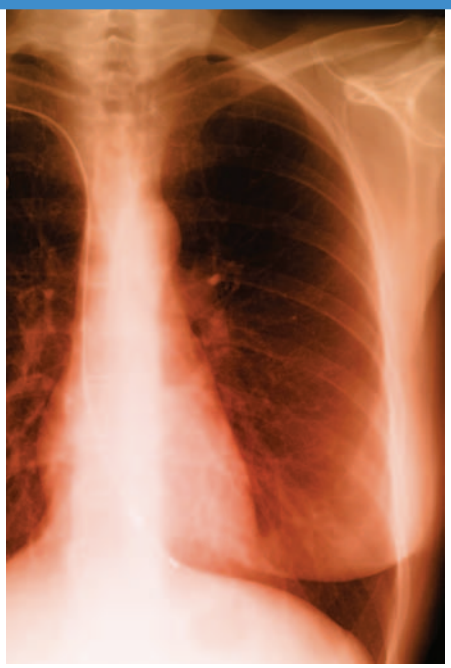


Table of Contents

Executive Summary

An astounding number of people are affected by asthma, a chronic respiratory disease characterized by inflammation and episodic narrowing of the airways. The burden of this chronic disease is felt everyday at the individual level, whether it's a frightening asthma attack or the constant vigilance and adherence to treatment plans required to keep it under control. The costs to society in lost productivity, health care related expenditures and educational interruption are significant.

Asthma cannot be cured, but it can be controlled so that people are able to lead 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) convened three expert panels to develop and update Guidelines for the Diagnosis and Management of Asthma ("Guidelines"). 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 conditions that can affect asthma.

The Asthma Awareness and Education Program (AAEP) has been funded by the Centers for Disease Control and Prevention (CDC) since 2001 to conduct asthma awareness and education activities through a cooperative agreement "Addressing Asthma from a Public Health Perspective." The mission of the AAEP is to improve the health of people living and/or working in New Jersey by effective prevention efforts and identification and management of asthma, through a coordinated partnership among public and private organizations. Activities include asthma surveillance reporting; convening of a State Asthma Committee; funding of the Pediatric Adult Asthma Coalition (PACNJ); partnership with the Office of Minority and Multicultural Health to support community-based asthma initiatives; development and implementation of a Strategic Plan for Asthma; and supporting statewide asthma awareness–raising and quality of life interventions.

This strategic plan will serve as a guidance document for the state government, healthcare providers, community organizations, public health advocates and others in the awareness, management and treatment of asthma in New Jersey.

BURDEN OF THE DISEASE

Asthma on the National Level

Data from the 2005 National Health Interview Survey suggest that an estimated 22.2 million Americans have asthma.[1] Prevalence has been shown to vary by age, gender, race, ethnicity, income, and region of residence. Current asthma prevalence is higher among children (8.5%) when compared with adults (6.7%), male children (9.6%) when compared with female children (7.4%), female adults (8.4%) when compared with male adults (4.9%), blacks (9.2%) when compared with whites (6.9%), and Hispanics of Puerto Rican descent (14.5%) when compared with Hispanics of Mexican descent (3.9%). Prevalence is also higher among individuals living below the federal poverty level (10.3%) when compared with individuals living at or above the federal poverty level (6.4% to 7.9%), and among individuals living in the Northeast (8.1%) when compared to individuals living in other regions of the country (6.7% to 7.5%).[2]

The role of asthma as a secondary condition is also significant. A recent report from the Agency for Health Care Research and Quality (AHRQ) noted that from 2000 to 2005, the number of hospitalized adults who also had asthma increased by 113 percent.[3]

Research has not yet identified or demonstrated how to prevent asthma from occurring with the exception of work-related asthma (WRA), which is asthma that is caused or aggravated by occupational exposures. More than 300 substances used in the workplace are known to cause WRA.[4] Although this condition is considered preventable, the American Thoracic Society estimates that more than one out of every seven adults with asthma has asthma related to their work.[5] The majority of individuals who develop WRA fail to fully recover, even after several years without exposure.[6]

Asthma imposes a tremendous financial burden on patients, their families and society. This burden includes direct medical costs in addition to indirect costs associated with missed school days, missed workdays, lost income and lost job opportunities. The annual total cost of asthma to the U.S. economy was estimated to be $12.7 billion annually in 1998.[7]

Despite clinical and pharmacologic advancements related to asthma care, national data reveal the stark persistence of asthma related morbidity and mortality. An estimated 55.6% of people with asthma experience one or more asthma attacks each year.[2] School age children in the United States miss approximately 12.8 million school days and adults in the United States miss approximately 10.1 million work days each year because of their asthma.[1] Asthma is responsible for about 1.8 million emergency department visits, 504 thousand hospitalizations and 4,210 deaths annually.[2] Everyone with asthma is at risk for adverse outcomes; however, the burden of these outcomes is disproportionately distributed. A recent national surveillance report revealed variation by age, race, ethnicity, income, and gender.[2] The following differences were noted:

- Children with asthma are more likely to visit the ED for asthma when compared to adults with asthma (11.2 versus 7.8 annual visits per 100 with asthma).

- Children with asthma are more likely to be hospitalized for asthma when compared to adults with asthma (3.3 versus 2.2 annual discharges per 100 with asthma).

- Children with asthma are more likely to have had an asthma attack in the prior year when compared to adults with asthma (63.1% versus 52.2%).

- Children under 5 years with asthma are the most likely to visit the ED for asthma and to be hospitalized for asthma when compared to all other age groups (25.9 annual visits per 100 with asthma; 10.0 annual discharges per 100 with asthma).

- Blacks with asthma are less likely to visit a physician for asthma when compared to whites with asthma (37.8 versus 67.8 annual visits per 100 with asthma).

- Blacks with asthma are more likely to visit the ED for asthma when compared to whites with asthma (21 versus 7 annual visits per 100 with asthma).

- Blacks with asthma are more likely to be hospitalized for asthma when compared to whites with asthma (4.2 versus 1.7 annual discharges per 100 with asthma).

- Blacks with asthma have a higher death rate for asthma when compared to whites with asthma (3.4 versus 1.9 annual deaths per 10,000 with asthma).

- Hispanics are more likely to visit the ED for asthma when compared to non-Hispanics with asthma (12.4 versus 8.4 annual visits per 100 with asthma).

- Hispanics of Puerto Rican descent with asthma are more likely to report having an asthma attack in the prior year when compared to Hispanics of Mexican descent with asthma (62.3% versus 51.4%).

- People with asthma who have a family income in the lower poverty level groups are more likely to report having an asthma attack in the prior year when compared to those with a family income that is at least 4.5 times the federal poverty level (56.6%-58.8% versus 52.9%).

- Females with asthma are more likely to report having an asthma attack in the prior year when compared to males with asthma (56.8% versus 54.0%).

- Female adults with asthma are more likely to be hospitalized for asthma when compared to male adults with asthma (2.5 versus 1.6 annual discharges per 100 with asthma).

Critical breakthroughs in science in the last decade have generated a body of information that, when effectively used to guide care of patients, enables most people with asthma to live full active lives. Yet, many patients remain ill because of a complex interplay of factors. Some of the commonly cited barriers include:

- Deficiencies in implementation of the most current guidelines
- Lack of access to ongoing asthma education
- Lack of access to appropriate primary or specialty asthma care
- Inability to visit physician during normal office hours
- No individualized asthma management plan
- Failure to use asthma management plans, peak flow meters, and other patient resources
- Lack of access to appropriate medications or devices
- Lack of access to mattress and pillow covers and other items that can protect against environmental triggers
- Persistence of environmental triggers
- Misguided concerns about the safety of inhaled corticosteroids
- Lack of awareness that asthma is a serious, but controllable chronic disease
- Use of asthma jargon or slang, which can interfere with intended messages
- Misperception that long-term control medications are not needed if symptoms go away

The national burden of asthma signifies multiple opportunities for intervention. Health care providers, public health professionals, health insurers, employers, schools, child care centers, caregivers, and patients with asthma must work together to reduce barriers and promote asthma control through appropriate medical assessment, patient monitoring, adherence to treatment recommendations, control of environmental factors, management of co-morbid conditions, and improved access to self-management education and resources.

Asthma in New Jersey

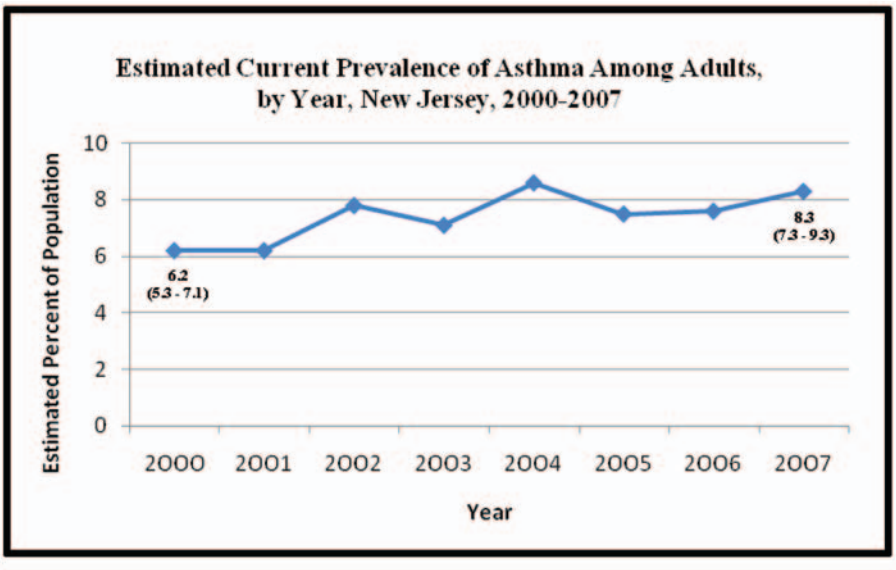
Asthma represents a serious and compelling public health problem in New Jersey. For example, the Asthma and Allergy Foundation of America estimates the annual total cost of asthma in New Jersey was nearly $324 million in 1998.[8] With funding from the Centers for Disease Control and Prevention (CDC), the New Jersey Department of Health and Senior Services maintains a comprehensive surveillance system to monitor asthma prevalence, morbidity, mortality, and associated risk factors. This section highlights some of the most current data defining the burden asthma in New Jersey.

Asthma Prevalence in New Jersey

The New Jersey Behavioral Risk Factor Survey (NJBRFS) is an annual telephone survey that is partially funded by the Centers for Disease Control and Prevention (CDC). This survey provides

statewide asthma prevalence estimates, primarily for adults. Single year adult asthma prevalence figures from the NJBRFS demonstrate an overall increase from 2000 to 2007 (Figure 1), although it is unclear whether this rise reflects an increase in asthma awareness or an increase in asthma cases.

Figure 1



Data Source: Centers for Disease Control and Prevention

Combined NJBRFS data from 2004-2006 indicate that about 516,088 adults (7.9%) currently have asthma. This data also shows that the estimated number of women with asthma (345,877) is more than double the estimated number of men with asthma (170,201) and that prevalence is higher among black, non-Hispanic adults (10.0%) when compared to Asian, non-Hispanic adults (4.5%), white, non-Hispanic adults (8.0%), and Hispanic adults (7.3%). Note that prevalence estimates for Hispanics should be interpreted with caution since national surveillance data shows that prevalence is relatively high among Hispanics of Puerto Rican descent and relatively low among Hispanics of Mexican descent.[2] NJBRFS data from 2002-2004 suggest that asthma prevalence is higher among adults with an annual household income of less than $25,000 as compared to other income levels and NJBRFS data from 2003-2004 suggest that approximately 10.7% of current adult asthma cases may be work-related.

Combined NJBRFS results from the 2005-2006 NJBRFS indicate that approximately 313,379 children have a history of asthma (14.8%) and that approximately 218,914 children (10.3%) currently have asthma. Results from the 2003 National Survey of Children's Health (NSCH) confirm that asthma is more common among male children when compared to female children in New Jersey.

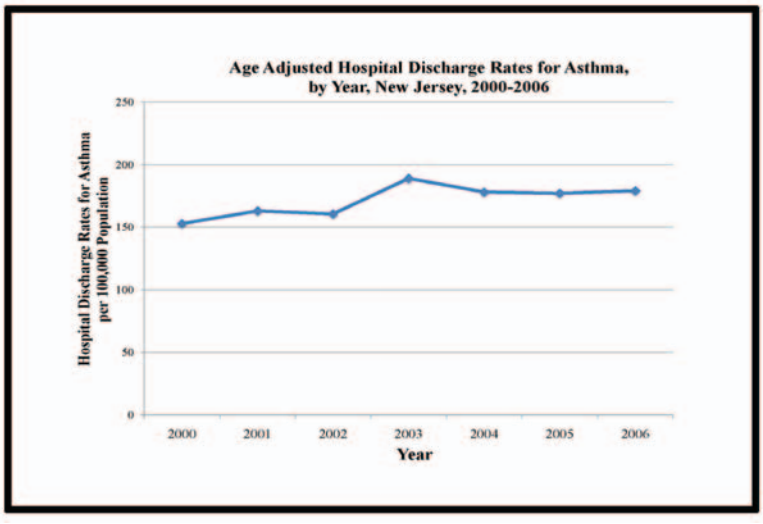
Asthma Morbidity in New Jersey

With appropriate management, asthma can be controlled so that people are able to lead active and healthy lives. Yet, the burden of asthma morbidity remains high in New Jersey. Results from the 2004-2006 NJBRFS demonstrate the following about adults with current asthma:

- About 67% report having asthma-related symptoms at least once during the last 30 days.
- About 49% report at least one asthma attack or episode in the prior year.
- About 37% report they were unable to work or carry out usual activities for at least one day in the prior year because of their asthma.
- About 17% report one or more ED/urgent care visits for asthma in the prior year.

In New Jersey, the primary source of statewide population-based information regarding asthma morbidity has been hospital discharge data. Annual age adjusted hospital discharge rates demonstrate an overall increase from 2000 to 2006 (Figure 2), which may be partially attributable to the increase in asthma prevalence that was also observed during this time period.

Figure 2



Data Source: New Jersey Department of Health and Senior Services

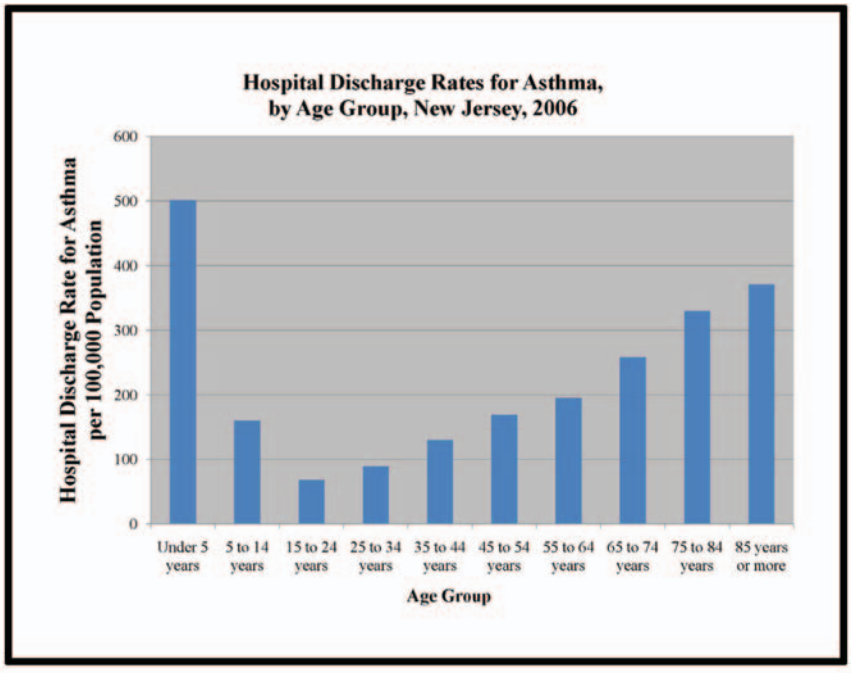
In 2006, there were 15,665 asthma hospitalizations among New Jersey residents representing about 1 of every 100 hospitalizations in the State. Analysis of hospital discharge data reveals the following:

- Although the overall hospital discharge rate for asthma increased from 2000-2006, certain populations experienced a decrease in hospital discharge rates. The asthma hospitalization rate for black residents less than five years of age decreased by about 26% and the asthma

hospitalization rate for Hispanic residents less than five years of age decreased by about 11% from 2000-2006. The asthma hospitalization rate for black residents 5-17 years of age decreased by about 5% during this period.

- In 2006, black residents were nearly three times more likely to be hospitalized for asthma when compared to white residents.
- In 2006, Hispanic residents were almost one and a half times more likely to be hospitalized for asthma when compared to non-Hispanic residents.
- Children less than five years of age are the most likely to be hospitalized for asthma. Rates for asthma hospitalization by age are at their lowest point for the 15 to 24 year age group, but rise for each consecutive age grouping thereafter (Figure 3).

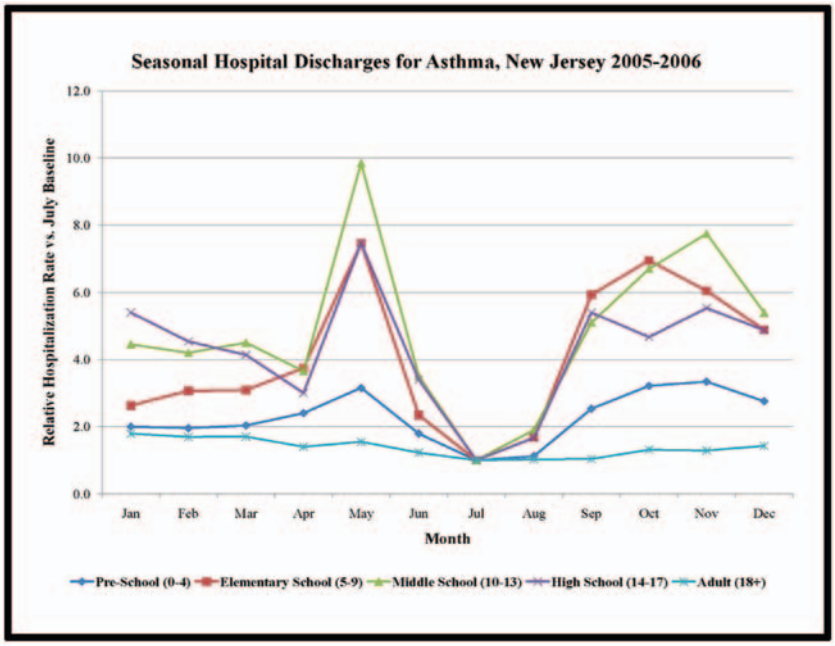
Figure 3



Data Source: New Jersey Department of Health and Senior Services

Children are more likely to be affected by seasonal factors when compared to adults. They experience a dramatic increase in asthma hospitalizations during the fall and spring months. Seasonal peaks are most apparent in school age children (Figure 4).

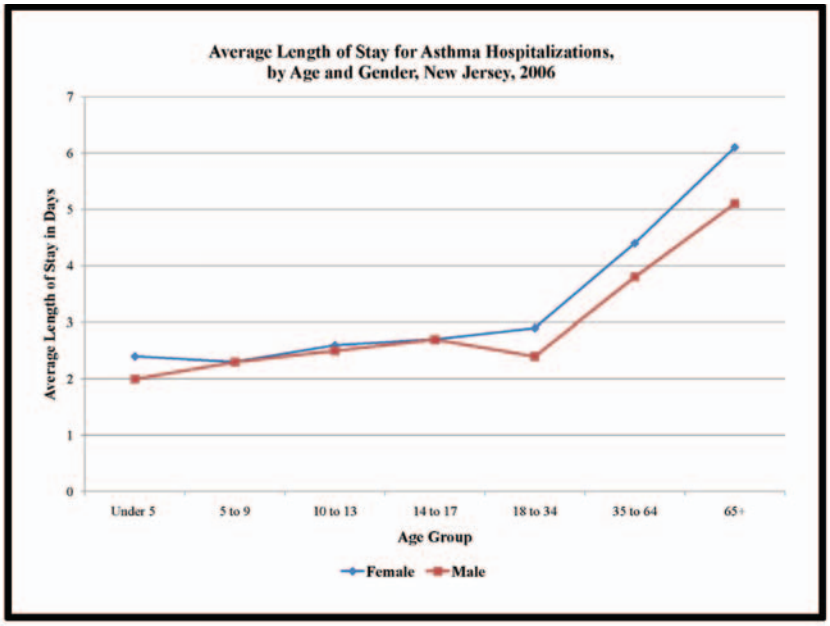
Figure 4



Data Source: New Jersey Department of Health and Senior Services

❖ Among adults, women are more likely to be hospitalized for asthma and are hospitalized longer for asthma when compared to men (Figure 5).

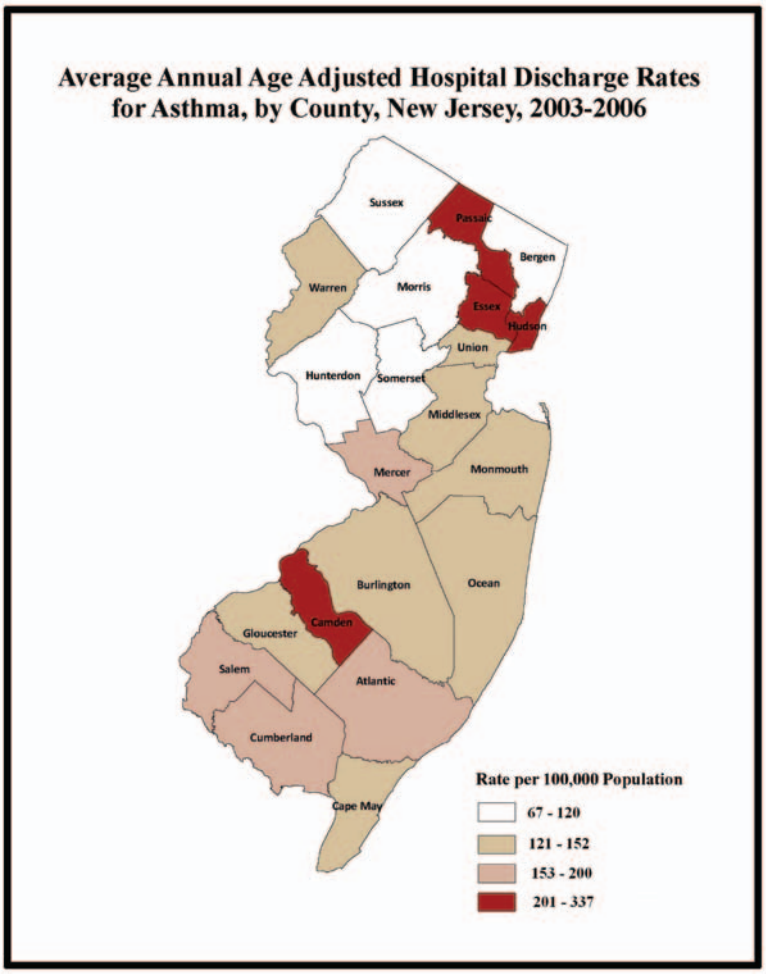
Figure 5



Data Source: New Jersey Department of Health and Senior Services

- Asthma hospitalization rates vary among the 21 counties of New Jersey (Figure 6). The average annual rates in 2003-2006 ranged from about 68 asthma discharges per 100,000 residents (Hunterdon County) to about 337 asthma discharges per 100,000 residents (Essex County).

Figure 6



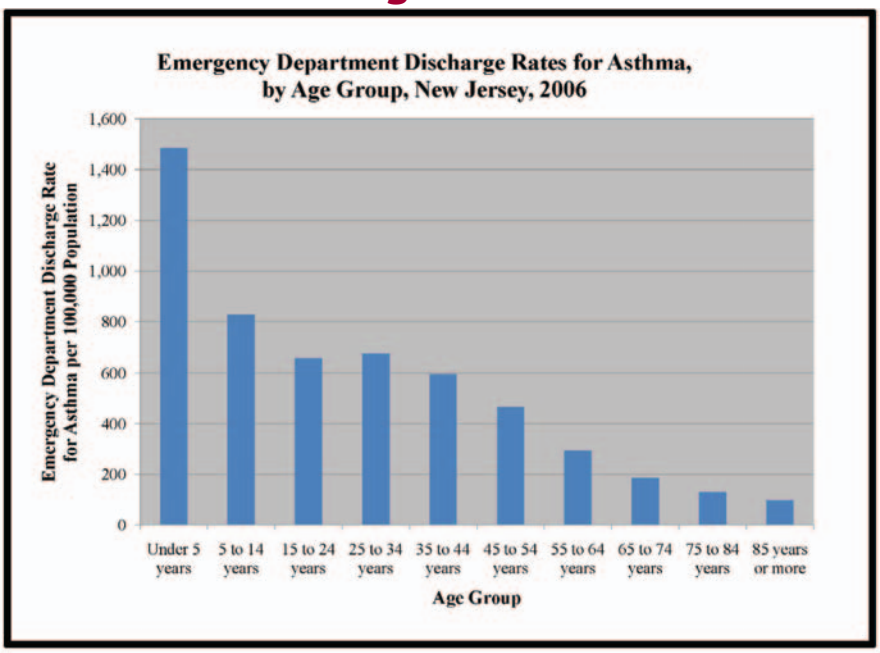
Data Source: New Jersey Department of Health and Senior Services

Beginning in 2004, New Jersey began collecting and reporting on emergency department discharges in the State. In 2006, there were 51,628 ED discharges for asthma among New Jersey residents representing about 2 of every 100 ED discharges statewide. Analysis of emergency department discharge data reveals the following:

- Among adults, women are more likely to be discharged from the ED for asthma when compared to men.
- In 2006, black residents were nearly four times more likely to be discharged from the ED for asthma when compared to white residents.

- In 2006, Hispanic residents were more than one and a half times more likely to be discharged from the ED for asthma when compared to non-Hispanic residents.
- Children under five years of age are the most likely to be discharged from the ED for asthma when compared to other age groups (Figure 7).

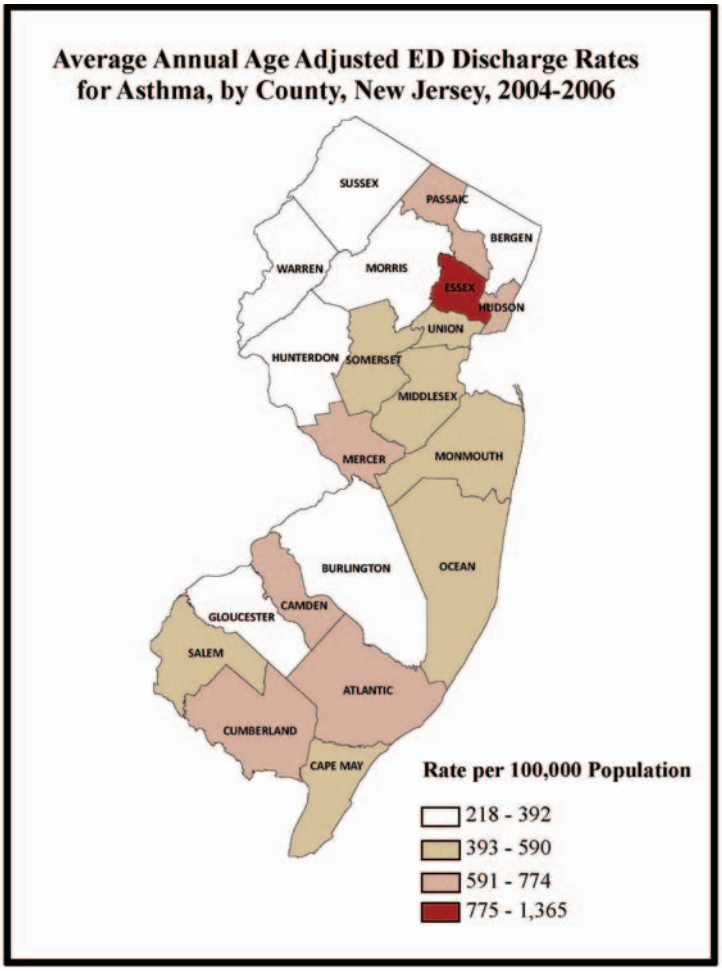
Figure 7



Data Source: New Jersey Department of Health and Senior Services

- ED discharge rates for asthma vary widely by county of residence (Figure 8). Average age adjusted ED discharge rates for asthma during 2004-2006 ranged from about 218 per 100,000 residents (Hunterdon County) to about 1,365 per 100,000 residents (Essex County).

Figure 8



Data Source: New Jersey Department of Health and Senior Services

Asthma Mortality in New Jersey

Death from asthma is uncommon, however; 106 deaths with an underlying cause of asthma were reported among New Jersey residents in 2005 and the extent to which asthma played a role in other instances of mortality is unknown. Although asthma prevalence declines with age, the risk of death from asthma increases steadily with age. Asthma mortality varies by race and ethnicity with higher age adjusted rates found among black residents and Hispanic residents as compared to white residents and non-Hispanic residents.

Risk Factors for Poor Asthma Control in New Jersey

Missed school days, lost work days, ED visits, hospitalizations, and deaths can be prevented when asthma is controlled resulting in an improved quality of life for individuals affected by asthma and a reduced economic burden for all New Jersey residents. Existing surveillance data indicates the following about risk factors for poor asthma control:

- New Jersey law requires physicians and advanced practice nurses to report work-related asthma (WRA) cases for proper public health follow-up. NJBRFS data from 2003-2004 suggest that about 10.7% (49,458) of adult asthma cases in New Jersey are work-related while only 450 actual cases of work-related asthma were identified through surveillance from 1988 to 2005. The large discrepancy between WRA prevalence estimates and number of identified cases is attributable to under recognition and/or underreporting of work-related asthma.

- The Centers for Disease Control and Prevention (CDC) considers people with asthma as a priority population for influenza immunization since asthma increases the risk of flu related complications. Data from the 2004-2006 NJBRFS indicate that only about 38.8% of New Jersey adults with current asthma receive a flu shot annually.

- Despite the medical recommendation that people with asthma stop smoking, there is little difference in the overall rates of smoking between those adults who have a history of asthma and those who do not. The 2002-2004 NJBRFS results indicate that an estimated 22% of adults with a history of asthma currently smoke. This compares to an estimated 19% of adults without a history of asthma who currently smoke. Smoking rates are highest among younger adults.

- Respondents on the 2002-2004 NJBRFS were asked if there was a time in the past 12 months when they needed to see a doctor but could not because of cost. Adults with asthma who answered yes to this question were more likely to report an asthma-related visit to the emergency department.

- Despite higher asthma ED visit and hospitalization rates among black and Hispanic children when compared to white children, the likelihood of admission to the hospital after visiting the ED is similar across race/ethnicity groups suggesting that processes of care and the decision to admit are similar in New Jersey regardless of race/ethnicity. This population based finding is consistent with existing research suggesting that black and Hispanic children present to the ED with similar acute asthma severity levels when compared to white children and that the disparity in asthma ED visit and hospitalization rates is due to differences in chronic asthma management causing minorities to visit the ED in higher numbers.[9]

- New Jersey recently began collecting data on asthma action plan use in the State. Preliminary estimates from the 2007 NJBRFS suggest that the number of adults with asthma who were ever given an asthma action plan is between 21%-35% while the estimated number of children with asthma who were ever given an asthma action plan is between 59%-82%. More precise estimates should become available as additional years of data are collected.

- New Jersey recently began collecting data about environmental counseling and asthma. Preliminary estimates from the 2007 NJBRFS suggest that the estimated number of people who were ever advised by a health professional to make changes in their environment to improve their asthma is between 39%-58% among adults with asthma and is between 42%-65% among children with asthma.

The burden of asthma is well defined in New Jersey, but information about asthma related risk factors is somewhat limited at this time. In 2008, the New Jersey Department of Health and Senior Services' Center for Health Statistics received funding from the CDC to join 36 other states in implementing the BRFSS Asthma Call-Back survey. This supplemental survey collects detailed information from individuals who report a history of asthma on the NJBRFS primary survey. As survey data becomes available in sufficient quantity, the State will be in a better position to characterize children and adults living in New Jersey with asthma and to monitor changes in asthma indicators over time. The comprehensive Asthma Call-Back survey collects information about recent history, symptoms and episodes, health care utilization, knowledge of asthma/management plan, modifications to environment, medications, cost of asthma care, work related asthma, co-morbid conditions, complementary and alternative therapies.

Conclusion

Existing surveillance data demonstrates that asthma is a significant public health concern for all subpopulations; however, certain groups are disproportionately affected by the disease. Populations of special interest include children (with a focus on children under 5 years), blacks, Hispanics, adult women, individuals living in certain areas of the State, and residents with a lower household income level. Asthma exacerbations are influenced by seasonal factors, particularly in school age children. Adult residents working in certain occupations are at an increased risk for developing new onset asthma and for experiencing asthma exacerbations. Occupational surveillance efforts suggest that under-reporting of work-related asthma is a significant problem contributing to missed

opportunities for prevention and asthma control. Enhanced surveillance efforts support the need to consider chronic asthma management issues in order to reduce race/ethnicity disparities. Statewide data also demonstrates the need to address various risk factors for poor control including access to care, flu immunization, smoking, asthma treatment plan utilization, and environmental counseling received among residents with asthma.

While it may take a village to raise a single child, it takes a concerted and coordinated attack by the infrastructure of the State to make inroads in asthma control. Asthma is a complex disease which requires a comprehensive and coordinated response including efforts directed at health care delivery systems, environmental assessment and intervention, education and health policy review. Surveillance data at the state and national level can inform stakeholders in setting priorities, planning interventions, and monitoring improvement over time. The State of New Jersey must continue to utilize available data to guide action and evaluate progress while expanding the surveillance system in order to fill identified gaps in information.

The Planning Process

Responding to the Challenge

New Jersey has recognized the significant challenge of addressing asthma in the State and has adopted a broad, multi-disciplinary approach. The complex nature of this epidemic requires partnerships with state as well as non-governmental organizations. These partnerships have included but are not limited to: the NJDHSS Division of Family Health Services, the Division of Epidemiology, Environmental and Occupational Health, the Office of Minority and Multicultural Health, Comprehensive Tobacco Control Program and the Center for Health Statistics, New Jersey Departments of Environmental Protection, Education, and Human Services; the Pediatric/Adult Asthma Coalition of New Jersey, and community-based/faith-based organizations all played a major role.

Mobilizing the resources of the State to attack the asthma epidemic has been an ongoing and successful effort. In 2001, the NJDHSS-AAEP was funded by the CDC to improve the health of people living and/or working in New Jersey by effective prevention, identification and management of asthma through a coordinated partnership among public and private organizations. Shortly after the program's inception, the NJDHSS-AAEP published a surveillance report entitled *Asthma in New Jersey*. This publication provided a detailed view of the burden of asthma in the State. It was followed by comprehensive updates in 2003, 2005, and 2006.

In reviewing the extensive list of asthma initiatives, DHSS identified the need to establish a clear view of current efforts and a means of communication to ensure coordination and reduce fragmentation. In January of 2002, a New Jersey State Interdepartmental Asthma Committee (IAC) was convened to review the role and current activities of the many disparate departments and divisions within the State that provide services, planning, prevention and care for people with asthma. Participants included representatives from departments and agencies in the State with active asthma programs, as well as federal partners. *The Interdepartmental Report and Strategic Plan for Asthma* was developed. In 2006, a retreat was held to evaluate the mission, goals and objectives of the existing strategic plan and assess their continued relevance, status of completion and to identify the need for new initiatives. The key themes were disparities in access to care; lack of statewide utilization of the Asthma Action Plan; management of asthma in the child care and school settings and communication among New Jersey asthma stakeholders.

In the years since the report was completed, a robust program of asthma prevention, assessment and intervention has been a high priority. For example, the New Jersey Department of Health and Senior Services (NJDHSS) hosted Annual Asthma Summits in 2005, 2006 and 2007 educating over 700 healthcare providers on current Best Practices of Asthma Care.

New Jersey Asthma Collaborative

In September 2005, the Commissioner (Dr. Fred M. Jacobs) of the New Jersey Department of Health and Senior Services recognized that asthma is a major public health issue that disproportionately impacts children and minorities, resulting in significant health disparities. In recognition of this phenomenon, the NJDHSS funded the New Jersey Primary Care Association (NJPCA) to initiate and implement a New Jersey Asthma Collaborative (Asthma Collaborative) based on the national model of the Health Resources and Services Administration (HRSA) Health Disparities Collaborative (HDC). The mission of the Asthma Collaborative was to improve the health of people living and/or working in New Jersey by effective prevention, identification and management of asthma. The overall goals of the Asthma Collaborative are: (1) generate and document improved health outcomes for underserved populations within the state; (2) transform clinical practice through the proven effective, evidence-based models of care; (3) develop infrastructure, expertise and multidisciplinary leadership within the state and within each organization, to improve health status and; (4) build strategic partnerships nationally, throughout the state and within the communities.

Agency for Healthcare Research and Quality

In July 2005, New Jersey was selected as one of six states to participate in the Learning Partnership to Decrease Disparities in Pediatric Asthma project. New Jersey joined Arizona, Michigan, Oregon, Maryland and Rhode Island in this groundbreaking initiative to develop and implement interventions to reduce disparities among minority children. The New Jersey team developed a Disparity Action Plan that targets three cities (Newark, Camden, and Trenton) with disproportionately high hospitalization and ED utilization for asthma. The Plan focuses on: (1) partnering with schools, (2) partnering with communities, (3) enhancing the capability of the emergency department (ED) to address asthma and create a follow-up system, and (4) develop a white paper on New Jersey accomplishments. The implementation of the Action Plan will be a collaborative approach with AAEP's stakeholders.

Healthy New Jersey 2010

The critical nature of asthma is recognized by its inclusion as a separate chapter in "Healthy New Jersey 2010," published by the Department of Health and Senior Services. The objectives identified for preventing and reducing the incidence of asthma are "education; identification, evaluation and control of environmental and occupational agents which may trigger the onset of asthma and an asthma attack; and access to primary care that allows diagnosis and efficient management of asthma."

There are three objectives identified to reduce the risk of Asthma. The first objective is to reduce the age adjusted mortality rate from asthma per 100,000 standard population; the second objective is to

reduce the annual hospital admission rate due to asthma per 100,000 population with blacks and Hispanics having the highest rate of hospitalizations due to asthma; and the third objective is to reduce the annual hospital admission rate due to asthma per 100,000 children under the age of five. Hispanic and black children also had the highest rates of hospitalization as noted to from 1998 to 2003.

The Pediatric/Adult Asthma Coalition of New Jersey (PACNJ)

In 1999, the American Lung Association of New Jersey and its medical section, the New Jersey Thoracic Society, initiated the formation of a statewide coalition to act as a clearinghouse for asthma programs and services and to mobilize asthma initiatives for statewide implementation. During the first year, members met to identify the key concerns they encountered in their efforts to help individuals with asthma. Out of this process five areas were targeted for interventions: schools, physicians, community outreach, health insurance and the environment. Task forces were organized around these areas and as members established priorities and began developing programs, it became evident that child care providers needed to be addressed separately from schools, therefore creating another task force.

In 2003, the Department of Health and Senior Services began to fund the Pediatric/Adult Coalition of New Jersey to implement the Departments' and PACNJ's asthma initiatives. The PACNJ mission is to improve the quality of life for individuals with asthma in New Jersey and New Jersey's children were the first focus for implementing asthma management strategies because statewide outreach was possible through the school system and the need was critical. The long range plan is to implement initiatives to reach all individuals with asthma and provide them with tools for self management and health literacy, empowering them to take control of their asthma.

The following plan is a result of the contributions made by the experts of both coalitions, state departments, community based organizations and people living with asthma. We are grateful to our members and thank them for allowing us to share our plan to reduce the burden of asthma in New Jersey.

The Strategic Plan

ENVIRONMENTAL

GOAL 1: IDENTIFICATION AND REDUCTION OF ENVIRONMENTAL EXPOSURES WHICH CAUSE OR EXACERBATE ASTHMA

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

Strategies:

A. NJDEP will continue to develop implementation plans for reduction of outdoor triggers.

Performance Indicator:

- Availability of implementation plans
- Identify emerging contaminants
- Change reporting thresholds to address risk

B. Implement measures to reduce outdoor environmental exposures.

Performance Indicator:

- Annual Air Quality Report
- Attainment of National Air Quality Standards
- Air Pollution Monitoring reports
- Reduce outdoor wood smoke

C. Reduction of emissions from mobile sources and stationary sources.

Performance Indicator:

- Compliance with state and federal standards
- Increase reporting for Emission Statements
- Annual Inspection reports
- Update and improve Emissions Inventory

D. Continue to use National Air Toxics Assessment (NATA) study to target facilities in the state.

Performance Indicator:

- Identification of targeted facilities
- Increase Hazardous Air Pollutants list for permitting

E. Publicize and promote the use of the NJDEP web site (http://www.state.nj.us.dep/airmon) to increase awareness and knowledge on air quality and asthma.

Performance Indicator:

- NJDEP web statistics
- Number of educational packages requested

Responsible entity – NJDEP

Objective 2. Identify and implement new strategies to reduce levels of indoor asthma triggers.

Strategies:

A. Inventory current strategies available for control of indoor asthma triggers and consider alternatives that include all settings: home, non-residential, recreation and consumer sites.

Performance Indicator:

- Inventory of existing strategies and outcomes
- Plan for new strategies
- Evaluation of new strategies outcomes

B. DEP/CEHS to distribute educational, outreach materials, and provide consultation and technical assistance on indoor triggers.

Performance Indicator:

- Web statistics
- Number of educational packages distributed
- Number of events attended

Responsible entity: NJDHSS-CEHS

C. CEHS will secure federal funding to provide for local health department and/or community based organizations to address indoor environmental contaminants through the promotion of the federal Healthy Home Model.

Performance Indicator:

- Receive funding
- Federal grant progress report

Responsible entity: NJDHSS-CEHS and NJDHSS-Adolescent Child Health Program

D. CEHS in cooperation with Rutgers University Cooperative Extension provide workshops to local health departments on indoor environmental health issues.

Performance Indicator:

- Number of workshops conducted

Responsible entity: NJDHSS-CEHS

E. PACNJ will provide education on indoor triggers.

Performance Indicator:

- Number of educational sessions
- Increase in the number of web page material downloads

Responsible entity: PACNJ

F. Disseminate information about construction and renovation of schools to assure use of materials that can prevent asthma triggers.

Performance Indicator:

- Materials distributed

Responsible entity: PEOSH

Objective 3. Develop and/or disseminate appropriate educational materials, training guides and other tools to ensure the adherence to best practices for pollution reduction.

Strategies:

A. Partners will promote the distribution of "Top Ten Actions to Control Asthma Triggers in your Home," developed by the PACNJ.

Performance Indicator:

- Number of downloads

Responsible entity: PACNJ

Objective 4. Implement strategies to eliminate exposure to environmental tobacco smoke (second hand smoke).

Strategies:

A. Comprehensive Tobacco Control Program (CTCP) will assist AAEP and partners in the promotion of resources including: Asthma Prevention Methods, NJ Quitnet, NJ Quitline, NJ Quit Center and Youth Cessation programs.

Performance Indicator:

- NJ Quitnet/Quitline data

Responsible entity: CTCP

OCCUPATIONAL

GOAL 1: REDUCE THE INCIDENCE OF WORK-RELATED ASTHMA WHILE IMPROVING THE DIAGNOSIS AND MANAGEMENT OF EXISTING CASES THROUGH CASE IDENTIFICATION, CASE MANAGEMENT AND WORKSITE INTERVENTION/OUTREACH/EDUCATION

Objective 1. Increase the capacity of New Jersey health care providers to diagnose, manage and report work-related asthma.

Strategies:

A. Implement outreach efforts to educate health care providers about work-related asthma.

Performance Indicator:

- Annual work-related asthma report
- Mailed educational materials
- Number of presentations at health care professional group meetings

B. Maintain mailing list of New Jersey physicians, advanced nurse practitioners, and physician assistants to allow for wide distribution of relevant asthma related information. Disseminate information about New Jersey reporting regulations for occupational diseases including work-related asthma.

Performance Indicator:

- Annual work-related asthma report
- Mailed educational materials
- Number of healthcare providers reporting work-related asthma

C. Publish surveillance research data on work-related asthma and its causes.

Performance Indicator:

- Reports and publications
- Educational material developed

Responsible entity: NJDHSS-OHS

Objective 2. **Identify and implement strategies to reduce exposure to substances in the workplace that will cause or exacerbate asthma.**

Strategies:

A. Compete for NIOSH/CDC funding of work-related asthma surveillance and intervention.

Performance Indicator:

- Successful grant application

B. Conduct onsite industrial hygiene evaluations at workplaces identified through surveillance case data.

Performance Indicator:

- Number of onsite industrial hygienist evaluations conducted

C. Ongoing analysis of the OHS Work-related Asthma Registry to determine high risk industries and occupations for work-related asthma.

Performance Indicator:

- Targeted interventions to high-risk populations

D. Provide access to educational materials on work-related asthma to all stakeholders and interested parties.

Performance Indicator:

- Web statistics

E. Educate employers and employees on work-related asthma, causes, and controls.

Performance Indicator:

- Number of worksite evaluation reports issued
- Mailed educational material

F. Disseminate literature on asthma causing agents to individuals who have been reported to the OHS Work-related Asthma Registry, identified industries and other users of asthma-causing agents.

Performance Indicator:

- Number of individuals who receive literature
- Number of companies who receive literature

G. Reduce disparities in work-related asthma.

Performance Indicator:

- Availability of materials in Spanish
- Target interventions at special populations

Responsible entity: NJDHSS-OHS

Objective 3. Initiate workplace wellness strategies to educate workers about asthma and offer disease management programs.

Strategies:

A. DHSS will continue to offer CDSMP workshops to state workers.

Performance Indicator:

- Number of workshops held
- Number of workshops participants who identified asthma as their chronic condition

B. Explore additional workplaces to offer CDSMP.

Performance Indicator:

- Number of new workplaces offering CDSMP
- Number of workshops held
- Number of workshops participants who identified asthma as their chronic condition

Responsible entity: NJDHSS-Division of Aging & Community Services and SAC members

C. Liaison with NJ Laborers Health & Safety Fund to initiate asthma strategies among the union workforce.

Performance Indicator:

- Plan to target specific trade unions at higher risk for asthma
- Plan to distribute asthma educational materials through union communications

Responsible entities: SAC members

Delivery of Health Care

GOAL 1. 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 asthma.**

Strategies:

A. Conduct an annual asthma educational program for healthcare providers either via conference or online.

Performance Indicator:

- Number of educational credits provided
- Number of educational sessions online
- Website statistics
- Conference Evaluation report
- Availability of material

Responsible entity: NJDHSS-AAEP

B. Promote Educating Physicians in their Community (EPIC) curriculum as a means to increase Primary Care Provider knowledge and treatment capability.

Performance Indicator:

- Secure funding
- Program expansion into one/county
- Contact hours/CMEs
- Web downloads

Responsible entity: NJ Academy of Pediatrics

C. Promote the use of PACNJ educational tools to healthcare and social service providers, and other professionals.

Performance Indicator:

- Number of web downloads
- Distribution matrix

Responsible entity: SAC

D. The AAEP webpage will provide link to partner websites to facilitate access to asthma information and promote existing asthma training programs.

Performance Indicator:

- Inclusion of partner links on AAEP webpage
- Web statistics

Responsible entity: NJDHSS-AAEP

E. Promote asthma educational/training programs for healthcare providers, allied health professionals, policy makers.

Performance Indicator:

- Number of educational trainings held
- Population reached

Responsible entity: SAC members

F. Develop online educational programs and resources for healthcare providers and policy makers.

Performance Indicator:

- Number of educational trainings held
- Population reached

Responsible entity: SAC

Objective 2. Increase the number of public and private health care plans who provide a comprehensive disease management program for enrollees with asthma.

Strategies:

A. Encourage healthcare plans to require the use of the Asthma Treatment Plan among participating healthcare providers.

Performance Indicator:

- Web downloads of Asthma Treatment Plan
- Percentage of people in NJ with an ATP (BRFSS data)
- Healthcare Plans requiring ATP

Responsible entity: PACNJ

B. The DHS will adopt contract language requiring HMOs that cover persons enrolled in Medicaid to provide asthma services that conforms to the recommendations for insurance coverage.

Performance Indicator:

- Contract requirements

Responsible entity: Medicaid

C. Explore the possibility of the top five (5) private health insurers meeting to discuss utilization of the ATP for their members.

Performance Indicator:

- Meeting and ATP Implementation Proposal

Responsible entity: PACNJ

D. PACNJ will secure funding to develop a one-hour session on the PACNJ Asthma Treatment Plan for healthcare providers as part of the criteria to qualify for insurance reimbursement for completing the form.

Performance Indicator:

- Receive funding
- Number of sessions and healthcare providers

Responsible entity: PACNJ

GOAL 2. REDUCE EMERGENCY DEPARTMENT VISITS THROUGH A COORDINATED APPROACH TO ADDRESS THE ACUTE AND CHRONIC NEEDS OF THE PATIENT

Objective 1. **Develop a model that can be implemented statewide to reduce asthma ED visits.**

Strategies:

A. Identify resources and area(s) to pilot program model.

Performance Indicator:

- Agreement of stakeholder to pilot program
- Explore other funding sources to increase the number of pilot sites

Responsible entity: NJDHSS and NJAHRQ ED committee

B. Develop, implement and evaluate a plan that incorporates discharge instructions, education, referral and follow-up for people with asthma that present at the ED.

Performance Indicator:

- Evaluation plan developed by AHRQ ED committee for pilot
- Report on pilot program

Responsible entity: NJAHRQ ED committee and agency

GOAL 3. IMPROVE ASTHMA MANAGEMENT BY ENSURING THAT HEALTH CARE PROVIDERS TREATING INDIVIDUALS WITH ASTHMA UTILIZE THE CURRENT NHLBI GUIDELINES AS THE PROTOCOL FOR ASTHMA MANAGEMENT

Objective 1. Ensure that healthcare providers' asthma educational materials and resources provided to patients reflect the current NHLBI guidelines.

Strategies:

A. Promote the use of the revised National Heart Lung Blood Institute (NHLBI) guidelines and asthma educational material.

Performance Indicator:

- PACNJ report on available resources on website
- Distribution of materials

Responsible entity: PACNJ

B. Provide access to most recently updated NHLBI guidelines.

Performance Indicator:

- Promotion of materials on various websites (e.g. AAEP and PACNJ)
- Availability on PACNJ web statistics
- Availability on Academy of Pediatrics and Pediatric Council on Research and Education (PCORE)

C. Annually review and update asthma materials distributed in state as appropriate based on NHLBI guidelines, program evaluation and cultural competency.

Performance Indicator:

- Assessment plan of materials
- Revise Workplan to incorporate updates

Responsible entity: NJDHSS-AAEP and PACNJ

Child Care and School

GOAL 1. IMPROVE THE PREVENTION AND MANAGEMENT OF ASTHMA AND ASTHMA TRIGGERS AMONG MEMBERS OF CHILD CARE AND SCHOOL COMMUNITY INCLUDING CHILDREN, THEIR CARE GIVERS AND ALL INDIVIDUALS WITH WHOM THEY INTERACT

Objective 1. Provide school nurses, school personnel (administrators, teachers, maintenance), and child care providers, with access to education and resources necessary to prevent and manage asthma in child care and school (after-school and before-school) settings.

Strategies:

A. Provide annual asthma education for school faculty.

Performance Indicator:

- Number of requests for training kits
- Date of faculty in-services
- Number of completed trainings
- Web stats

Responsible entity: PACNJ and NJDOE

B. The DHSS and the DHS will collaborate with the New Jersey Chapter of the American Academy of Pediatrics (NJAAP), NJ Department of Children and Families (Office of Licensing) and PACNJ to provide training on management of children with asthma to child care providers and child care center directors, and pilot an Asthma Friendly Child Care Award.

Performance Indicator:

- Policies and Practices trainings offered
- Asthma Trainings offered by child care health consultants to child care providers
- Number of kits requested for training
- Reported dates of training

Responsible entity: PACNJ Child Care Task Force

C. Ensure the availability of asthma training materials and a team capable of providing consultation and education on asthma management to child care providers statewide.

Performance Indicator:

- DHS tracking Child Care Health Consultants (CCHC) outreach on asthma medications Part I and II

Responsible entity: CCHC

D. Develop a statewide team of facilitators trained to deliver "Policies and Practices for Asthma Friendly Child Care" to reach the 9000 child care providers and directors in the state.

Performance Indicator:

- Number facilitators
- PACNJ report on facilitators sharing sessions and trainings

Responsible entity: PACNJ

E. The DHS-Division of Family Development will participate in development of a specific strategy to incorporate preschool children in outreach and education for child care staff members.

Performance Indicator:

- DHS Work Plan for outreach and education

Responsible entity: DHS

Objective 2. Provide asthma education and promote system change to increase asthma friendly schools and school districts statewide in New Jersey.

Strategies:

A. Identify areas in Asthma Friendly School Award (AFSA) programs that need strategies for improvement.

Performance Indicator:

- PACNJ Assessment

B. Identify and create systems for broad based implementation of AFSA process including technical assessment to participating schools.

Performance Indicator:

- Electronic management of AFSA program

C. Create an efficient organized system for recognition of award recipients on an ongoing basis.

Performance Indicator:

- Number of schools/districts receiving award

D. Target high risk school districts for focused effort to qualify all schools in their districts.

Performance Indicator:

- Number of high risk districts receiving AFSA

E. Develop AFSA newsletter for distribution twice a year.

Performance Indicator:

- Availability of newsletter

Responsible entity: PACNJ

Objective 3. Provide asthma education and promote system change to create asthma friendly child care settings statewide in New Jersey.

Strategies:

A. Develop and implement "Asthma Friendly Child Care" program.

Performance Indicator:

- Components of child care program

Responsible entity: PACNJ

Objective 4. Increase the number of children statewide who have an Asthma Treatment Plan in the school setting.

Strategies:

A. Promote compliance with New Jersey Legislation (N.J.S.A:18A:40-12.8) requiring an Asthma Treatment Plan (ATP) in the school and child care setting.

Performance Indicator:

- Percentage of children with asthma who have ATP statewide

Responsible entity: PACNJ

B. Initiate efforts to ensure that licensing standards and regulations relative to permissible activities by child care providers be developed that mandate that the ATP be required for licensed child care centers, consistent with the Universal Health Care Record.

Performance Indicator:

- Number of child care centers who require ATP

Responsible entity: PACNJ and DCF

Education and Awareness

GOAL 1. EMPOWER PATIENTS, PROVIDERS AND THE PUBLIC TO PREVENT, MANAGE AND TREAT ASTHMA THROUGH EDUCATION, AWARENESS AND COMMUNICATION

Objective 1. Identify and promote asthma "key messages" for providers, patients and target populations.

Strategies:

A. Establish and implement a communication plan that incorporates key messages.

Performance Indicator:

- Communication plan

Responsible entity: NJDHSS-AAEP and PACNJ

Objective 2. Improve access to asthma education for patients, providers and the public.

Strategies:

A. Initiate education programs to patients who present at the emergency department with asthma.

Performance Indicator:

- Revised discharge instructions
- Participation in asthma education class
- Report of NJDHSS-AAEP pilot
- Decrease ED visits
- Decrease school absenteeism
- Increase use of inhaled corticosteroids

Responsible entity: NJAHRQ ED Subcommittee

B. DHSS and partners will continue to provide basic information on asthma on their websites.

Performance Indicator:

- Availability of electronic information
- Web statistics

Responsible entity: SAC

C. Work-related Asthma will provide outreach, seminars and mass mailings.

Performance Indicator:

- Number of events, mailings conducted.
- Number of asthma resources shared
- SAC Subcommittee reports on coordination

Responsible entity: NJDHSS-OHS

D. Identify a secure funding mechanism to continue statewide asthma educational program for healthcare providers.

Performance Indicator:

- Apply for grant funds
- CEUs

Responsible entity: NJDHSS-AAEP

E. State Asthma Committee members will incorporate asthma education programs into their existing infrastructure to reach their respective populations.

Performance Indicator:

- Survey of stakeholders

Responsible entity: Designated State Asthma Subcommittee

F. Develop and implement a plan to increase the number of Certified Asthma Educators (AE-C) in New Jersey.

Performance Indicator:

- Developed Plan
- Reimbursement for asthma education
- Increase in the number of AE-C in NJ from baseline of thirty-six (36)

Responsible entity: Designated State Asthma Subcommittee

G. Promote healthcare providers to refer patients with asthma or caregivers into the chronic disease self-management program (CDSMP).

Performance Indicator:

- Number of CDSMP attendees
- Availability CDSMP grant

Responsible entity: NJDHSS-Division of Aging & Community Services

Objective 3. **PACNJ will secure funding to establish the PACNJ website as a library of "virtual resources."**

Strategies:

A. Create access to programs by specific populations – health care providers, patients, school personnel, child care providers.

B. Post all PACNJ education materials to the website.

C. Develop on line quizzes for programs posted on website.

D. Generate reports tracking website use and quizzes.

Performance Indicator:

- Availability of information
- Web reports

Responsible entity: PACNJ

Policy and Advocacy

GOAL 1. DEVELOP AND ADVOCATE FOR LEGISLATION THAT WOULD ENSURE ACCESS TO ASTHMA EDUCATION

Objective 1. Improve asthma outcomes by promoting a statewide systems change for asthma management.

Strategies:

A. Identify and initiate appropriate mechanism to establish reimbursement for providers who complete Asthma Treatment Plan.

Performance Indicator:

- Mechanism identified

Responsible entity: NJDHSS-AAEP

B. Engage support from appropriate professional and community organizations to facilitate systems change.

Performance Indicator:

- Partners endorsement
- Implementation Plan

Responsible entity: SAC-Policy Committee

GOAL 2. IMPROVE ASTHMA CONTROL BY PROMOTING ASTHMA FRIENDLY ENVIRONMENTS FOR CHILDREN

Objective 1. Identify and create systems for broad based implementation of the AFSA process.

Strategies:

A. Introduce legislation that requires New Jersey schools to meet Asthma Friendly criteria.

Performance Indicator:

- Regulation

Responsible entity: PACNJ and Department of Children and Families

Objective 2. Identify and establish elements for Asthma Friendly child care.

Strategies:

A. Identify and initiate appropriate mechanism to require Asthma Friendly Child care.

Performance Indicator:

- Policy/legislation

Responsible entity: PACNJ

GOAL 3. ESTABLISH AND IMPLEMENT A SUSTAINABLE APPROACH FOR PROVIDING COORDINATED CARE FOR PATIENTS WITH ASTHMA WHO PRESENT TO THE EMERGENCY DEPARTMENT

Objective 1. Develop and promote a New Jersey Best Practices of Asthma Care for patients with asthma in the Emergency Department (ED) that will address the acute/chronic needs of asthma patients.

Strategies:

A. Pilot and access the efficiency of a three-tier approach to asthma care for patients who present at the ED.

Performance Indicator:

- Evaluation report

Responsible entity: NJAHRQ ED Committee

B. Convene policy subcommittee to identify/compile/publish Best Practices of Asthma Care policy paper.

Performance Indicator:

- Policy paper

Responsible entity: NJAHRQ Policy Subcommittee

C. Identify funding and/or legislation for statewide implementation.

Performance Indicator:

- Secured funding or legislation

Responsible entity: NJAHRQ Policy Subcommittee

State Coordination

GOAL 1. PROMOTE AND SUPPORT STATEWIDE COLLABORATION AMONG PUBLIC AND PRIVATE ORGANIZATIONS TO ADDRESS ALL ASPECTS OF ASTHMA IN NEW JERSEY

Objective 1. Implement and evaluate a comprehensive State Asthma Plan among stakeholders engaged in efforts to reduce the burden of asthma statewide.

Strategies:

A. AAEP will develop an online inventory of all asthma initiatives within the state.

Performance Indicator:

- Availability of electronic inventory
- Web statistics

Responsible entity: NJDHSS-AAEP

B. Identify necessary subcommittees appropriate to implement and evaluate State Asthma Plan.

Performance Indicator:

- Subcommittee report/recommendation

Responsible entity: SAC

C. AAEP will apply to the Centers for Disease Control and Prevention (CDC) for continuation of funding to support asthma state infrastructure.

Performance Indicator:

- Notice of CDC grant award

Responsible entity: NJDHSS-AAEP

D. Additional stakeholders will be identified for participation in the development and implementation of the State Asthma Plan and/or membership on the State Asthma Committee or PACNJ.

Performance Indicator:

- Expanded membership

Responsible entity: AAEP Coordinator and PACNJ Coordinating Manager

E. AAEP will serve as a "point of contact" for communication among the State Asthma Committee.

Performance Indicator:

- Ability to disseminate material electronically
- Information requested

Responsible entity: NJDHSS-AAEP

F. Initiate collaborative projects with new stakeholders (e.g. Medicaid, Tobacco, Obesity, Women's Health, Office of Public Health and Housing) to expand the impact of the State Asthma Plan in other focus areas.

Performance Indicator:

- Inventory of new initiatives

Responsible entity: SAC

Objective 2. Promote and support collaboration between State agencies and universities, professional organization and other individuals in the State to expand or encourage asthma related research through data sharing and technical assistance.

Strategies:

A. Develop online inventory of asthma research in New Jersey.

Performance Indicator:

- Electronic inventory

Responsible entity: NJDHSS-AAEP

Objective 3. Obtain additional funding for New Jersey asthma initiatives.

Strategies:

A. Communicate funding opportunities with stakeholders.

Performance Indicator:

- Electronic notification

Responsible entity: NJDHSS-AAEP

B. Apply for appropriate Funding Opportunity Announcement(s) to facilitate implementation of State Plan.

Performance Indicator:

- Submission of grant

Responsible entity: SAC

Objective 4. Collaborate with the Office of Public Health Infrastructure to establish protocol to address asthma at the local level.

Strategies:

A. Coordinate State Asthma Plan with the Community Health Improvement Plans developed by the Community Public Health Partnership in NJ's 21 counties and the cities of Newark and Paterson.

Performance Indicator:

- Summary of local activities

Responsible entity: NJDHSS-AAEP and NJDHSS-Office of Public Health

GOAL 2. ENHANCE THE PACNJ EFFORT TO ACT AS A STATEWIDE COALITION FOR ASTHMA

Objective 1. PACNJ will seek funding to increase utilization of PACNJ asthma resources statewide.

Strategies:

A. Stakeholders will utilize PACNJ educational tools for inclusion in their respective asthma initiatives.

Performance Indicator:

- PACNJ tracking program

Responsible entity: SAC

B. Members of the State Asthma Committee will continue to provide resources (e.g. staff, technical assistance) to the PACNJ in their expansion of asthma management.

Performance Indicator:

- Inventory of State Asthma Committee and PACNJ membership

Responsible entity: SAC

C. PACNJ will annually prepare a rigorous assessment of Coalition Partnership and one (1) related to Coalition Intervention.

Performance Indicator:

- Assessment report

Responsible entity: PACNJ

D. Annually, PACNJ will update their webpage to reflect current partners.

Performance Indicator:

- Webpage update

Responsible entity: PACNJ

Objective 2. PACNJ will secure funding to establish the PACNJ website as a library of "virtual resources."

Strategies:

A. Create access to programs by specific populations – health care providers, patients, school personnel, child care providers.

B. Post all PACNJ education materials to the website.

C. Develop on line quizzes for programs posted on website.

D. Generate reports tracking website use and quizzes.

Performance Indicator:

- Availability of information
- Web reports

Responsible entity: PACNJ

Health Disparities

GOAL 1. REDUCE THE DISPARITIES OF ASTHMA INCLUDING THOSE RELATED TO AGE/GENDER, SOCIOECONOMIC, RACE/ETHNICITY, MORBIDITY/ MORTALITY AND GEOGRAPHIC RESIDENCE THROUGH PARTNERSHIP AND COLLABORATION

Objective 1. Annual workplans will incorporate initiatives that focus on social determinants of health with an emphasis on women, children, elderly, Hispanic/Black populations and residents in high priority areas.

Strategies:

A. Monitor and report surveillance data for high priority groups.

Performance Indicator:

- Trend analysis
- Workplan Evaluation

Responsible entity: NJDHSS-AAEP

B. Partners will plan and implement initiatives to reach high risk individuals.

Performance Indicator:

- Inventory of NJ Asthma Disparities Initiatives

Responsible entity: SAC-Asthma Disparities Subcommittee

C. Partners will utilize culturally and linguistically appropriate educational materials for specific ethnic and cultural groups.

Performance Indicator:

- Stakeholders develop a Resource Listing of materials used and/or disseminated.

Responsible entity: SAC, SAC-Education/Awareness Subcommittee and PACNJ

D. Identify models of intervention and effective tools for outreach to disparate cultural and ethnic populations. Links to minority community-based organizations (MCBOs) will be sought to facilitate participation in asthma related education and outreach. OMMH community mobilization grantees will be encouraged to participate in the asthma outreach efforts.

Performance Indicator:

- Technical assistance provided, OMMH annual report, UMDNJ Center for Health Disparities

Responsible entity: NJDHSS-OMMH, UMDNJ-Center for Health Disparities

E. State Asthma Committee and the PACNJ Coalition will include consumers from high-risk populations.

Performance Indicator:

- List of partners

Responsible entity: NJDHSS-AAEP and PACNJ

Objective 2. Promote research to ameliorate asthma disparities.

Strategies:

A. Statewide Asthma Committee will identify funding opportunities to expand research on asthma disparities.

Performance Indicator:

- Availability of funds

Responsible entity: NJDHSS-OMMH

Objective 3. FQHCs will continue collaborative work to improve quality of asthma care to high-risk populations.

Strategies:

A. Continuation of FQHC Quality Improvement efforts to improve delivery of care for NJ residents with asthma.

Performance Indicator:

- Quality Improvement Reports

Responsible entity: NJ Primary Care Association (NJPCA)

B. NJPCA will work with AAEP to select asthma indicators to monitor quality improvement.

Performance Indicator:

- Indicator report

Responsible entity: NJPCA and NJDHSS-AAEP

C. NJPCA will serve as liaison to SAC on the review of asthma quality improvement initiatives.

Performance Indicator:

- FQHCs feedback

Responsible entity: NJPCA

Objective 4. **Promote community-based asthma initiatives to reduce asthma disparities in high-risk populations.**

Strategies:

A. OMMH will make available Funding Announcement for Community Mobilization to Reduce Asthma Disparities.

Performance Indicator:

- Number of agencies funded (baseline 3)

Responsible entity: NJDHSS-OMMH

B. Community-based organizations will partner with local entities to implement community model to reduce school absenteeism and asthma hospitalizations among children at risk OMMH funded communities.

Performance Indicator:

- Identified communities
- Quarterly reports

Responsible entity: Funded OMMH Community Based Organizations

C. AAEP will monitor and report on outcomes of community-based model.

Performance Indicator:

- AAEP reports

Responsible entity: NJDHSS-AAEP

SURVEILLANCE

GOAL 1. MAINTAIN AND EXPAND A SYSTEM FOR MEASURING THE RELEVANT ELEMENTS OF ASTHMA IN THE STATE TO REDUCE ASTHMA BURDEN

Objective 1. Expand surveillance system to fill-in identified gaps in data.

Strategies:

A. Catalog existing asthma data in order to identify gaps in available data.

Performance Indicator:

- Listing of available data posted to website

B. Review NJBRFS Call-Back Survey to determine priority components for analysis and reporting.

Performance Indicator:

- Plan for analysis
- Publish data

C. Identify plan for the appropriate distribution of hospital/ED data below the county level.

Performance Indicator:

- Draft workplan
- Public use datasets available for surveillance and research

Responsible entities: NJDHSS-CHS and AAEP

D. Identify plan to incorporate Medicaid data into existing surveillance system.

Performance Indicator:

- Inclusion of Medicaid representatives on asthma workgroups (SAC, PACNJ)
- Draft workplan

Responsible entities: NJDHSS and DHS

E. Conduct special projects and enhanced surveillance on asthma.

Performance Indicator:

- List of research priorities and data needs
- Published manuscripts

Responsible entities: NJDHSS-MCH-EPI

F. Identify a secure funding mechanism to provide supplemental funding to NJBRFS to examine the burden of asthma among subgroups.

Performance Indicator:

- Increase NJBRFS sample size
- Availability of data

Responsible entities: NJDHSS-AAEP and NJDHSS-CHS

Objective 2. Analyze and monitor the burden of asthma in New Jersey.

Strategies:

A. Monitor the impact of surveillance in reducing the burden of asthma in New Jersey.

Performance Indicator:

- Surveillance system evaluation

B. Continue to obtain, analyze and report on New Jersey emergency department discharges, hospitalizations, prevalence, mortality, work-related asthma and associated factors.

Performance Indicator:

- Availability of data

Responsible entities: NJDHSS-AAEP

C. Develop a list of data indicators for asthma outcomes including statewide targets for improvement.

Performance Indicator:

- Published list of indicators and associated targets

Responsible entities: NJDHSS-AAEP

D. Promote an evaluation by the Consumer and Environmental Health Services (CEHS) of the impact of exposure and examine the relationship to hazardous air pollutants on asthma hospitalization rates in four New Jersey locations.

Performance Indicator:

- Environmental Public Health Tracking (EPHT) system and report

Responsible entity: NJDHSS-CEHS

E. Continue to analyze and report on specific populations that are at increased risk for asthma and asthma related outcomes.

Performance Indicator:

- Workplan including definitions and special populations
- Published report

Responsible entity: NJDHSS-AAEP

F. Development of DEP and DHSS Geographic Information Systems to identify communities at risk.

Performance Indicator:

- Collaboration with EPHT program and CHS to develop GIS based information.

Responsible entities: NJDHSS-CHS and CEHS

Objective 3. Communicate the relevance of asthma surveillance data and statewide efforts to control asthma to people with asthma, healthcare providers and the public.

Strategies:

A. Provide access to national and state asthma data on the NJDHSS website.

Performance Indicator:

- Availability of data online
- Web statistics

B. Identify new methods of distribution to improve communication of surveillance data.

Performance Indicator:

- Availability of new publication
- Collaboration with EPHT and CHS to disseminate asthma data

C. Publish a comprehensive surveillance report every three (3) years and at least one (1) fact sheet or other publication per year.

Performance Indicator:

- Availability of publication

D. Provide technical support and data resources to requesters.

Performance Indicator:

- Number of request
- Type of support given

Responsible entity: NJDHSS-AAEP

EVALUATION

- Establish a Steering Subcommittee for each focus area and designate a Chair who will be responsible for providing feedback to the State Asthma Committee.

- Subcommittees will meet biannually to assess and report on the process for objectives and strategies within their focus area.

- Subcommittee chairs will provide recommendations on attainment of goals, objectives and strategies to State Asthma Committee.

- An annual meeting of the State Asthma Committee will be held to communicate progress and make any changes to the Strategic Plan.

- An annual update will be disseminated that includes the current challenges, new programs and essential information to all relevant agencies.

Appendix A – Acronyms

AAEP - Asthma Awareness and Education Program
AFSA – Asthma Friendly School Award
AHRQ - Agency for Healthcare Research and Quality
ATP – Asthma Treatment Plan
CBO – Community-Based Organizations
CCHC – Child Care Health Consultants
CDC – Centers for Disease Control and Prevention
CDSMP - Chronic Disease Self-Management Program
CEHS – Consumer and Environmental Health Services
CHS – Center for Health Statistics
CTCP – Comprehensive Tobacco Control Program
DHS – New Jersey Department of Human Services
ED – Emergency Department
EPHT – Environmental Public Health Tracking
EPIC – Educating Physicians in their Community
HDC – Health Disparities Collaborative
HRSA – Health Resources and Services Administration
IAC – Interdepartmental Asthma Committee
MCH-EPI – NJDHSS Maternal Child Health and Epidemiology Program
NAEPP – National Asthma Education and Prevention Program
NHLBI – National Heart Lung and Blood Institute
NIOSH - The National Institute for Occupational Safety and Health
NJBRFS – New Jersey Behavioral Risk Factor Survey
NJDEP – New Jersey Department of Environmental Protection
NJDHSS – New Jersey Department of Health and Senior Services
NJPCA – New Jersey Primary Care Association
PACNJ – Pediatric Adult Asthma Coalition of New Jersey
OHS – Occupational Health Services
OMMH – Office Minority and Multicultural Health
PEOSH – Public Employee Occupational Safety and Health Program
SAC – State Asthma Committee
SENSOR – Sentinel Event Notification System for Occupational Risks
WRA - Work Related Asthma

Appendix B – Partners

New Jersey Department of Health & Senior Services

- Special Child, Adult and Early Intervention Program
- Child and Adolescent Health Services
- Maternal & Child Health Epidemiology Program
- Office of Primary Care and Rural Health
- Office of Women's Health
- Women, Infants & Children Program
- Occupational Health Services
- Consumer, Environmental and Occupational Health Services
- Public Employees Occupational Safety and Health
- Office of Public Health Infrastructure
- Center for Health Statistics
- Comprehensive Tobacco Control Program
- Office of Minority & Multicultural Health
- Vaccine Preventable Disease Program
- Division of Aging and Community Services
- Office of Policy

New Jersey State Departments

- NJ Dept. of Environmental Protection
- NJ Dept. of Education – Office of Program Support Services
- NJ Dept. of Human Services (Medicaid & Office of Early Care/Education)
- Office of the Governor

Non-Governmental Stakeholders

- Pediatric/Adult Asthma Coalition of NJ
- NJ Primary Care Association
- OMMH Asthma Grantees
- Central NJ Maternal Child Health Consortium
- Allergy & Asthma Network Mothers of Asthmatics
- Horizon NJ Health-Healthcare Management Education & Outreach
- NJ Chapter of American Academy of Pediatrics

Appendix C -References

1. NCHS Asthma Prevalence, Health Care Use and Mortality: United States, 2003-2005.

2. MMWR National Surveillance for Asthma-United States, 1980-2004 October 19, 2007

3. Agency for HealthCare Research and Quality. Asthma Rates Soaring Among Adult Hospital Patients. AHRQ News and Numbers, June 18, 2008. Available: http://www.ahrq.gov/news/nn/nn061808.htm.

4. Chan-Yeung M, Occupational Asthma, Chest, 98:5, November 1990 supplement, 148s-161s.

5. Balmes J, Becklake M, Blanc P, et al. Environmental and Occupational Health Assembly, American Thoracic Society. American Thoracic Society Statement: Occupational Contribution to the Burden of Airway Disease. Am J Respir Crit Care Med, 2003; 167:787-797. Available: http://ajrccm.atsjournals.org/cgi/content/full/167/5/787

6. NJDHSS Division of Epidemiology, Environmental and Occupational Health. Occupational Health Surveillance Update Special Issue on Work-Related Asthma. May 2006

7. Weiss, Sullivan. The health economics of asthma and rhinitis. I. Asessing the economic impact.

8. Asthma and Allergy Foundation of America. State Costs at a Glance-1998. Available: http://www.aafa.org/display.cfm?id=6&sub=63&cont=142.

9. Kruse L, Deshpande S, Vezina, M (December 2007) , Disparities in Asthma Hospitalization among Children Seen in the Emergency Department. Journal of Asthma, 44:10, 833-837.

For additional information on the New Jersey Asthma Plan:

New Jersey Department of Health and Senior Services
Division of Family Health Services
Asthma Awareness and Education Program
50 East State Street, P.O. Box 364
Trenton, New Jersey 08625-0364
Phone: 609-984-6137
www.state.nj.us/health/fhs/asthma/index.shtml

C1454