

2009 Louisiana State Plan to Address the Burden of Asthma

**Louisiana Department of Health and Hospitals
Bureau of Primary Care and Rural Health
Chronic Disease Prevention and Control Unit
Asthma Management and Prevention Program**





State of Louisiana

Department of Health and Hospitals

March 1, 2009

Dear Louisiana Residents:

I am pleased to submit the Louisiana State Plan to Address the Burden of Asthma. Asthma is a serious chronic disease of the airways that makes breathing difficult. Although asthma is not curable, with proper disease management by the patient and healthcare professional, the disease can be controlled. If the disease is controlled properly, asthmatics can live a normal life with little or no restriction of activity.

According to the Centers for Disease Control and Prevention asthma:

- Accounts for more than 14 million days of school and work missed annually
- Is the third cause of hospitalization among children younger than 15 years of age
- Has caused an increase in deaths nationally
- Has had a significant impact on the cost of health care nationally and statewide

The Louisiana Department of Health and Hospitals' (DHH) Bureau of Primary Care and Rural Health – Chronic Disease Prevention and Control Unit recognizes the need for focusing on best practices that will improve coordination between primary and emergency care through policy initiatives. These initiatives are driven by the utilization of surveillance data and are essential to improving self management of asthma.

DHH is working with stakeholders to reduce socioeconomic health inequities among children and adults suffering from asthma. By collaborating with stakeholders and internal and external partners; DHH will reduce the burden of asthma statewide through the goals, objectives and strategies outlined in the state plan.

Sincerely,

Jimmy Guidry, MD
State Health Officer & Medical Director

Acknowledgements

Tasha Bergeron, RN-Louisiana Office of Public Health Chronic Disease Nurse Consultant

Sandy Blake, PhD, Director-University of Louisiana Monroe Office of Outcomes Research & Evaluation

Brandi Bourgeois, MPH, Epidemiologist-Louisiana Tobacco Control Program

Collette Stewart-Briley, MSPH, Environmental Health Science Manager-Louisiana Office of Public Health Section of Environmental Epidemiology and Toxicology

Sharon B. Buchert, Governor's Office on Elderly Affairs

Angela K. Daniel, MSSW, Program Manager Service-Learning Policy, Planning, & Evaluation-Louisiana Office of Public Health

Dr. Edward Davis, Allergist-Ochsner Health Center New Orleans

Melissa Dear, RhP, AE-C, Director of Prior Authorization-University of Louisiana Monroe

Ashley Dulle BS, RRT, AE-C, Respiratory Therapy Program Director-Bossier Parish Community College School of Allied Health Professions Louisiana State University Health Sciences Center

Linda Guedry, RN, President-Louisiana School Nurses Organization, Ascension Parish School Nurse

Dr. Jane El-Dahr, Professor of Clinical Pediatrics and Clinical Professor of Medicine-Tulane University Medical Center

Thomas P. Lotz, RRT, Med, Chief Executive Officer, American Lung Association of Louisiana

Pamela Malveaux, Louisiana DHH Region II Coordinator, Louisiana Campaign for Tobacco-Free Living

Jennifer Mouton, Air Quality Assessment Division-Louisiana Department of Environmental Quality

Natasha McCoy, MPH, Program Manager-Louisiana Diabetes Program

Tiffany Netters, MPA, Program Manager-Louisiana Tobacco Control Program

Henry Nuss, Ph.D., Assistant Professor-LSU Health Sciences Center School of Public Health

Audrey Pugh, Program Manager, Public Policy and Evaluations-Louisiana Office of Public Health

Dr. Maxcie Sikora, Allergist-Ochsner Health Center of New Orleans

Dianne Smith, System Administrator-Pointe Coupee Better Access Community Health

Jennifer Stenhouse-Center for Planning Excellence

Alma Charles Stewart, Tobacco Health Disparities Consultant, Louisiana Tobacco Control Program-A. Charles Stewart Consultants

Chrishelle Harris-Stipe, MPH, Director of Programs-American Lung Association

Todd Griffin, MSPH, Behavioral Risk Factor Surveillance System Coordinator-Bureau of Primary Care and Rural Health

Bennett Hilley, Associate Planner and Research-Center for Planning Excellence

Dr. Kristy Isaac BS, AE-C, Assistant Professor of Clinical Pharmacy-Xavier University College of Pharmacy Division of Clinical and Administrative Sciences

Leonard Jack, Jr, PhD, MSc, Director, Center for Minority Health & Health Disparities Research and Education, College of Pharmacy-Xavier University of Louisiana

Roxanne Jewell RRT, AE-C, Cardiopulmonary Manager-Pointe Coupee General Hospital

Raegan Jones, Education Program Consultant Safe and Healthy Schools Section-Louisiana Department of Education

Dr. Gina P. Lagarde, Louisiana Child Health Medical Director-Louisiana Office of Public Health

Gail Kelso-Louisiana Department of Social Services, Division of Child Care and Early Childhood Education, Quality Improvement Unit

Tara Titone, ASLA, LEED A.P. Community Planner/ Project Manager-Center for Planning Excellence

Michael Vince, MPA, Administrator Air Quality Assessment Division-Louisiana Department of Environmental Quality

Dr. Ann Vockroth, Allergy & Immunology, Internal Medicine-Ochsner Health Center of New Orleans

Doug Wafer, Air Quality Assessment Division-Louisiana Department of Environmental Quality

Kahree Wahid, Program Project Coordinator, Louisiana Head Start-Louisiana Department of Social Services

Claudia Washington, Program Monitor-LDHH Office of Public Health, Adolescent School Health Program

Catherine Wattigny RN, BA, State Director-Louisiana School Nurses Organization

Melanie Wearing, MSPH Environmental Health Scientist Coordinator-LDHH Office of Public Health, Section of Environmental Epidemiology and Toxicology

Eman Williams, MSPH Environmental Health Scientist Coordinator-LDHH Office of Public Health, Section on Environmental Epidemiology and Toxicology

Table of Contents

Executive Summary	3
Asthma in Louisiana	
Mission and Vision of the Louisiana Asthma Program.....	4
Current State of Asthma in Louisiana.....	5
Factors in Louisiana that Impact Asthma.....	7
Asthma State Plan	
Development of the State Asthma Plan.....	10
The Louisiana Asthma Surveillance Collaborative.....	11
Healthy People 2010: Louisiana’s Focus on Asthma.....	12
Louisiana State Plan Goals.....	12
Implementation and Evaluation.....	13
Goals of Louisiana’s Asthma Strategic Plan	
Goal 1: Community Outreach.....	14
Goal 2: Health Care Education.....	18
Goal 3: Advocacy and Policy.....	21
Goal 4: Data & Surveillance.....	24
Goal 5: Asthma-Related Health Inequities/Disparities.....	27
Goal 6: Comprehensive Evaluation Plan.....	30
Summary	32
Logic Model	33
Special Acknowledgements	34

Executive Summary

What is Asthma?

Asthma is a chronic disease of the airways that makes breathing difficult. With asthma, there is inflammation of the air passages that result in a temporary narrowing of the airways that carry oxygen to the lungs. This results in asthma symptoms, including coughing, wheezing, shortness of breath and chest tightness.

Currently there is no cure for asthma, but with proper treatment the chronic illness can be controlled, leading to asthmatics living normal active lives. Asthma is a very serious disease that has been known to cause death to some of those diagnosed with the disease. With proper asthma treatment and management, problems associated with asthma can be controlled. If the condition is not well controlled, the patient can experience an inactive lifestyle, multiple visits to the emergency room, and a significant number of missed days of school and work. The best way to properly manage asthma is to follow an asthma action plan (also called a management plan), which is a written plan that is developed with a doctor to help control asthma.

A History of Louisiana's Effort

Monitoring the health status of a population is an essential step in evaluating the effectiveness of various health programs and in developing programmatic policy for the future. In September 2005, the Louisiana Department of Health and Hospitals (DHH) were awarded a \$50,000 planning grant for asthma from the United States Environmental Protection Agency (EPA). The planning grant's focus was to provide the state with the necessary resources to define and develop a surveillance system that would track asthma complications among children in East Baton Rouge Parish.

Due to the aftermath of Hurricane Katrina in August 2005, DHH requested a one year no-cost extension. The overall goals of the grant were to:

- Establish a statewide surveillance system for asthma
- Create an organized statewide working group to develop and publish a detailed report on the burden of asthma in Louisiana
- Use information gathered to educate the community about proven methods of care and reduce hospital emergency room use
- Establish a piloted surveillance system to evaluate childhood asthma complications

By using two parishes as pilots, Louisiana's first surveillance system for children living with asthma was developed. Both East Baton Rouge and Pointe Coupee parishes served as examples of what is needed to determine the necessary components of a true asthma surveillance

system. With East Baton Rouge Parish serving as an urban environment and Pointe Coupee Parish as a rural environment, the surveillance system provided contrasting views of how children with asthma are possibly affected by different environmental conditions. As a part of the surveillance system, the Louisiana Department of Environmental Quality (LDEQ) provided data on ozone and particulates from April 2006, through March 2007. In addition, two Baton Rouge hospital emergency room departments provided data for the same duration of time. Pointe Coupee Parish also agreed to provide data from the parish's hospital emergency room departments, Federally Qualified Health Centers and the parish's urgent care weekend clinic.

As a compliment to the patient and environmental data provided, the Louisiana Department of Health and Hospitals' Office of Public Health's Section of Environmental Epidemiology and Toxicology (SEET) implemented an initiative to assess indoor air quality in two high schools in the targeted urban and rural parishes. At the request of SEET, an Indoor Air Quality Specialist (IAQ) conducted daily walk-through assessments of the environments at each school, documenting deficiencies or particulates found. SEET then provided the data report to each school's administration, faculty and staff.

The intent of this process was to guide the development of a statewide surveillance system and provide insight for the state's need to collect data on behalf of Louisianians living with asthma and asthma management and prevention stakeholders. The statewide asthma working group, or the Louisiana Asthma Surveillance Collaborative (LASC), was then convened to assist with the analysis of the data collected, the development of the pilot surveillance system into a statewide project and the creation of a strategic plan on asthma in Louisiana.

Using data collected in the asthma pilot surveillance system, LASC continued to develop a strategic plan that would address the state's needs in the following priority areas:

- Asthma Health Care Education
- Advocacy and Policy
- Community Outreach
- Data & Surveillance
- Asthma-Related Health Inequities

Mission Statement:

The Louisiana Asthma Management and Prevention Program is committed to enhancing the quality of life of asthmatics by providing effective asthma management education to patients, their families, and Louisiana communities impacted by this chronic disease.

Vision Statement:

To reduce the incidence of asthma in Louisiana through effective asthma outreach and education.

Asthma in Louisiana

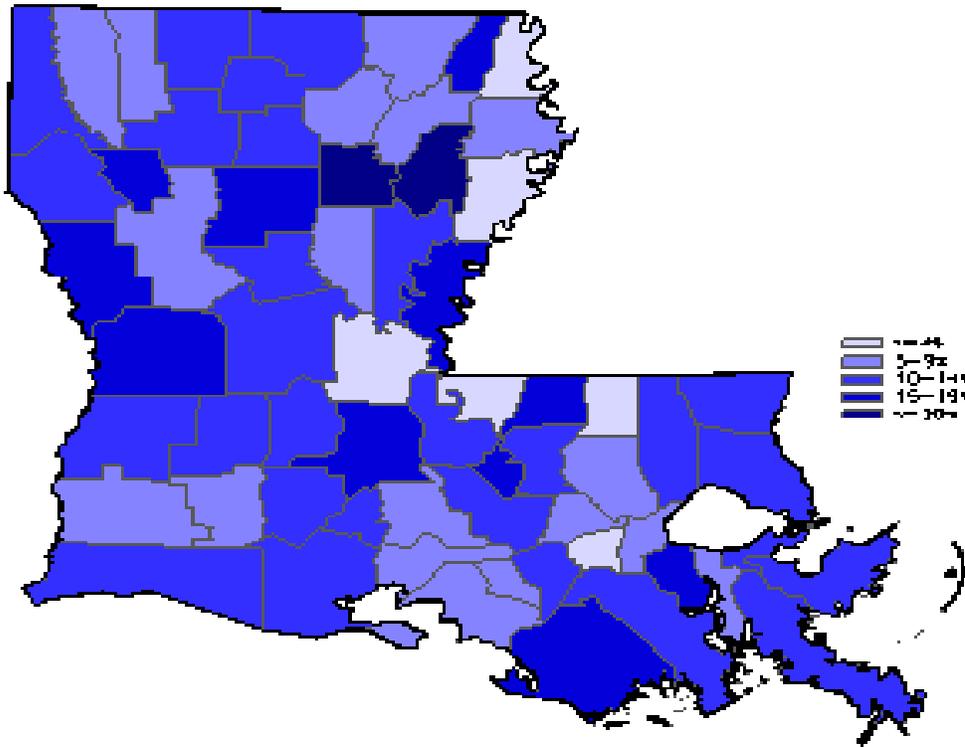
An estimated 200,000 adult Louisianians, 18 years of age and older, currently suffer with asthma (6.3% statewide vs. 8.4% nationally) and asthma is the most common chronic disease in Louisiana children. Results from data collected in the current state surveillance indicate that one in ten (10.7%) Louisiana households with children had at least one child who was asthmatic.¹

In Louisiana, asthma patients over the age of 55 have an increased risk of mortality (7.9/100,000) than the same age group nationwide (6.8/100,000), with women having a far higher mortality rate (9.0/100,000) than women in this same age group nationwide (7.9/100,000). Louisiana men in the same age group also faced higher rates of asthma mortality (6.3/100,000) than men nationwide (5.3/100,000).²

Section 1: The Current State of Asthma in Louisiana

In 2006, the Behavioral Risk Factor Surveillance System (BRFSS) estimated that Louisiana residents who were diagnosed with asthma by a healthcare provider was 10.7%, however, of those Louisiana residents diagnosed with asthma in 2006, only 5.8% responded that they currently have asthma symptoms. Data from the 2006 BRFSS also indicated that Louisiana females had a higher prevalence for asthma than males, and that Louisianians who fell under a low socioeconomic status also tended to have higher prevalence rates for asthma. The highest prevalence rates were among those that had incomes lower than \$25,000, had less than a high school education, and were uninsured or underinsured. The 2006 BRFSS showed a 2.8% increase over the 2005 BRFSS in the number of Louisianians reporting they had ever been diagnosed with asthma. Only an increase of less than 1% reported that they currently had asthma, when compared to the 2005 BRFSS.

Figure 1: Asthma Prevalence by Parish for LA residence 18 years and older, 2004-2006**



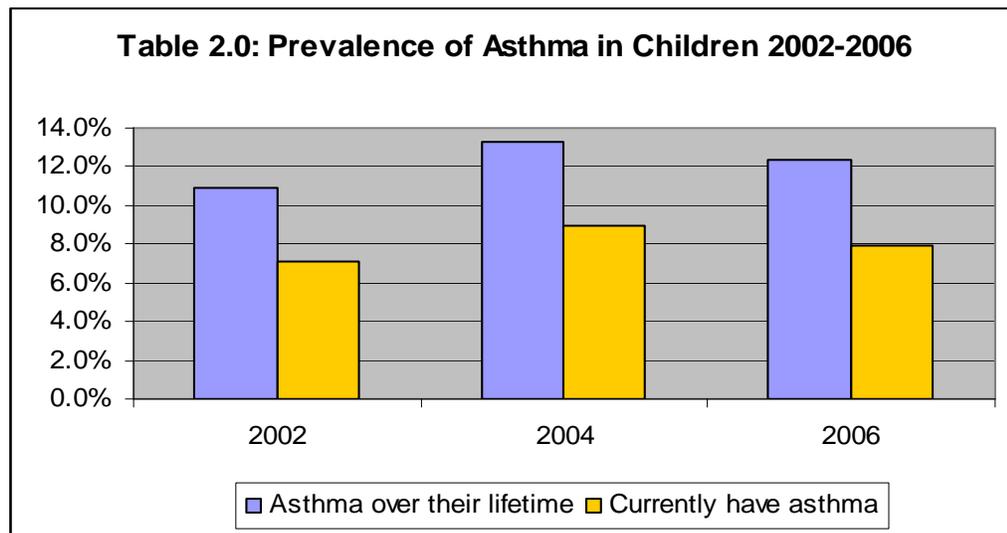
Asthma Prevalence in Ages 1 - 18 Year Olds

In an effort to measure the prevalence of asthma among Louisiana children under the age of 18, a new module was added to the 2002 BRFSS. The *“Optional Childhood Asthma Module”* asked if there were children with asthma in the home of the respondent. Survey participants who indicated that children were living in their homes were subsequently asked if one or more of the children had ever had asthma, and if the child/children currently had asthma. Analysis revealed that approximately 43.1% of homes surveyed had children, and 10.7% of those children had asthma.

Houses in which the survey respondents were Caucasian had the lowest prevalence of children with asthma. At 8.4%, Caucasian households were in stark contrast to all other racial groups surveyed. The prevalence of childhood asthma was 13.5% among African American households, 16.2% in Hispanic households, and 17.5% for households in which the respondent chose

“other” as their racial group. Households with an annual income of less than \$15,000 per year had the highest prevalence of childhood asthma (21.3%). In comparison, houses with an income of \$50,000 or more per year had a prevalence of 8.1% for children in the house with asthma. Houses in which the survey participant was unemployed also had a high prevalence of childhood asthma at 21.8%. In homes where the respondent was retired, the prevalence was 18.4%, while in homes where the respondent was employed, it was 6.4%.⁶

BRFSS data shows that there was a fluctuation between children with asthma over their lifetime, and children who currently had asthma between the years 2002 through 2006. Table 2.0 illustrates a trend of the prevalence of children with asthma from the BRFSS over a three year period.



Section 2: Factors in Louisiana that Impact Asthma

Tobacco Use

Table 3.0 shows the correlation between cigarette use and asthma. The respondents were current and non-current asthmatics who either smoked or had been exposed to tobacco smoke in 2002. Tobacco is one of the top five triggers of asthma symptoms.

Table 3.0

The Association Between Smoking and Current Asthma		
Characteristics	Current Asthmatics	Not Current Asthmatics
1. Current Tobacco Use (excluding smokeless)	30.7%	22.8%
2. In the same room with someone who was smoking (at least one day in the last week)	68.7%	59.3%
3. In the car with someone who was smoking (at least 1 day in the last week)	54.7%	40.9%
4. Live with someone who smokes	57.8%	47.0%
5. At least one close friend smokes	39.3%	33.7%

Source: 2002 BRFSS, LA DHH Chronic Disease Epidemiology Unit,
⁶ 2006 Louisiana Health Report Card, LA DHH Chronic Disease Epidemiology Unit

Louisiana Climate

The asthma death rate in Orleans Parish is significantly higher than rates for the rest of Louisiana and the United States. Coupled with the hot, humid climate in New Orleans and the large number of old, musty homes with dust mites and mold, a high concentration of major asthma triggers exists in the city. South Louisiana has a hot, humid climate during summer months, from June through September. The hot, humid summer months can adversely impact asthmatics if they are not properly educated on the precautions they should take.

Ozone and Air Quality

According to the Louisiana Department of Environmental Quality’s (LDEQ) Air Quality Assessment Division, ozone can penetrate the lungs which can:

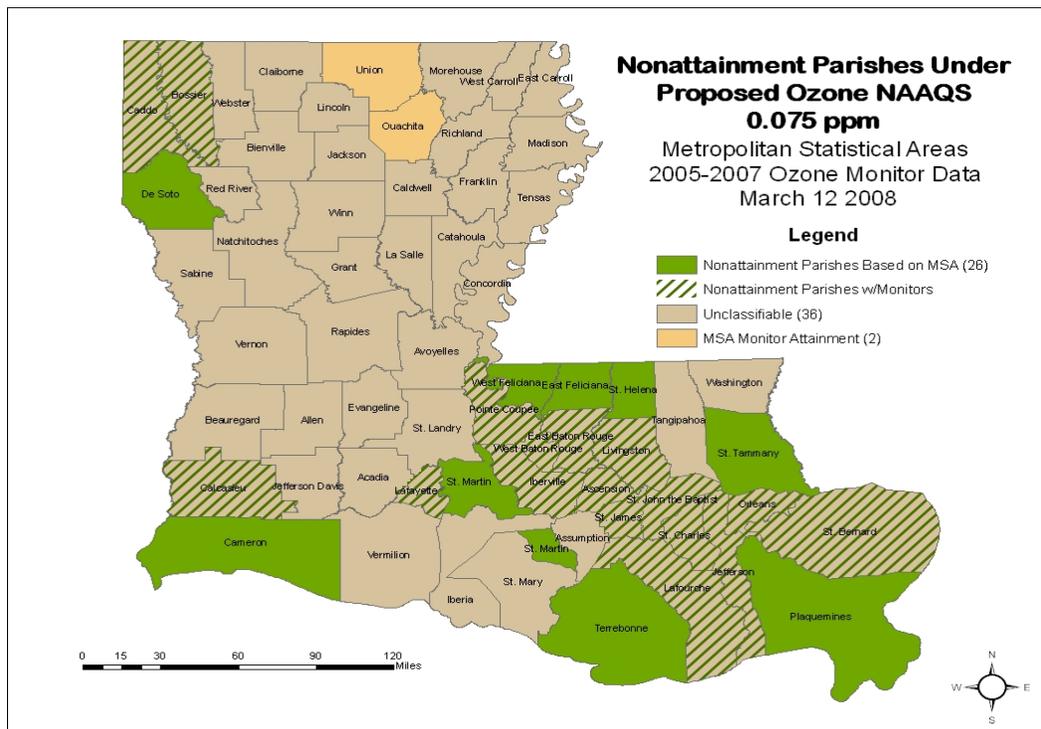
- Make it more difficult for people working or playing outside to breathe as deeply and vigorously as normal

- Irritate the airways resulting in coughing, sore or scratchy throat, pain when taking a deep breath and shortness of breath
- Increase asthma attacks and use of asthma medications
- Inflammate and damage the lining of the lungs by injuring the cells that line the air spaces in the lungs
- Increase susceptibility to respiratory infection
- Aggravate chronic lung diseases such as asthma, emphysema, and bronchitis

New ozone standards administered by the EPA and monitored by the LDEQ, estimates that a standard of 0.075 ppm (parts per million) would prevent many health complications, including those associated with asthma, chronic bronchitis, upper and lower respiratory systems, as well as frequent visits to hospital emergency rooms and missed days of school or work.

Per the new standards, LDEQ identified 26 parishes that may be designated as “Non-Attainment Parishes,” which means their monitor readings were above the standard of 0.075. Ozone readings above the standard of 0.075 ppm put individuals with lung disease, as well as children, older adults, and people exposed to the outdoors at a higher risk for health complications.

Figure 2: Parish ozone levels based on revised EPA standards.



State Asthma Plan Section:

Development of the Louisiana State Asthma Plan

The Chronic Disease Prevention and Control Unit hosted a strategic planning meeting January 30 and 31, 2007, at the West Baton Rouge Conference Center in Port Allen, Louisiana. To assist in the development of strategic plans for each program area, facilitated break-out sessions were held for the Louisiana Tobacco Control Program, Heart Disease and Stroke Prevention Program, Diabetes Prevention and Control Program, and the Asthma Management and Prevention Program. Feedback from these sessions was used to lead future programmatic initiatives and form the comprehensive strategic plan for the entire chronic disease unit. The two-day strategic planning session was an opportunity for DHH staff, partners and stakeholders to develop goals and objectives to guide the work of the programs for the next five years.

Following the strategic planning meeting, the Louisiana Asthma Management and Prevention Program (LAMP) continued working with the newly formed Childhood Asthma Surveillance Collaborative (CASC) to accomplish the goals and objectives of the aforementioned EPA grant

including: establishing a pilot surveillance system; establishing and sustaining the program as Louisiana's statewide working group on asthma; and moving forward to develop the asthma state plan.

Following completion of the EPA grant, the CASC became more formalized and elected to change the name of the stakeholders group to the Louisiana Asthma Surveillance Collaborative (LASC) with the group changing its focus to adults and children. The LASC established four workgroups to meet monthly between quarterly meetings of the LASC in an effort to assist in developing the strategies of the four priority areas. The LASC and its workgroups consisted of healthcare providers, certified asthma educators, respiratory therapists, registered nurses, health educators, environmental specialists, epidemiologists, state agency representatives, a Louisiana Public Health Institute representative, tobacco prevention and control program administrators and stakeholders, chronic disease program administrators, parent organizations, Louisiana Bureau of Health Services Financing (Medicaid), and advocacy and policy coordinators.

**Louisiana Asthma Surveillance Collaborative
Mission Statement:**

To establish a statewide collaborative that develops and implements strategies to reduce the health and economic consequences caused by asthma through evidence-based, data driven best practices.

During the state plan development process, LASC quarterly meetings provided an opportunity for members to gain insight from other states; respond to updates provided by the workgroup lead and members; review data to guide the strategic planning process; and assist the state asthma program in making a connection with health care societies to receive input on the objectives and strategies in the state plan. The LASC engaged asthma program managers and epidemiologists from other states, as well as other state's coalitions to receive technical assistance in finalizing the state plan for Louisiana. Without a funding source, Louisiana tapped every available human resource available via teleconferences, monthly and quarterly meetings and individual meetings for pertinent statewide healthcare and environmental advocates. As a result of the inclusive planning process, LAMP, the LASC and the Louisiana American Lung Association completed the *2009 Louisiana State Plan to Address the Burden of Asthma (Asthma State Plan)*. In December 2008, the plan was submitted to the Louisiana State Medical Director, Bureau of Primary Care and Rural Health Director, and the Chronic Disease Prevention and Control Unit Director for their input and final approval.

The marketing and dissemination plan will be implemented via collaboration between statewide networks, state health department interagency programs and external partnerships developed through the state's planning process.

Healthy People 2010: Louisiana will focus on the following Healthy People Objectives for Asthma:

- Reducing hospitalizations for asthma
- Reducing school and work days missed by persons with asthma due to asthma
- Increasing the proportion of persons with asthma who receive formal patient education, including information about community and self-help resources as an essential part of the management of their condition

Louisiana Asthma Program Goals:

Goal 1: The Louisiana Department of Health and Hospitals will develop a comprehensive asthma program which will include targeting community outreach.

Goal 2: Increase asthma education to healthcare providers, clinicians, health educators and support staff.

Goal 3: Improve the environment and quality of life for asthmatics through advocacy and policy.

Goal 4: Develop a comprehensive system of data surveillance (including contributing factors) in order to better explain the burden of asthma.

Goal 5: Identify and eliminate health inequities related to asthma in Louisiana.

Goal 6: Develop a comprehensive evaluation plan to measure the effectiveness of the goals and strategies in the Asthma State Plan.

Implementation Plan

The LAMP and the LASC stakeholders identified their next major step as developing an implementation plan that will be revisited quarterly and evaluated on an annual basis. This ongoing collaboration will provide a platform for all stakeholders to establish their roles in the implementation plan, which will ensure the following:

- The state's objectives and strategies will be accomplished.
- The statewide data and surveillance system will be enhanced.

- Technical assistance will be available to the state health department.
- Improve the delivery of care for asthmatics through effective and efficient health education.
- Provide community outreach, advocacy and policy, and prioritize efforts related to eliminating health disparities through the strategic activities outlined in the Asthma State Plan.

Evaluation Plan

Evaluation is an important and integral component of the Asthma Management and Prevention Program. The LASC work groups will adopt CDC's *"Framework for Program Evaluation in Public Health"* (MMWR, September 17, 1999, Vol. 48 No. RR-11) to provide a structured basis for an effective evaluation plan for the Asthma State Plan. Based on this article, effective program evaluation is a systematic way to improve and account for public health actions by involving procedures that are useful, feasible, ethical and accurate. The framework is composed of six steps that must be taken in any evaluation. The steps are as follows:

- Step 1: Engage stakeholders.
- Step 2: Describe the program.
- Step 3: Focus the evaluation design.
- Step 4: Gather credible evidence.
- Step 5: Justify conclusions.
- Step 6: Ensure use and share lessons learned.

The LASC will oversee the evaluation of the Asthma State Plan by meeting quarterly to discuss data issues, initiatives and activities of the work groups and to review and discuss the progress of the plan.

Community Outreach

Goal 1: Louisiana Department of Health and Hospitals will develop a comprehensive asthma program which will include targeting community outreach.

Short Term (2009-2010):

Objectives

- 2.1** Increase the number of Medicaid/LaCHIP patients receiving formal patient education.
- 2.2** Increase the number of persons receiving education related to asthma and environmental factors that impact asthma.
- 2.3** Increase awareness of the efforts of the Louisiana Asthma Management and Prevention Program.

Strategies

- 1) Establish regional coalitions to address asthma-related health concerns of communities and to increase the knowledge of asthma.
- 2) Promote the University of Louisiana at Monroe's asthma help line to Medicaid and LaCHIP recipients and provide funding awarded to applicants to develop regional asthma coalitions.
- 3) Conduct planning meetings with the LASC work groups, regional coordinators, and stakeholders at the local level to develop regional action plans.
- 4) Implement regional action plans to reach communities with the highest prevalence of asthma and those not previously reached.
- 5) Develop a toolkit for schools to use with "Partner with the American Lung Association of Louisiana" and to support the "Breathe Well and Live Well" adult asthma management program.
- 6) Participate in at least four regional and/or statewide outreach events per calendar year.
- 7) Conduct pre and post assessment surveys at outreach events to determine their effectiveness.

- 8) Create and communicate audience specific asthma awareness and treatment messages.

Intermediate (2011-2013):

Objectives

- 2.4** Increase the number of school districts that receive education related to asthma management and prevention.
- 2.5** Increase public awareness of asthma, advocate for policy changes and improve awareness of asthma management.
- 2.6** Decrease the number of students with asthma that lack an active life due to complications with asthma.
- 2.7** Increase self-management of asthma among adults and children.

Strategies

- ✓ Work with Louisiana School Board Association to promote asthma related wellness and health programs to parents, caregivers and schools.
- ✓ Work with Louisiana school-based health centers to promote asthma education to school administrators, faculty and staff.
- ✓ Educate Louisiana Head Start, school administrators, staff, and caregivers about asthma triggers, indoor air quality and symptoms of asthma.
- ✓ Provide education to childcare health consultants and safety coordinators.
- ✓ Provide education to physical education teachers through collaboration with the Louisiana Association for Health, Physical Education, Recreation and Dance; the annual conference of the Louisiana Governor's Council on Physical Fitness and Sports; and the Regional Tour De Fitness event.
- ✓ Provide schools with information regarding the benefits of CDC's *"Six Strategies for Asthma –Friendly Schools."*
- ✓ Inform key stakeholders on current ratio of student to schools nurses in Louisiana.

- ✓ Develop brochures, Web site postings, Public Service Announcements and the “Tools for Schools Initiative - HealthySEAT.”
- ✓ Utilize social media to inform caregivers and patients about asthma control.
- ✓ Provide schools with information related to the Air Quality Index and Ozone Action Alert Days.
- ✓ Promote the use of asthma action plans through the regional asthma coalitions.
- ✓ Diversify collaborative participation via identifying new stakeholders to participate in the group.
- ✓ Implement a recruitment process for the Asthma Collaborative members to identify potential asthma/chronic respiratory stakeholders.
- ✓ Implement CDC’s *Six Strategies for Asthma-Friendly Schools* by providing:
 - Management and support systems for asthma-friendly schools
 - Appropriate school health and mental health services for students with asthma
 - Asthma education and awareness programs for students and school staff
 - A safe and healthy school environment to reduce asthma triggers
 - Safe, enjoyable physical education and activity opportunities for students with asthma
- ✓ Develop talking points to educate key community leaders about challenges to providing asthma care in schools, including but not limited to recommended ratio of school nurses to students.
- ✓ Provide Louisiana residents with resources on how to improve indoor air quality in the home, school, and work environment.
- ✓ Conduct training of asthma specialists to increase awareness and educate school districts and communities on the benefits of CDC’s “*Tools for School Program.*”

Long Term (2013-2014):

Objective

2.8 Decrease missed school days due to asthma.

Strategies

- ✓ Implement the Tools for Schools Program annually in childcare centers and public schools with high prevalence per region.
- ✓ Work with childcare health consultants to assess and analyze the burden of asthma among children enrolled in schools per targeted region.
- ✓ Continue training of asthma specialists to increase awareness and educate school districts and communities on the benefits of CDC's "*Tools for School Program.*"

Healthcare Education

Goal 2: Increase asthma education to healthcare providers, clinicians, health educators and support staff.

Short Term (2009-2010):

Objectives

1.1 Provide educational opportunities to 50 providers to increase their knowledge of the updated NAEPP (what does NAEPP stand for, please include) guidelines.

1.2 Increase capacity to provide adequate asthma education to patients.

Strategies

- ✓ Target healthcare providers through the Louisiana Rural Health Association and Louisiana Primary Care Association's quarterly and annual events.
- ✓ Provide educational opportunities to providers practicing in Louisiana's critical access and rural hospitals statewide.
- ✓ Develop and distribute relevant asthma educational materials and toolkits to implement the NAEPP (if you spelled out NAEPP in preceding section, the abbrev. here is ok) guidelines.
- ✓ Partner with the Louisiana Tobacco Control Program to develop (to develop or provide?) educational messaging for schools.
- ✓ Offer educational opportunities to all school nurses, providers and staff of Louisiana's School-Based Health Centers.
- ✓ Partner with healthcare providers through the Louisiana Academy of Allergy and Immunology.
- ✓ Target pediatricians through the Louisiana Chapter of the Academy of Pediatrics' quarterly and annual events.

- ✓ Provide training and ongoing technical assistance by certified asthma educators.
- ✓ Develop an inventory of currently used and available asthma educational materials to reach patients and providers.
- ✓ Develop materials for schools regarding the dangers of second-hand smoke.

Intermediate (2011-2013):

Objectives

1.3 Increase the number of completed Asthma Action Plans administered by schools to students living with asthma.

1.4 Increase the number of Asthma Action Plans administered to adults.

1.5 Increase LAMP's capacity to implement strategies to increase formal patient education related to asthma.

Strategies

- ✓ Increase the number of certified asthma educators in Louisiana.
- ✓ Work with Louisiana school nurses to provide a modified Asthma Healthcare Plan in targeted schools at regional levels.
- ✓ Collaborate with health care societies across the state.
- ✓ Develop and promote follow-up procedures for patients presenting to hospital emergency rooms for asthma exacerbations for those admitted to stay.

Long Term (2013-2014):

Objective

1.7 Reduce Louisiana's hospitalization rate for asthma patients.

Strategy

- ✓ Implement strategies outlined in the health education and community outreach goal areas to engage Louisiana in patient-centered care.

Advocacy and Policy

Goal 3: Improve the environment and quality of life of asthmatics through advocacy and policy.

Short Term (2009-2010):

Objectives

- 3.1** Clarify and implement a statewide policy for students and parents regarding approval for students to carry quick relief inhalers and anaphylaxis.
- 3.2** Establish collaboration with the Coalition for A Tobacco-Free Louisiana (CTFLA).
- 3.3** Identify state legislators currently working as stakeholders for asthma, obesity and other diseases that decrease the activity and quality of life of children.

Strategies

- ✓ Engage key legislators.
- ✓ Have state asthma program manager serve as a member of the CTFLA.
- ✓ Partner with statewide organizations that have been identified as having similar policy goals.
- ✓ Present legislators with information on the burden of asthma in Louisiana.
- ✓ Utilize asthma surveillance data to inform and respond to policymakers.

Intermediate (2011-2013):

Objectives

- 3.4** Advocate for legislation to reimburse certified asthma educators and other health care providers who offer diabetes education to patients.
 - 3.5** Advocate for increased funding to increase the number of school nurses to the recommended standards of the National Association of School Nurses.
-

3.6 Implement legislation that promotes asthma-friendly schools by implementing a statewide indoor air quality program.

3.7 Promote policy that will establish asthma safe home environments.

3.8 Increase the number of stronger local smoke-free ordinances and policies.

3.9 Increase the number of tobacco-free healthcare facilities and schools districts.

Strategies

- ✓ Provide DHH and state leaders with the report on Louisiana’s burden of asthma including costs to the state, evaluation of the Asthma State Plan, and an analysis of the gaps in service to improve health and decrease costs to the state.
- ✓ Provide policymakers with information illustrating the positive health impact of asthma education by certified asthma educators.
- ✓ Develop talking points to provide to community leaders, local and state policy makers, health associations and other advocates regarding the benefits for developing a statewide program to improve the indoor environment of schools and low income housing.
- ✓ Develop and disseminate educational information informing local communities about the challenges facing school nurses in public schools.
- ✓ Collaborate with the Louisiana Tobacco Control Program’s regional grantees to engage local level policy makers.

Long Term (2013-2014):

Objectives

3.10 Reduce exposures to outdoor environmental triggers.

3.11 Utilize scientific data to develop effective policy interventions and evidence-based strategies that are community specific to improve the health and quality of life of asthma patients and their families.

Strategies

- ✓ Provide data to Louisiana Department of Agriculture and Forestry officials on environmental factors that impact asthmatics.
- ✓ Collaborate with the Louisiana Department of Agriculture and Forestry to determine and mitigate adverse impact of agricultural practices.
- ✓ Disseminate data on the burden of asthma to local and state policy makers and community advocates.

Data & Surveillance

Goal 4: Develop a comprehensive data surveillance system to define the statewide burden of asthma and contributing factors.

Short Term (2009-2010):

Objectives

4.1 Identify data pertaining to ozone and particulate levels, as well as BRFSS data related to asthma education.

4.2 Identify methods of collecting school asthma data in an effort to outline prevalence and school days missed due to asthma.

4.3 Enhance current data collected on child and adult prevalence, deaths due to incidence of asthma and other complications associated with asthma.

4.4 Increase data collected on asthma prevalence to include missed days of work and school, deaths, sleep disturbances and activity limitations.

4.5 Monitor data that provides surveillance statistics related to ethnic groups impacted by asthma.

4.6 Enhance current data collected on hospitalizations due to asthma.

4.7 Increase data collected and analyzed on statewide ozone and environmental particulate data.

Strategies

- ✓ Evaluate data from the following asthma indicators:
 - LDEQ ozone and particulate data
 - Behavioral Risk Factor Surveillance System (BRFSS)
 - Louisiana Hospital Inpatient Discharge Data (LAHIDD)

- Edgar School Asthma Data (What is the strategy? To utilize, to include?)
- ✓ Administer the *2009 Asthma Call Back Behavioral Risk Factor Surveillance System Survey*.
- ✓ Monitor asthma on health utilization of persons with asthma including the following pharmacology measures that identify control of asthmatics: awareness and attitudes of asthmatics towards self- management; increased knowledge of asthma; and mechanism of asthma education if received.
- ✓ Present data at conferences hosted by major statewide partners.
- ✓ Conduct a pilot on quantitative data surveys of statewide physical education teachers to assess their knowledge and awareness of asthma triggers, symptoms and methods to increase physical activity among asthmatic students.

Intermediate (2011-2013):

Objectives

- 4.8** Identify statewide data sources that will define the burden of asthma in Louisiana.
- 4.9** Conduct gap analysis of data measures to determine areas of need.
- 4.10** Identify methods of collecting hospital discharge data in real time notifications.
- 4.11** Identify methods of collecting adult incidence of asthma-related work days missed due to asthma related occurrences.
- 4.12** Expand data collection on Louisiana physical education teachers and coaches to measure knowledge and awareness of asthma triggers, symptoms, and methods to increase physical activity among asthmatic students.

Strategies

- ✓ Monitor "*Asthma Call Back Behavioral Risk Factor Surveillance System Survey*."
- ✓ Analyze and report on Medicaid claims data due to occurrences of asthma-related illnesses.

- ✓ Analyze and report on data provided by the annual *Youth Risk Behavioral Survey and Youth Tobacco Survey*.
- ✓ Analyze existing data provided in the 2008 Louisiana Burden of Asthma report and compare to CDC recommendations for data collected on asthma at the state level to identify gaps.

Long Term (2013-2014):

Objective

4.13 Build rapport with Louisiana Health Care Quality Forum and/or Louisiana Association of Health Plans to access data on all payer data base.

Strategies

- ✓ Disseminate current Burden of Asthma report and Louisiana State Asthma Plan report to stakeholders.
- ✓ Engage stakeholders from Louisiana Health Care Quality Forum in annual progress of the state health department's efforts to improve asthma in Louisiana.

Asthma-Related Health Inequities

Goal 5: Identify and eliminate health inequities related to asthma in Louisiana

Short Term (2009-2010):

Objectives

5.1 Identify specific and ethnic groups adversely impacted by asthma statewide.

5.2 Improve LAMP's ability to increase awareness of asthma in low income, underinsured, and Louisianans living in rural communities.

Strategies

- ✓ Partner with the DHH Office of Public Health Maternal and Child Health Program to develop educational campaign targeting parents, families and pregnant women.
- ✓ Establish criteria for the classification of asthma-related health inequities.
- ✓ Collect and analyze data on diverse populations and groups.
- ✓ To help further identify populations adversely impacted by asthma, utilize partners' existing survey instruments to collect data around their target groups and populations.
- ✓ Participate in the DHH Chronic Disease Prevention and Control Unit's Statewide Health Disparities Stakeholders' Meeting to assist in the integration of asthma, cancer, diabetes, heart disease, stroke, tobacco control, and obesity state programs.
- ✓ Collaborate with the Louisiana Tobacco-Related Health Disparities Statewide Coalition to target identified groups.

Intermediate (2011-2013):

Objectives

- 5.3** Increase diverse membership of the Louisiana Asthma Surveillance Collaborative.
- 5.4** Establish a partnership with key stakeholders from diverse populations to identify critical issues related to asthma-related health inequity.
- 5.5** Identify cultural, environmental and social factors that negatively impact asthmatic specific and ethnic groups in the category of health inequity disparate. Please simplify, don't understand.
- 5.6** Provide culturally sensitive education to diverse populations on asthma self-management and control.
- 5.7** Increase culturally sensitive strategies to those identified as disparate, in accordance with the qualitative and quantitative data analyzed by the LASC.

Strategies

- ✓ Build partnerships with stakeholder groups representing targeted populations.
 - ✓ Educate Louisiana Head Start, school administrators and staff about asthma triggers, indoor air quality and symptoms of asthma.
 - ✓ Conduct community forums focused on asthma that will identify barriers for persons living with asthma in Louisiana's targeted regions.
 - ✓ Recruit membership of those identified as disparate into regional asthma coalitions.
 - ✓ Partner with state programs to link to populations identified under criteria as experiencing asthma related health inequities.
 - ✓ Develop culturally sensitive materials for targeted populations.
 - ✓ Help disparate populations connect to a "medical home" in their region or community.
-

Long Term (2013-2014):

Objectives

5.8 Decrease cultural barriers related to providing appropriate asthma education.

5.9 Increase patients' ability to self-manage asthma, and empower patients with the ability to understand their rights to receive adequate asthma care, regardless of ethnic, cultural or social differences.

Strategies

- ✓ Implement all of the goals, objectives and strategies outlined in the Asthma State Plan, specific to identified specific and ethnic groups.

Evaluation

Goal Area 6: Comprehensive Evaluation Plan

Short Term (2009-2010):

Objective

6.1 Develop and submit to CDC a five-year evaluation plan to assess the progress of LAMP and LASC towards achieving the goals and objectives identified in the Asthma State Plan.

Strategies

- ✓ Establish an evaluation work group from the LASC (no more than ten members) to assist in leading the development of the LAMP evaluation plan.
- ✓ Complete the first step in CDC's *Framework for Program Evaluation* e.g. identification and engagement of appropriate stakeholders to ensure all programmatic areas and persons affected by the program are represented, defining their roles, in the development of the LAMP evaluation plan.
- ✓ Complete the second step in CDC's *Framework for Program Evaluation* by describing the LAMP program, developing the program's logic model and asking stakeholders to review the logic model.
- ✓ Complete the third step in CDC's *Framework for Program Evaluation* by focusing the evaluation design and prioritizing the evaluation questions around LAMP's stakeholder-determined evaluation focus.
- ✓ Complete the fourth step of CDC's *Framework for Program Evaluation* by gathering credible evidence (e.g. develop indicators that relate to activities and outcomes of evaluation focus, identify existing and needed data sources, determine and validate data collection methods).
- ✓ Complete the fifth step of CDC's *Framework for Program Evaluation* by justifying conclusions (e.g., appropriate analyses, quality control of data, stakeholder review of results, comparison of results to other standards, consideration of limitations and biases).

- ✓ Complete the sixth step of CDC's *Framework for Program Evaluation* by utilizing evaluation findings and sharing of lessons learned.
- ✓ Develop a plan for annually updating LAMP's evaluation plan.
- ✓ Review and finalize the evaluation plan for the LAMP and LASC
- ✓ Develop a plan for updating LAMP's evaluation plan annually, as well as reviewing and finalizing the evaluation plan for LASC?

Intermediate (2011-2013)

Objective

6.2 Implementation of the state's five year, comprehensive evaluation plan to assess progress of LAMP and LASC towards achieving goals and objectives identified in the Asthma State Plan.

Strategies

- ✓ Begin implementation of LAMP's five-year evaluation plan.
- ✓ Develop and implement a plan to communicate the successful implementation of the Asthma State Plan to LAMP's stakeholders over the program's five-year grant period.
- ✓ Convene the LASC Evaluation Workgroup to review progress of the LAMP five- year evaluation plan.
- ✓ Conduct a midyear evaluation on the progress of LAMP five-year evaluation plan including: the effectiveness of Asthma State Plan, LACS stakeholder engagement, and evaluation of the overall LAMP management process.
- ✓ Completion of a LAMP Annual Progress Report.

Long Term (2013-2014):

Objective

6.3 Complete the Asthma State Plan's five-year, comprehensive evaluation plan.

Strategy

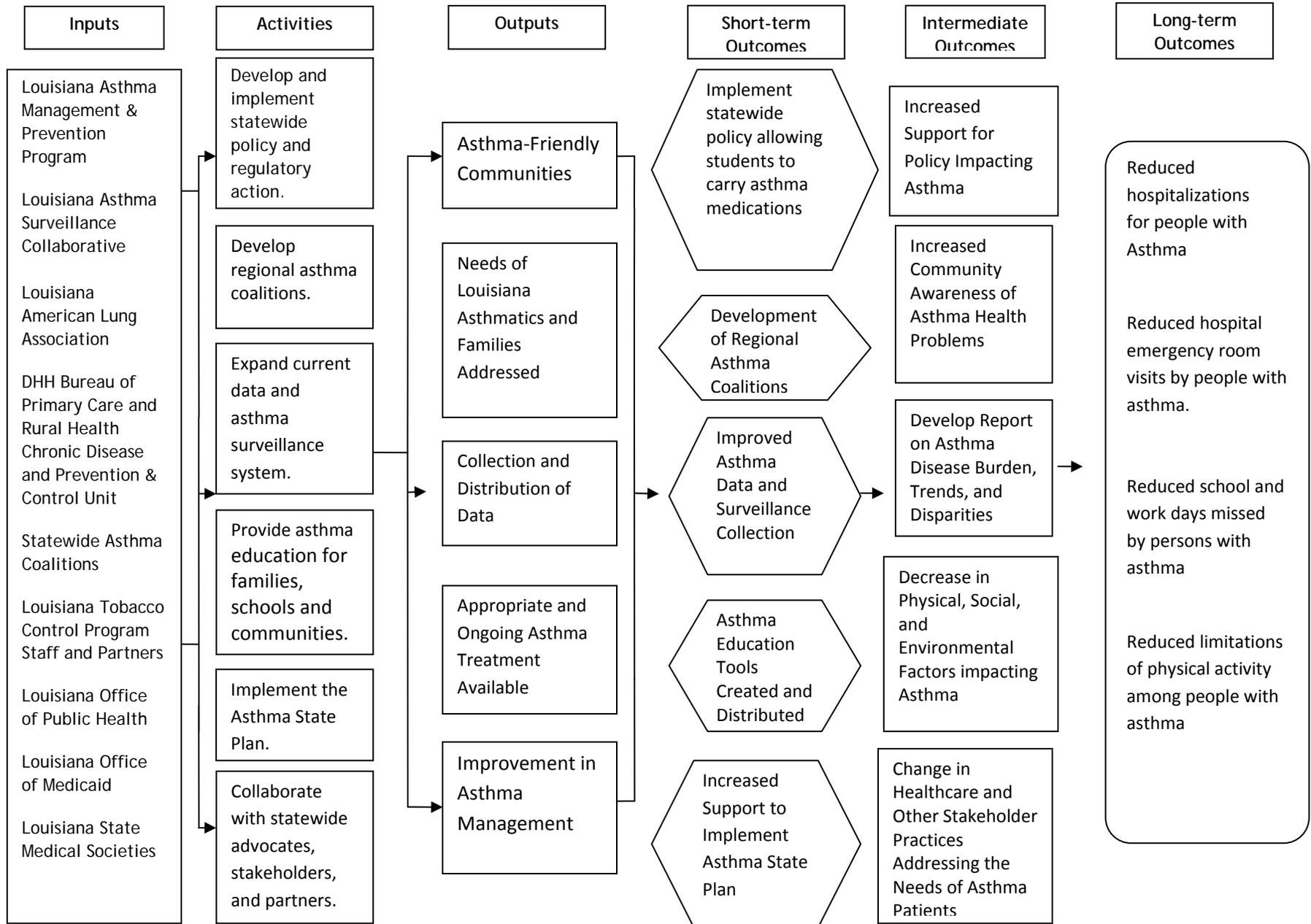
- ✓ Produce a report on LAMP's five-year evaluation plan.

Summary

In partnership with the Louisiana Asthma Surveillance Collaborative and the American Lung Association of Louisiana, the Louisiana Asthma Management and Prevention Program is committed to working with individuals, groups, communities, educational systems, stakeholders and healthcare professionals to improve the quality of life of Louisiana's asthmatics and their families. The Louisiana Asthma State Plan defines the burden of asthma and presents a comprehensive and inclusive plan that requires collaboration and commitment from Louisiana leaders, the public health sector, education, environmental and social services agencies, child care specialists, scientists and Louisiana's citizens. The plan focuses on improving the health of those affected by this chronic respiratory illness by increasing the program's capacity to educate Louisiana citizens about asthma and empower them to demand and receive the highest quality of health care.

The Louisiana Asthma Management and Prevention Program is committed to building on past successes to drive high standards of health care, decrease costs associated with poor disease management, and provide health care professionals with the necessary resources to provide health care based on best practices. In collaboration with local, state and federal partners, the state's asthma program will implement the plan to reduce the burden of asthma in Louisiana. LAMP's aim to reduce the burden of asthma will require a pledge from engaged partners to leverage fiscal and human resources and accountability in order to implement the strategies set forth in the targeted time frame.

Logic Model: Louisiana State Plan to Address the Burden of Asthma



SPECIAL ACKNOWLEDGEMENTS:

The Louisiana Department of Health and Hospitals' Bureau of Primary Care and Rural Health Chronic Disease Prevention and Control Unit would like to extend a special acknowledgement to national partners for their assistance in this effort. The Louisiana Asthma Management and Prevention Program communicated with partners from other states in order to obtain technical assistance in developing a statewide surveillance system, enhancing the Louisiana Asthma Surveillance Collaborative, and provide guidance on development and implementation of a state plan. Louisiana was fortunate to receive in-kind support from the states of Mississippi, Michigan, and Minnesota, as well as developing a partnership with an environmental expert in the Region 6 Environmental Protection Agency.

The Chronic Disease Prevention and Control Unit's Asthma Management and Prevention Program would like to extend a special acknowledgement to the following stakeholders:

Jennifer Cofer, MPH, CHES, AE-C, Executive Director, Mississippi, American Lung Association of the MidSouth

Leonard Jack, Jr, PhD, MSc, Editor-in-Chief, Health Promotion Practice, Associate Dean for Research, Director, Center for Minority Health & Health Disparities Research and Education, College of Pharmacy, Xavier University of Louisiana

Janet Keysser, Asthma Program Manager, Chronic Disease and Environmental Epidemiology Section, Minnesota Department of Health

Eugenia King, MPH, Asthma Programs Coordinator-MS, American Lung Association of the Mid South

Dr. Larry K. Lowry, The Southwest Center for Pediatric Environmental Health, Region 6, Tyler, Texas

Monica Stinson, MS, CHES, Asthma Program Coordinator, Office of Health Data & Research, Mississippi State Department of Health

Betsy Wasilevich, PhD, MPH Asthma Epidemiologist, Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology, Michigan Department of Community Health

*Updated and Written by: Mark Perry & the LASC
January 2009*