

Utah Asthma Plan



Communities Working Together
2007-2012



Utah Department of Health
Asthma Program
288 North 1460 West
P.O. Box 142106
Salt Lake City, Utah 84114-2106

www.health.utah.gov/asthma
801-538-6141

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Office of the Governor

State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

March 2007

Greetings!

It is my pleasure to recognize the hard work and dedication of the Utah Asthma Task Force as they present the newly developed *Utah Asthma Plan*. This plan which was developed by asthma experts, community organizations, government agencies, and individuals with asthma represents a vision of Utah communities working together to improve the quality of life for people with asthma.

Asthma places a heavy burden on those with the disease, as well as those who offer support. The *Utah Asthma Plan* is an urgent, coordinated call to action, challenging us to work toward a common cause. By striving to achieve the plan objectives and strategies we can reduce the public health burdens caused by asthma.

I applaud the Task Force for their efforts to develop the *Utah Asthma Plan*.

Sincerely,

A handwritten signature in black ink that reads "Jon M. Huntsman, Jr." with a stylized flourish at the end.

Jon M. Huntsman, Jr.
Governor

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Section 1: The Problem

Asthma is a chronic lung disease caused by airway inflammation that results in a reversible airflow obstruction. An asthma attack can sometimes turn deadly if medications are not readily available.

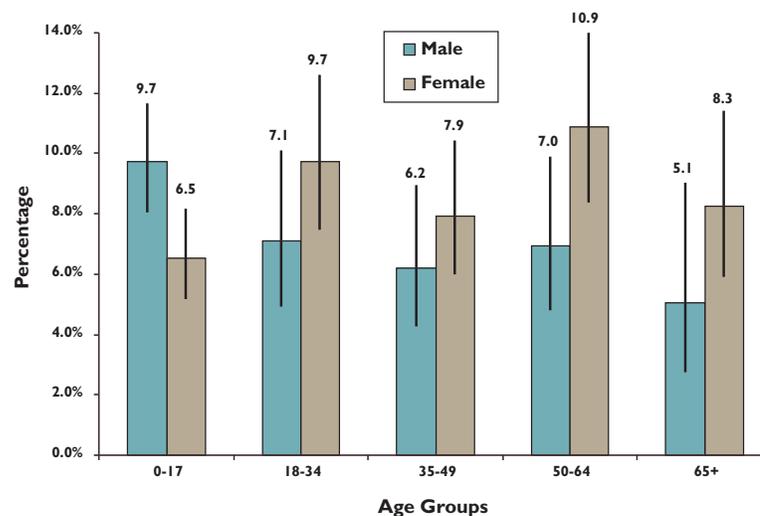
Asthma is one of the ten leading chronic conditions that restrict activity and is a leading cause of missed school days in the United States.

(Healthy People 2010)

Asthma Prevalence

In 2005, asthma prevalence among adults aged 18 and over was the same in Utah as for the United States population—7.9% (Behavioral Risk Factor Surveillance System, 2005). The prevalence for children aged 17 years and under in Utah for the same year was slightly higher at 8.2% (Utah Health Status Survey, 2005). This translates into roughly 138,700 adults 18 and over who had current doctor-diagnosed asthma in 2005 and 64,300 children under age 18 who were currently under medical care for asthma in the same year. In the adult population 65 and over, prevalence in 2005 was 8.3% for females and 5.1% for males (BRFSS).

Figure 1 – Prevalence of Asthma by Age and Sex, Utah 2005



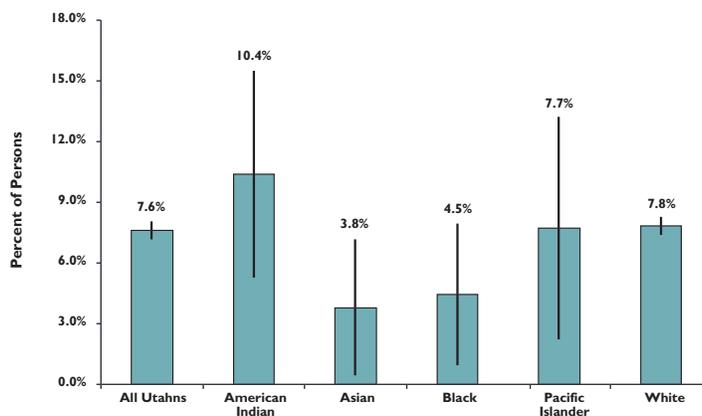
Data Sources: For 0-17, 2005 Utah Health Status Survey; 18 and over uses Behavioral Risk Factor Surveillance System

Section 1: The Problem

Certain disparities are also apparent across the state of Utah in those who suffer from asthma. Geographically, differences in prevalence occur across the 12 local health districts that cover the state—notably differing in range from Southeastern Utah local health district (10.3%) to Utah County health district (6.5%) for those 18 and over (BRFSS, 2003-2005). For those under age 18, Summit County has a prevalence rate of 11.2%, whereas Bear River District and Utah County Health Departments each have childhood prevalence of 6.8% (Utah HSS, 2003-2005).

Race and gender are two other important areas where disparities have been observed. BRFSS data show a higher prevalence of asthma among the American Indian/Native Alaskan population (10.4%) compared to the overall population rate of 7.6% across 2000-2005. The Hispanic population shows a rate of 5.1% for the same time period; however, there may be other factors affecting asthma for these populations.

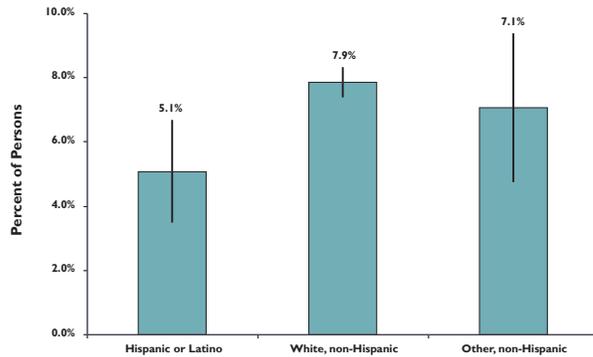
Figure 2 - Prevalence of Asthma Among Utah Adults Aged 18 and Over by Race and Ethnicity, 2000-2005



Data Source: Behavioral Risk Factor Surveillance System, 2000-2005

Section 1: The Problem

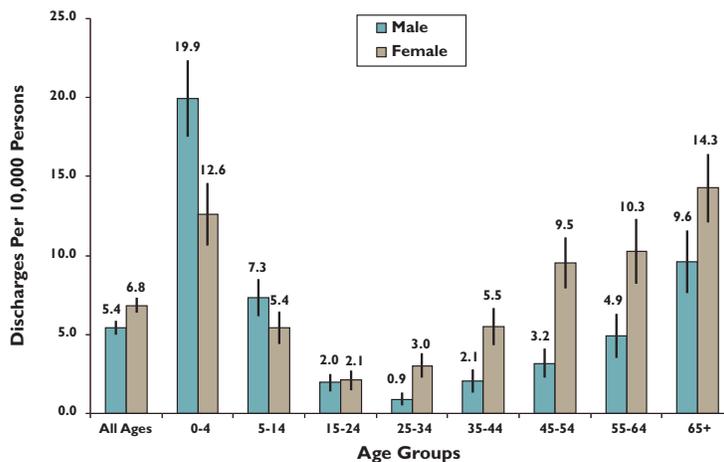
Figure 3 - Ethnicity of Utah Adults (18 and Over) Who Reported Having Asthma, 2000-2005



Data Source: Behavioral Risk Factor Surveillance System, 2000-2005

The burden of asthma on the Utah population manifests itself in many areas of people's lives. During 2005, there were 1,549 hospital discharges for persons with asthma resulting in a cost of approximately \$10.9 million. Hospital discharge rates were highest for the 0-4 years age group (19.9 for males, 12.6 for females per 10,000 persons) and next for the 65+ age group (14.3 for females, 9.6 for males per 10,000 persons).

Figure 4 – Rate of Hospital Discharges for Asthma by Age Group and Gender, Utah Residents 2005

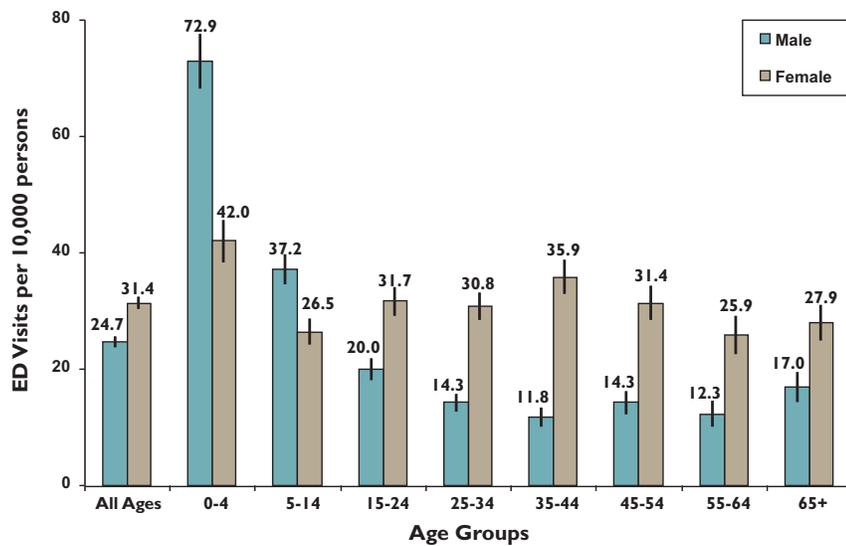


Data Source: 2005 Utah Hospital Discharge Data base, IBIS, Utah Department of Health.

Section 1: The Problem

Emergency department visits for asthma in 2005 totaled 7,084 (including those who were treated and released or admitted to the hospital) with a cost of \$12.2 million and an average cost of \$1,720 per visit. The rate of emergency department visits was highest in the 0-4 age group (males, 72.9 and females, 42.0). This indicates a need for enhancing asthma management education among parents and providers.

Figure 5 – Emergency Department Visit Rates for Asthma by Age Group and Gender, Utah Residents 2005



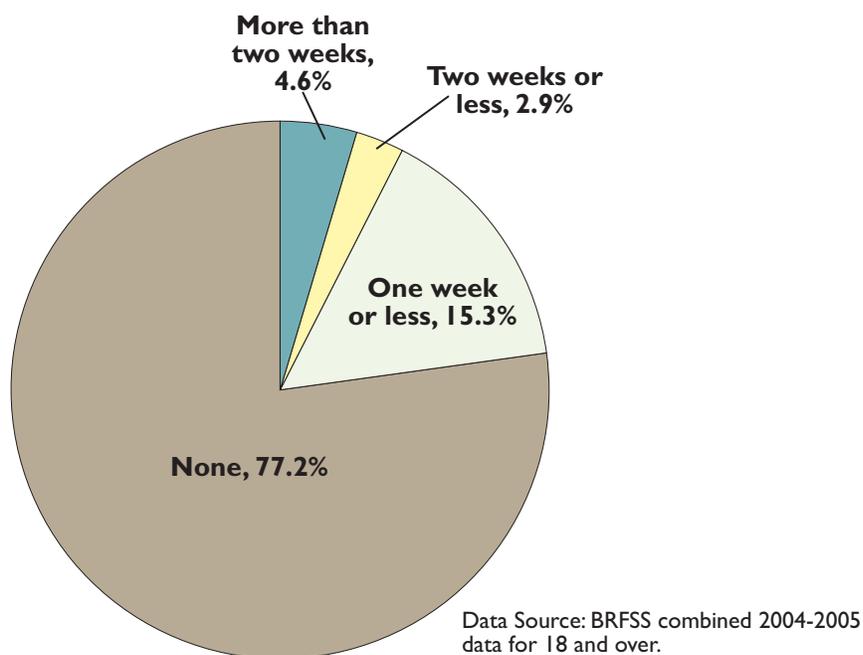
Data Sources: 2005 Utah Emergency Department Encounter Database, IBIS-PH, Utah Department of Health. Note: Rates are for all encounters (treat and release, treat and admit)

A survey of seniors included aspects of asthma management and showed that 68.3% used an inhaler, 57.8% avoided factors that affected their asthma, 29.2% used oral medications, 27.3% rested, 16.1% ate healthfully, and 6.2% reported they exercised (Utah Asthma Program Data, Health and Safety Survey, April/May 2005).

Section 1: The Problem

Finally, to fully address asthma in Utah, attention must be given directly to mitigating specific risk factors that create greater challenges for those with asthma. Environmental (indoor and outdoor), genetic (family history), societal (social, cultural, economic), and behavioral (smoking, exercise, pets, lifestyle) risk factors are all areas that can complicate asthma management. Such risk factors can lead to limitations in their daily activities compared to those who do not experience symptoms of asthma.

Figure 6 - Number of Days In the Past Year Work or Usual Activities Were Limited due to Asthma, Utah 2004-2005



Section 2: Utah Background

Recognizing the growing burden of asthma on Utah citizens, the Utah Department of Health applied for funding from the Centers for Disease Control and Prevention. The cooperative funding program was designed to allow states to develop capacity to address asthma from a public health perspective.

Utah received funding in late 2001 and created the Utah Asthma Program.

Utah Department of Health Asthma Program

Utah Asthma Program Vision

Improving lives of those with asthma.

Mission

To make sustainable connections to improve the lives of those with asthma based on the following principles:

- » Enhance and develop partnerships.
- » Conduct surveillance and evaluation of asthma.
- » Promote use of best practices.
- » Share resources.
- » Facilitate open communication.

Staff Members:

Rebecca Giles, MPH, CHES

Program Manager

Patrick Lee, MPA

Epidemiologist

Cherissa Wood

Health Specialist
American Lung Association
of Utah, Liaison

Libbey Chuy, MPH

Health Program Specialist/Grant Coordinator

Rebecca Jorgensen

Health Program Specialist

Karen Mangum

Secretary

Section 2: Utah Background

In 2002, the Utah Asthma Program and its partners began working to organize the Utah Asthma Task Force and develop The Utah Asthma Plan. In March 2002, the first meeting of the Utah Asthma Task Force was held.

When the plan was completed, the Task Force identified steps to move the plan forward. These steps included:

- » Presenting the plan to policy and decision makers for expansion of partners that are committed to assisting with implementation.
- » Contacting various organizations to explain and promote the plan.
- » Identify opportunities for collaboration.
- » Identifying resources to implement the plan, including additional funding.

Since the development of the Utah Asthma Plan, the Task Force has continued to meet quarterly to oversee progress of the plan and to prioritize activities. The action groups met monthly to plan and implement the activities.

The Utah Asthma Task Force began implementing strategies from the Utah Asthma Plan in the fall of 2003. The following are highlights of Task Force accomplishments:

Schools	Health Systems and Professionals	Communities	Environmental	Other
Provided Open Airways Trainings (54 schools and 810 students).	Wrote the Asthma module for the Utah Medical Home Portal. http://medhomeportal.org	Distributed asthma public awareness messages across the state (radio and print).	Launched EPA's Tools for Schools Program in four school districts.	Surveyed seniors 65 and older in senior centers across the state to assess knowledge and beliefs about asthma.
Trained more than 150 schools and 4,250 faculty members through the Utah School Resource Manual Training.	Conducted a health insurance asthma survey to assess gaps in services for those with asthma.	Partnered with nearly 100 asthma professionals from across the state. (Utah Asthma Task Force).	Developed and distributed Occupational Respiratory Disease packets to workers at 150 mines.	Presented at multiple conferences locally and nationally about task force projects.
Passed the Self-Administration Law, (May 2004) permitting students who have asthma to carry an inhaler at school.	Trained 12 clinics about strategies to improve asthma care (UPIQ Project).	Developed and implemented Winning With Asthma, an online training program for those involved in youth sports.	Developed and implemented air quality guidelines for schools and the community.	Held the first in the nation asthma/genomics conference including presentations on pharmacogenomics, family health history and ethical issues.
Developed and implemented general asthma action plan statewide.	Developed four provider modules for pediatric and adult asthma, medications and resources.	Translated a number of educational materials into Spanish.	Began a school-based 3 year study on how air quality affects children's health.	Provided asthma data about pharmacies, emergency departments, hospitals, prevalence, morbidity, and mortality.
Administered state-wide school survey to assess school staffs beliefs, attitudes and ideas about asthma.	Developed materials for health professionals to educate parents of children with asthma.	Provided eleven community mini-grants throughout the state.	Co-hosted the first EPA Region 8 Children's Environmental Health Conference.	Established partnership with The Center for Multicultural Health to improve programs for diverse communities.

Section 3: Asthma Plan Revision

The Revision Process

There have been many successes since the implementation of the Utah Asthma Plan three and half years ago. The Task Force has learned much about how to provide services that will have the greatest impact on Utahns with asthma. In the Spring of 2006, the Utah

Asthma Task Force determined there was a need to revisit Utah's Asthma Plan. Many of the strategies had been completed and revising the plan would provide further direction in continuing asthma efforts in Utah.

Task Force

In a Task Force meeting in July 2006, members prioritized issues and highlighted topics they determined needed to be addressed in the revised Utah Asthma Plan. In October 2006, members of the Utah Asthma Task Force convened an all-day workshop to identify areas of interest and develop objectives and strategies that will reduce hospitalizations due to asthma and the overall burden of asthma in Utah. The vision statement was also updated by the Utah Asthma Task Force and now reads:

Utah communities working together to improve the quality of life for people with asthma.

Each of the action groups met several times after the workshop to finalize each of the sections. The Task Force was presented a draft copy of the revised Utah Asthma Plan in January 2007. Members of the Task Force and other partners participated in the first review of the plan and appropriate changes were included in the plan. The final plan was presented to the Task Force in April 2007.

The remainder of this document describes the vision of the Task Force and its partners for a public health response to asthma in Utah.

Section 3: The Revision Process

Workgroups for Utah's Asthma Plan

Asthma Management:

To assist people with asthma to improve their quality of life by providing the tools and resources necessary to maximize and promote wellness.

Health Systems:

To assist the health care system in providing access to appropriate care as defined by the National Asthma Education and Prevention Program (NAEPP) Guidelines.

Population Issues:

Within population systems, provide culturally appropriate assistance for those affected by asthma so they can better manage within their social and physical environments.

Risk Factors:

Identify risk factors and promote intervention strategies to reduce those risks in Utah.

Data and Monitoring:

To assure availability of quality data to guide interventions that improve the quality of life for people with asthma.

Section 3: The Revision Process

Utah Asthma Task Force Partners and Organizations

Local Health Departments

- » Bear River
- » Davis County
- » Salt Lake Valley
- » Tooele County
- » Utah County
- » Wasatch County
- » Weber-Morgan

Hospitals

- » LDS Hospital
- » Primary Children's Medical Center
- » St. Mark's Hospital
- » Timpanogos Regional Hospital
- » University of Utah Miners Hospital
- » University of Utah Hospital

Health Plans

- » Altius
- » Children's Health Insurance Program (CHIP)
- » Molina Health Care
- » Public Employees Health Program
- » Select Health
- » University of Utah Health Plans
- » Utah Medicaid and Medicare

Additional Organizations

- » American Lung Association of Utah
- » Association for Utah Community Health

Section 3: The Revision Process

Additional Organizations - continued

- » Intermountain Pediatric Society
- » Intermountain Allergy and Asthma Clinic
- » Salt Lake Community Action Program/Head Start
- » Project Success
- » Salt Lake County Aging Services
- » Salt Lake County Housing Authority
- » Utah PTA

State Agencies and Programs

- » Utah Department of Health
 - » Utah Asthma Program
 - » Center for Multicultural Health
 - » Center for Health Data
 - » Chronic Disease Genomics Program
 - » Health Care Financing
 - » Maternal and Child Health
 - » Tobacco Prevention and Control
- » Utah Department of Environmental Quality
- » Department of Human Services, Divisions of Aging and Adult Services

Universities and Schools

- » Brigham Young University
- » Davis County School District
- » Granite School District
- » Murray School District
- » Southeastern Technology College
- » University of Utah
- » Utah State University
- » Weber School District
- » Weber State University

Section 3: The Revision Process

Cross-cutting Issues

During the planning process the Task Force determined that there were many cross-cutting issues within the strategic areas of interest. The term cross-cutting references the concept that there are issues that may appear in several if not all of the different strategic areas of interest.

The cross-cutting issues identified were:

- » Community involvement
- » Education
- » Policy development
- » Research and Emerging issues
- » Sustainability—funding and partnerships

Community Involvement

The Task Force determined that it was important to focus on individuals and their benefit from programs and projects that are developed. In order for programs to more effectively reach individuals with asthma, the Task Force will more fully engage the community in planning and carrying out educational activities.

Education

Education is the cornerstone of asthma management. The Task Force is committed to educating the public, people with asthma, caregivers, health care providers, and other professionals who provide services to individuals and families with asthma, so that they are aware of current resources to help effectively manage asthma. Education is an ongoing issue and will be addressed in each of the strategic workgroups.

Section 3: The Revision Process

Policy

Reducing the burden of many chronic diseases may be aided by policy or legislative changes. Behaviors have been changed and lives have been saved as a result of such action. Well-known examples include: Inhaler laws allowing students to carry medications at school and the enactment of the Utah Indoor Clean Air Act. Some of the most important policies affecting health are developed at the local level and in private sector organizations, such as outdoor smoking policies and school policies on inhalers.

Not all policies require legislative change. This is an ongoing issue and the Task Force will be addressing policy issues in all aspects of the Utah Asthma Plan

Research and Emerging Issues

Health care is constantly evolving with new research and discoveries. The Task Force has a responsibility to be aware of these issues and to pass new credible, reliable information to providers and to others dealing with asthma.

Sustainability

The Centers for Disease Control and Prevention has committed to assisting states with partial funding for projects identified in state plans; however, additional funding will be necessary to continue efforts to decrease the burden of asthma in Utah. It is important that the Task Force be able to form partnerships and establish funding sources to allow sustainability of its function and organization despite funding changes that may occur.

Section 4: The Plan



Utah communities working together to improve the quality of life for people with asthma.

Asthma Management
Health Systems
Population Issues
Risk Factors
Data and Monitoring

Asthma Management



I had been sick with a respiratory illness and I was having a really hard time breathing; at one point I knew that I was in trouble. I went to an urgent care facility near my home, where a doctor told me that I had asthma. He informed me that my respiratory illness triggered the attack. I had never had an asthma attack before. I was treated and prescribed asthma medications and was sent on my way. What do I do now?

--Ranae
January 2007

Section 4: The Plan - Asthma Management

Background

The term asthma management is used because treatment of asthma is much more than prescribing appropriate medications. For asthma management to be effective, it is important to assess the barriers people face in gaining control of their asthma. Barriers come in many forms and are different for everyone. For example, some people with asthma may be exposed to secondhand smoke and other triggers while others may not be taking their medications correctly. This may occur for many reasons, such as a lack of provider and patient education which could lead to emergency room visits and hospitalizations.

People with asthma can become experts in their own care. Asthma patients who learn to effectively control their asthma will experience a better quality of life.

Mission

To assist people with asthma in improving their quality of life by providing the tools and resources necessary to maximize and promote wellness.

Asthma Management

Objective 1: *To increase awareness of how asthma affects daily life activities.*

Strategies:

1. Develop, promote and distribute asthma education materials in the community to be used by people with asthma, their caregivers, and the general public.
2. Identify and recruit community partners.
3. Recruit volunteers to assist in asthma education in the schools.
4. Implement a marketing plan to identify target audiences and distribute educational materials including asthma action plans.

Desired Outcomes:

- » Improve quality of life for those with asthma.
- » Increase number of community partners.
- » Decrease number of school and work days missed because of asthma.

Objective 2: *Assist people dealing with asthma to understand the disease process and possible treatments and strategies.*

Section 4: Asthma Management

Strategies:

1. Identify, increase the number of and promote asthma educators and their services.
2. Encourage health systems and physicians to refer patients to asthma educators and pharmacy education programs.
3. Promote a central database/clearinghouse of available information.
4. Promote Asthma Program Web site, including education materials, data/research, resources.
5. Promote reimbursement of asthma management services by health care professionals.
6. Promote asthma education among current and future providers (nursing and medical schools).

Desired Outcomes:

- » Increase use of and compliance with asthma treatment plans.

Objective 3: *Increase patient ownership in their individual treatment plans.*

Strategies:

1. Conduct surveys of people with asthma to determine levels of knowledge and utilization of asthma self-management skills. Report findings to Task Force and other interested parties.
2. Conduct surveys and review pharmacy records to understand reasons for non-compliance with treatment plans.
3. Increase the use of asthma action and management plans.
4. Improve follow-up, well patient check-ups and education including proper technique for all asthma patients through a variety of methods.
5. Increase outreach by asthma educators.
6. Create and promote a database of clinics with extended hours.

Desired Outcomes:

- » Improve self-management skills.
- » Increase use of and compliance with asthma management/action plans.

Section 4: Asthma Management

Objective 4: *Improve access to asthma management systems.*

Strategies:

1. Present cost savings benefits to health care insurance plans to reimburse for asthma education.
2. Improve/increase partnerships between health care insurance plans and asthma management services.
3. Identify those who are insured, underinsured, uninsured, and where they live.
4. Improve marketing of asthma management services.
5. Collaborate with emergency departments, urgent care facilities and community health centers to improve asthma education.
6. Implement *Living Well with Chronic Conditions, Stanford University's Chronic Disease Self-Management Program*, (a program that teaches self-management skills) in communities to increase self-management knowledge and behavior among people with asthma, especially those at increased risk because of age, race, ethnicity, poverty, or geographic isolation.
7. Develop and implement a pharmacy education program.

Desired Outcomes:

- » More health plans reimburse for asthma education.
- » Increase utilization of programs that pay for prescriptions.
- » Increase utilization of asthma educators.
- » Increase information regarding asthma management services.

Objective 5: *Promote awareness of how the social/cultural environment affects asthma management.*

Strategies:

1. Understand the asthma burden in diverse communities.
2. Build partnerships in the community to improve access to culturally appropriate self-management education and resources.

Section 4: Asthma Management

3. Provide community partners access to asthma education materials and encourage distribution of materials.
4. Develop and promote asthma education materials to be used by people with asthma, their caregivers, and the general public. Continue to ensure that asthma materials are appropriate for the populations for whom they are intended.
5. Develop and promote clinically accurate asthma education materials that are culturally appropriate and easy to use by diverse populations.
6. Enhance and expand culturally appropriate asthma awareness campaigns aimed at at-risk and/or disparate populations.

Desired Outcomes:

- » Increase awareness of asthma burden in diverse communities.
- » Increase collaboration with community partners.
- » Improve access to asthma resources.

Objective 6: *Assure state laws and policies reflect sound asthma management.*

Strategies:

1. Educate policymakers about asthma policy and best practices.
2. Advocate at the state level to increase the proportion of school nurses per pupil in the schools.
3. Advocate at a state level to allow students to carry epi-pens for anaphylaxis reactions.
4. Educate caregivers, providers, schools and people with asthma and their parents about asthma policies in their schools.

Desired Outcomes:

- » Increase awareness of laws and policies that impact asthma care.
- » Improve advocacy and care for families that are consistent with current policies and treatment goals.

Health Systems



My son Kaleb started coughing occasionally in 2003, he was 3. I took him to a pediatrician who prescribed cold medicine, the coughing continued and I took him to our family doctor who told me that I should give him caffeine drinks to open up his airway. I went to another pediatrician who recommended ear drops for an ear infection and lotion (Cetaphil) for his eczema. Four months later Kaleb was diagnosed with asthma and he was started on several asthma medications. He responded well and stopped coughing!

We moved to Utah in 2004. At first we didn't have any trouble but then the coughing returned. He was prescribed other medications that worked for about 14 months. At that point, Kaleb was acting as if he had pneumonia, but x-rays showed nothing and nothing seemed to work. We took him back to the doctor and he gave us our first asthma action plan in the fall of 2006. * A week or two later Kaleb was back in the doctor's office. The doctor and the physician assistant talked and together made an action plan that works.

* I got an action plan that is working---nearly 4 years after his diagnosis going from doctor to doctor.

--Heidi
January 2007

Section 4: The Plan - Health Systems

Background

Asthma patients must have access to appropriate primary and specialty asthma care, education services, necessary medications and devices to manage asthma more effectively. Unfortunately, many patients lack access to basic health services, including coordinated care.

Mission

Assist the health care system to provide access to appropriate care as defined by National Asthma Education Prevention Program (NAEPP) guidelines.

Health Systems

Objective 1: *Promote available resources to patients and providers to encourage the underinsured and uninsured to seek appropriate care.*

Strategies:

1. Educate health care providers and patients about available resources.
2. Promote available resources through a variety of channels.
3. Use information obtained under objective 3 to inform the Task Force about needs and methods to educate.
4. Increase awareness among patients and providers of patient advocacy services.

Desired Outcomes

- » Increase the proportion of people with asthma who are receiving care.

Objective 2: *Increase the awareness of patients and providers in how to assess the adequacy of their insurance benefit package.*

Strategies:

1. Obtain information on published models that demonstrate a cost-benefit of inclusive asthma benefit packages.
2. Disseminate the coverage checklist to providers, patients, third-party payers, and employers.

Desired Outcomes:

- » Improve benefit packages.
- » Improve use of covered benefits.

Section 4: Health Systems

Objective 3: *From a patient perspective, explore access and barriers to health care.*

Strategies:

1. Develop and administer quantitative and/or qualitative methods to identify barriers and ways to improve care, from a patient perspective, including patients who are uninsured, underinsured or underserved.
2. Identify if, where, and by whom, *The Chronic Care Model* is being used.
3. Increase awareness and promote use of chronic care model among pharmacies, primary care providers, asthma specialists, school systems, emergency departments, and hospitals.
4. Explore practice collaborative agreements between physicians and pharmacists and promote where appropriate.

Desired Outcomes:

- » Increase access to care.
- » Decrease barriers to care.
- » Improve continuity of care.

Objective 4: *Increase awareness of and participation in professional development opportunities for medical management and education.*

Strategies:

1. Offer continuing education credits for asthma education activities.
2. Promote interaction within the health care community to discuss asthma care issues through multiple channels such as Web sites, meetings, telehealth and grand rounds.

Desired Outcomes:

- » Increase use of resources and educational materials by providers.
- » Increase communication within the health care community regarding asthma care.

Population Issues



The Asthma School Resource Manual and training was developed in 2003 to help school personnel understand asthma and know what to do in the event of an asthma attack while at school. Often, school staff do not think asthma is a major concern until either a student has an attack at school, or the school nurse informs them of just how many students in their school have asthma.

One principal did not believe asthma was a problem at her school, so she did not feel the Asthma School Resource Manual and Training were necessary for her faculty. The school nurse was aware of this resource and informed the principal that there were, on average, two students with asthma in each classroom at her school. The principal then sought out the training for her staff so they could be more informed in the event of an asthma attack at their school.

Asthma Program Intern
Fall 2004

Section 4: The Plan - Population Issues

Background

Asthma affects individuals in all age groups, ethnic backgrounds, and geographic locations. Within each group are sub-groups that are in need of special resources that are specific to that group or individual. Target populations include: youth, focusing in child care, schools, and youth organizations; adult issues on work-sites, churches, prisons, and community adult organizations; and older adult, focusing in aging services, long-term care/assisted living facilities, retirement communities, and home care. The design of the asthma intervention efforts must meet the educational needs of each target population, and be culturally appropriate for each

ethnicity within their social and physical environments. Within the population's context and existing systems, the goal is to improve asthma self-management and influence policies that would support asthma friendly environments among all populations.

Mission

Within population systems, use best practices to provide culturally appropriate assistance for those affected by asthma so they can better manage their asthma within their social and physical environments.

Population Issues

Education Objective: *To increase awareness that asthma is a chronic disease that occurs throughout the lifespan and is a public health concern so that people with asthma are better equipped to manage their disease.*

Desired Outcomes

- » Increase accurate and timely diagnosis across all populations.
- » Increase self-management.
- » Increase education among all people who oversee care of those with asthma.
- » Improve quality of life for all people with asthma.
- » Reduce activity limitations among persons with asthma.
- » Ensure all materials are culturally and linguistically appropriate.

Partnership/Sustainability Objective: *To identify, network and collaborate with stakeholders to accomplish our mission by identifying increased funding for sustainability.*

Desired Outcomes

- » Complete and implement cultural competency plan.
- » Engage stakeholders statewide to collaborate on projects.

Section 4: Population Issues

- » Seek increased funding opportunities to carry out Asthma Plan.
- » Utilize relationships to identify new and creative strategies for best practices.
- » Collaborate with agencies statewide.

Policy Objective: *To develop and promote implementation of policies that create environments free of asthma triggers, and promote positive asthma management among all populations.*

Desired Outcomes

- » Decrease student-to-school nurse ratio.
- » Increase number of schools in monitored areas that use air quality guidelines for recess.
- » Develop strategies for alternative activities on bad air days.
- » Reduce indoor air triggers by working with identified organizations to implement appropriate policies.

YOUTH

Education Strategies

1. Make asthma action plans readily available to students and families.
2. Utilize existing resources to ensure school age children with asthma receive appropriate care (i.e., Utah School Resource Manual Training, Winning with Asthma, Open Airways, Asthma Camp, and Tools for Schools).
3. Develop child care personnel training or resource on how to address asthma management in child care facilities.
4. Evaluate existing resources to ensure best practices.
5. Provide education to families of children with asthma on how to communicate with their child's health care provider about their child's asthma.

Section 4: Population Issues

Partnership/Sustainability Strategies

1. Provide schools with funding and structure to adopt coordinated health curricula for asthma management away from home.
2. Promote and offer assistance to American Lung Association of Utah asthma camp for children.
3. Collaborate with the local Girl Scout programs to promote their Asthma Awareness Patch Program.
4. Collaborate with the National Children's Health Study in promoting asthma awareness.
5. Identify and partner with other organizations to enhance asthma management for youth.

Policy Strategies

1. Promote consistent use of asthma action plans in all schools statewide.
2. Promote consistent use of air quality guidelines where applicable within the state.
3. Assist school districts in maintaining comprehensive tobacco-free school policies.
4. Advocate at the state level to increase the proportion of school nurses per pupil in the schools.
5. Evaluate school nursing programs to identify which school districts have adequate coverage for their students, as well as utilization of existing asthma school resources, (e.g., Tools for Schools, Open Airways, Winning With Asthma, etc.).

Section 4: Population Issues

ADULT

Education Strategies

1. Distribute asthma educational materials to venues where adults live, work, and play.
2. Encourage development of disease management programs in all venues where adults live, work, and play, to include asthma management techniques, proper use of medications, preventive methods, and actions to be taken at the time of exposure to a known irritant.
3. Provide education to individuals with asthma on how to communicate their asthma concerns to their health care provider.
4. Inform and educate adults about the health and social benefits of smoke-free homes, multiple-dwelling units, vehicles, worksites, and outdoor venues.

Partnership/Sustainability Strategies

1. Promote, train, and provide technical assistance to local partners on the implementation of the Utah Secondhand Smoke Policy Implementation Guide for promoting smoke-free policies in homes, multiple dwelling units, workplaces, health care settings and outdoor venues.
2. Identify and collaborate with other community-based organizations statewide to implement asthma management strategies within the communities they serve.

Policy Strategies

1. Assist contractors in promoting, implementing, and maintaining policies that enforce environments that are free of asthma triggers at multiple dwelling units, outdoor venues, and worksites.
2. Publicly recognize identified community organizations that actively reduce employee and customer exposure to asthma triggers, (e.g., secondhand smoke, mold, indoor air pollutants, etc.).
3. Promote creation of worksite protocols for reporting early signs and symptoms of sensitization.

Section 4: Population Issues

OLDER ADULT

Education Strategies

1. Implement educational activities to identified aging services agencies.
2. Provide education to older adults with asthma on how to communicate with their health care provider about their asthma concerns.
3. Identify and promote best practices for older adults with asthma.
4. Identify co-morbidity for chronic obstructive pulmonary disease (COPD) and asthma among older adults.

Partnership/Sustainability Strategies

1. Identify and collaborate with agencies and individuals that serve older populations.

Policy Strategies

1. Publicly recognize identified long term care facilities, senior centers, and retirement communities that actively reduce client exposure to asthma triggers (e.g., second-hand smoke, mold, indoor air pollutants, etc.).
2. Promote consistent use of air quality guidelines among all venues where older adults live, work, and play.

ALL POPULATIONS

Education Strategies

1. Conduct town hall meetings to increase awareness of asthma.
2. Develop partnerships and utilize resources already in existence to help reduce driving when air quality is poor.
3. Identify who is receiving flu shots vs. who is not. Develop materials on the importance of why individuals with asthma should receive flu shots.

Section 4: Population Issues

Partnership/Sustainability Strategies

1. Fund local health departments, community based organizations, Native American populations, and health care facility efforts to increase asthma awareness among specific population groups.
2. Partner with local health plans to provide materials and resources to their members.
3. Collaborate with Utah's emergency and bioterrorism agencies to develop protocol for emergency response situations regarding asthma.
4. Partner with Center for Multicultural Health to assure that all information provided by the Task Force is culturally and linguistically appropriate.

Policy Strategies

1. Promote model flu and pneumonia shot initiatives among health care providers.

Risk Factors



We are having a real serious problem with asthma at our house. I live in North Salt Lake in a trailer park near the refineries, medical waste processing plants, and manufacturers; my son has a chronic cough and asthma. I have worked to clean our home and surroundings but there is still something that is bothering my son's asthma. Is there someone that can come out and test my trailer for environmental hazards and code violations?

--Karen
December 2006

Section 4: The Plan - Risk Factors

Background

Asthma is a complex disease and is recognized to have multiple causes and risk factors. However, Utah, with its large population of children, variety of housing, and unique mixture of mountain valley, desert climate, industry, and agriculture, provides a challenge to reducing risk factors. It is suggested that risk factors be addressed in Utah through four broad categories: 1) environmental (both indoor and outdoor), 2) genetic (Utah is world renowned for its family history and genetic work), 3) societal (ethnic, social, literacy and economic issues that an individual does

not control), and 4) behavioral (lifestyle and choices that an individual can control). Each of these categories are equally important and if addressed can help reduce the prevalence of asthma in Utah.

Mission

To identify asthma risk factors and promote intervention strategies to reduce those risks in Utah.

Risk Factors

Environmental Objective: *To promote awareness of indoor and outdoor environmental risk factors through community cooperation. Increase awareness of the effects of water damage, flooding, sewage backups, and plumbing leaks in relation to asthma. Promote opportunities to improve indoor air quality to include public buildings, schools, daycare centers and homes.*

Strategies:

1. Identify and collaborate with agencies that have a stake in environmental issues related to asthma (e.g., air quality).
2. Develop and share standard core messages related to asthma and air quality on the following key elements: 1) exposure to secondhand smoke; 2) tobacco prevention and cessation among youth; 3) tobacco cessation among adults with asthma and caregivers of individuals with asthma.
3. Link asthma initiatives with other chronic disease and environmental initiatives and build on existing projects.

Section 4: Risk Factors

4. Collaborate with the Environmental Public Health Tracking (EPHT) Program to demonstrate a link between environment and asthma health status. Utilize tools to track geographic patterns and temporal trends in acute asthma events using hospital admission and emergency room data and air pollution data.
5. Advocate for appropriate indoor and outdoor environmental air quality issues and identify appropriate partners.
6. Develop and implement Integrated Pest Management (IPM) and air quality policies for schools.
7. Promote anti-idling programs.
8. Implement public awareness programs utilizing health advisories, news releases, paid media, listservs, etc. (e.g., EPA media, joint news releases about air pollution and ozone levels, and campaigns promoting ways to reduce other environmental risk factors).

Desired Outcomes:

- » Enhance and expand user-friendly Web links and other resources that promote awareness of outdoor/indoor air quality.
- » Promote efforts to decrease air emissions and outdoor pollutants.
- » Support efforts that increase awareness of environmental risks to asthma.

Genetic Objective: *To promote awareness of genetics and family health histories as a predictor of asthma risk.*

Strategies:

Pharmacogenomics

1. Develop fact sheets on topics such as genetics vs. genomics, pharmacogenomics, direct-to-consumer marketing, genetic testing on asthma.
2. Develop workshops/trainings for health professionals to provide updates on asthma genomics and current research.

Section 4: Risk Factors

3. Identify and recruit additional partners to assist with activities.

Family History

1. Develop a public awareness campaign to educate on the importance of knowing your family health history.
2. Provide education in organizational newsletters and listservs on family health history (why it's important, how to collect it, assessing risk, what to do after collecting it, and resources/tools available).
3. Identify family health history tools and resources currently available.

Ethical, Legal and Social Issues

1. Develop a survey for the general public to determine their beliefs and ideals about genetic/genomics issues. Based on the survey results, develop a plan to educate the general public and media (messages will include both negative and positive issues).
2. Stay current on and watch for opportunities to participate in advocating for legislation to protect against genetic discrimination.
3. Develop guidelines for companies on using genetic information (genetic discrimination, employment, insurance, etc).
4. Review cases of genetic discrimination from other states to use in educational and legislative activities.

Section 4: Risk Factors

Other Strategies

1. Review and adapt appropriate strategies from other states and national organizations.
2. Refer to the Asthma and Genomics, April 2006 work plan for additional ideas and strategies.
3. Collaborate with Utah-based partners associated with the National Children's Health Study.

Desired Outcomes:

- » Increase awareness of possible genetic links to asthma.
- » Support efforts that increase early detection of asthma in at-risk populations.

Societal (risks an individual cannot control) Objective:

To promote awareness of asthma risk associated with social, economic, ethnic, occupational and other related factors to reduce asthma morbidity and improve quality of life.

Strategies:

1. Promote appropriate respiratory disease educational materials to high risk occupations.
2. Support programs within air conditioner, humidifier, and swamp cooler businesses to develop moisture prevention products for consumers.
3. Develop “asthma-friendly” policies for housing agencies, apartment complexes and landlords.
4. Work with agencies responsible for developing bioterrorism and emergency response plans to include steps for those with asthma.
5. Develop a resource guide of agencies and materials (e.g., how to get an in-home inspection, purchase vacuum cleaners, etc.).

Section 4: Risk Factors

6. Assure all educational materials are culturally and linguistically appropriate for various populations.
7. Collaborate with insurance carriers to improve private insurance coverage of smoking cessation programs.
8. Support ongoing efforts for tobacco-free policies in outdoor venues, worksites, health care settings, homes and multi-dwelling units.

Desired Outcomes:

- » Increase awareness of possible societal risks factors for asthma.
- » Increase policies that reduce societal risk factors.

Behavioral (risks an individual can control) Objective:

To promote awareness of the association between behavioral choices and asthma.

Strategies:

1. Develop and share standard core messages related to asthma and air quality on the following key elements: 1) exposure to secondhand smoke among individuals with asthma; 2) tobacco prevention and cessation among youth; 3) tobacco cessation among adults with asthma and caregivers of individuals with asthma.
2. Train local health departments to assist and advise their communities in home hygiene practices. Promote the training through representatives of local ethnic communities throughout the state.
3. Develop and implement an in-home asthma, lead and safety assessment intervention program including: asthma trigger education, dust and pest control measures; installing pillow and mattress covers; mold remediation; and eliminating or restricting smoking in housing units.
4. Promote awareness regarding hygiene and/or trigger-reducing home programs.

Section 4: The Plan - Risk Factors

5. Work with partners involved in immunizations at the state and local levels to promote flu shots to those with asthma.
6. Promote awareness regarding water damage and restoration, emphasizing the importance of rapid attention to catastrophic conditions such as flooding and sewage backflows, as well as common conditions such as plumbing leaks.
7. Facilitate referrals to smoking cessation programs.
8. Support smoke-free homes and vehicle programs.

Desired Outcomes:

- » Increase awareness of home hygiene practices to reduce the risks of asthma.
- » Support efforts by local health departments that increase awareness of possible behavioral risks for asthma and the implementation of effective home hygiene practices.

Data and Monitoring



One day one of my athletes was struggling running up and down the field during a game. My first thought was I have to run her harder and get her in better shape during practice, until one day during a game she came up to me and said she was having a hard time breathing, but to not take her out of the game. That was my introduction to exercise-induced asthma. Since that time I have had several athletes with asthma and a few I recommended to go to a doctor because I was able to spot the symptoms of asthma.

--High School Soccer Coach
October 2006

On an average team of 10, at least one athlete will have asthma. About nine million U.S. children under 18 (13%) have ever been diagnosed with asthma. Many people who don't have "chronic" asthma (up to 13% of the population) experience asthma symptoms only when participating in aerobic activity such as basketball, soccer, and track and field. These people may have what is called Exercise-Induced Asthma (EIA) or Exercise-Induced Bronchospasm.

Data like this helps to target certain populations and direct interventions. The Winning With Asthma Program was developed to help coaches learn how to help their athletes with asthma to properly manage symptoms.

Section 4: The Plan - Data and Monitoring

Background

The burden of asthma in Utah has a significant effect on the quality of life for many Utahns. To determine if the Utah Asthma Plan is effective in reducing this burden, the morbidity, mortality and impact of the disease must be assessed. These data will not only direct the plan, but will determine how close the plan is to achieving its goals.

Mission

Assure availability of quality data to guide interventions that prevent asthma and improve the quality of life for people with asthma.

Data and Monitoring

Objective 1: *Identify data, assess and improve the quality of existing data sources.*

Strategies

1. Maintain a list of information needs from existing sources.
2. Identify primary users of information, assess their needs, and prioritize according to results of assessment.
3. Assess quality of data sources. (e.g., hospital emergency department, Medicaid utilization, death certificate, pharmacy, and other appropriate sources).
4. Explore reasons for disparities in the health outcomes and impact of asthma in Utah to identify effective strategies to reduce disparities.

Desired Outcomes

- » Ability to make recommendations to data providers for data quality improvement.
- » Evaluation of the quality of each data source in a summary report.
- » Maintain a data system sufficient for Utah Asthma Task Force needs.

Objective 2: *Identify new data sources to fill gaps as needed.*

Strategies

1. Develop a list of information needs as they become known that are not covered by existing data sources.
2. Assess the feasibility of using previously unused data sources for asthma surveillance, such as health maintenance organization data and clinic data.
3. Explore opportunities to add an asthma component to existing data collection systems.

Section 4: The Plan-Data and Monitoring

4. Create new data collection systems as necessary to fill gaps.
5. Evaluate the efficiency of and need for expandability of data projects in cooperation with the Utah Asthma Task Force.

Desired Outcomes

- » The identified data gaps are filled.
- » Ongoing analyses of data from projects to determine project implementation needs.

Objective 3: *Disseminate information from surveillance data to appropriate stakeholders.*

Strategies:

1. Periodically update the asthma indicators in cooperation with the UDOH, Center for Health Data.
2. Identify and target information for specific audiences (e.g., Utah State Legislature, local health departments, schools, etc.).
3. Produce appropriate data reports, including a statewide asthma burden report.

Desired Outcomes

- » Reports are available to appropriate audiences.
- » Asthma data is used to guide interventions by stakeholders.

Objective 4: *Maintain infrastructure to support surveillance needs.*

Strategies

1. Assure sufficient capacity of epidemiological, statistical and information technology to collect, evaluate, analyze, and interpret data.
2. Assure capacity for the production and dissemination of surveillance reports.
3. Assure ongoing input from the surveillance workgroup and the Utah Asthma Task Force.

Section 4: The Plan-Data and Monitoring

Desired Outcomes:

- » Maintain a comprehensive infrastructure and sufficient support system for compilation, interpretation and dissemination of data in a timely manner.

Objective 5: *Evaluate the implementation of Utah's Asthma Plan.*

Strategies:

1. Assist workgroups in identifying high priority objectives.
2. Identify measurement strategies, including measurable data, for objectives.
3. Ensure open communication with workgroups on all objectives.
4. Develop timeline, budget, and resources needed for plan evaluation.
5. Perform evaluation and report results to the Utah Asthma Task Force.

Desired Outcomes:

- » Effectiveness of the plan is demonstrated.
- » Program planning is driven by the data.
- » Timely implementation of state plan objectives.
- » Corrective action is implemented as necessary to adjust the Utah Asthma Plan.

Appendices - Task Force Participants

Bonnie Athas, Department of Human Services, Divisions of Aging and Adult Services

Abril Atherton, PharmD, University of Utah

Kendyl Bell, American Lung Association of Utah, Miss Utah Organization

Marykay Borders, Health Manager, Salt Lake CAP Head Start

Wayne Cannon, MD, Intermountain Health Care

Deirdre Caplin, PhD, University of Utah

Eugene C. Cole, DrPh, Brigham Young University

Libbey Chuy, MPH, Utah Department of Health

Craig Cutright, Executive Director, American Lung Association

Leslie Dalton, Health Commissioner, Utah PTA

Dulce Diez, Center for Multicultural Health

Janae Duncan, Center for Multicultural Health

Karen Ekker, Utah Department of Health

Dave Foley, MSPH, Salt Lake Valley Health Department

Dave Folland, MD, Intermountain Health Care

Jack Fried, MA, RRT, St. Mark's Hospital

Rebecca Giles, MPH, CHES, Utah Department of Health

David Gourley, MD, Intermountain Allergy and Asthma

Ginger Guest-Warnick, Asthma Program Manager, General Pediatrics,
University of Utah

Elizabeth Huggins, RRT, CPFT, AE-C, LDS Hospital

Task Force Participants

Dana Hughes, RN, PhD, Miners Hospital, University of Utah

Marie Hunter, RN, Utah Valley State College

Jenny Johnson, Utah Department of Health

Paula Johnson, RN, Davis County Health Department

Rebecca Jorgensen, Utah Department of Health

LaDene Larsen, RN, BSN, Utah Department of Health

Patrick Lee, MPA, Utah Department of Health

DeeDee Lobato, Salt Lake County Aging Services

Marlene Magaraci, RN, BSN, Quality Improvement Specialist, Select Health

Howard McQuarrie, MD, Utah Public Employees Health Program

Valerie Morgan-Wallace, RRT, Primary Children's Medical Center

Linda Morris, APRN, MSN, Utah Department of Health

Kimberly Mueller, Chronic Care Coordinator, Association for Utah Community Health

Adam Owens, Utah Department of Health

Steve Packham, Ph.D, Utah Division of Air Quality

Melanie Preece, RN, JD, Utah Department of Health

Autumn Pham, RN, Salt Lake County Aging Services

Sylvia Rickard, Advocate, Utah State Womens Legislative Council

Robert T. Rolfs, MD, MPH, Utah Department of Health

Karen Roylance, RN, BSN, School Nurse Consultant, UDOH

Jeannine Ruston-Fowler, Quality Improvement Coordinator, University of Utah Health Plans

Task Force Participants

Wayne Samuelson, MD, University of Utah

Betty Sawyer, Project Success

Greg Smith, P.E., Salt Lake City School District

Amanda Sorenson, Salt Lake County Aging Services

Craig Teerlink, University of Utah Department of Biomedical Informatics

Katie Tingey, Salt Lake County Aging Services

Suzan Tibbits, Granite School District

Kallie Webb, Molina Healthcare of Utah

Vicki Wheeler, Associate Director, American Lung Association

Cherissa Wood, American Lung Association of Utah

David Young, PharmD, University of Utah, School of Pharmacy

Sabrina Yrungaray, MPH, CHES, Utah Department of Health

Healthy People 2010 - Asthma Objectives

Goal: *Promote respiratory health through better prevention, detection, treatment, and education efforts.*

1. **Objective 24-1:** Deaths from asthma—*Reduce asthma deaths.*
2. **Objective 24-2:** Hospitalizations for asthma—*Reduce hospitalizations for asthma*
3. **Objective 24-3:** Hospital emergency department visits for asthma—*Reduce hospital emergency department visits for asthma.*
4. **Objective 24-4:** Activity Limitations—*Reduce activity limitation among persons with asthma.*
5. **Objective 24-5:** School or work days lost—*(Developmental) Reduce the number of school or work days missed by persons with asthma due to asthma.*
6. **Objective 24-6:** Patient education—*Increase 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.*
7. **Objective 24-7:** Appropriate asthma care—*(Developmental) Increase the proportion of persons with asthma who receive appropriate asthma care according to the NAEPP Guidelines.*
8. **Objective 28-8:** Surveillance systems—*(Developmental) Establish in a least 25 states a surveillance system for tracking asthma death, illness, disability, impact of occupations and environmental factors on asthma, access to medical care, and asthma management.*

Source: www.healthypeople.gov

Asthma Glossary

Albuterol: (Beta 2 agonist or albuterol sulfate) The most commonly seen rescue or quick relief medication used to relieve asthma symptoms quickly by relaxing muscles around the airways. Also used before exercise to prevent asthma symptoms for people with exercise-induced asthma. Most often used as an inhaler or with a nebulizer.

Allergen: A substance which causes an allergic response in sensitive individuals. Allergens can be either natural (e.g., pollen, dust) or man-made (e.g., perfume, cleaning agents).

Asthma: A chronic, inflammatory disorder of the airways characterized by wheezing, breathing difficulties, coughing, chest tightness, and other possible symptoms. People with asthma have very sensitive airways that are constantly on the verge of overreacting to asthma triggers.

Asthma Action Plan: A written document that outlines an individual treatment plan for a person who has asthma; developed in talking with the health care provider, family member and caregivers. Effective action plans help patients control their asthma and live healthy, active lives.

Asthma episode/attack/exacerbation: A time when asthma symptoms flare up or intensify, requiring immediate adjustments in treatment and medication to get symptoms under control. Asthma episodes may occur suddenly, with few warning signs, or build slowly over a period of hours or even days.

Asthma Friendly Communities: Places where people are quickly and accurately diagnosed, receive appropriate treatment, and are safe from physical and social environmental risks that exacerbate asthma.

Asthma management: A comprehensive approach to achieving and maintaining control of asthma. It includes patient education to develop a partnership in management, assessing and monitoring severity, avoiding or controlling asthma triggers, establishing plans for medication and management of exacerbations, and regular follow-up care.

Asthma Glossary

Bronchial tubes (bronchus): The major airways of the respiratory system that carry air from the trachea (windpipe) to the microscopic air sacs (alveoli) in the lungs.

Bronchioles: The smallest airways in the lungs.

Bronchoconstriction/bronchospasm: The tightening in the airways that occurs with asthma. Caused when the muscles around the bronchial tubes contract in response to specific triggers.

Bronchodilator drugs: Drugs that relax muscles around the airways, which open the airways up. Some bronchodilators are used for quick relief of symptoms during an asthma attack. Others are taken every day to prevent symptoms.

Controller medications: The standard treatment of asthma for most patients who have “chronic” asthma and need daily medication. These medications provide “long-term relief” by making airways less sensitive, which reduces symptoms before they even appear. Called a controller because it controls asthma and prevents asthma attacks.

Corticosteroid: A type of medication used to reduce inflammation. These drugs mimic a substance produced naturally by the adrenal glands. In asthma, these drugs are often taken through an inhaler for long-term control. They may also be taken orally or given intravenously for a short time if asthma symptoms become out of control.

Dander: Scaly or shredded dry skin that comes from animals or bird feathers. Dander may be a cause of an allergic response in some people.

Exercise-induced asthma: Asthma symptoms that appear during or following exercise. Symptoms may be minimal or severe enough to require emergency treatment. Some people who have chronic asthma have exercise as a trigger. Some people only develop bronchoconstriction (asthma symptoms) when they exercise.

Asthma Glossary

Inhaled corticosteroid: Steroidal anti-inflammatory medication useful for people who have asthma. The medication is breathed in through the mouth into the lungs. Also called “ICS”. Not the same as anabolic steroids.

Inhaler/metered-dose inhaler (MDI): A device used to deliver a variety of commonly prescribed asthma medications that help ease breathing by opening the airways.

Irritant: Any substance that causes swelling of the respiratory system. An irritant may trigger asthma symptoms, but may not be considered an allergen. Examples of irritants include tobacco smoke, chemicals, pesticides or air pollution.

Mucus: Often called phlegm or sputum, this sticky fluid is produced by the membranes lining the airways. Exposure to certain triggers can increase mucus production. Excessive amounts of mucus make breathing more difficult.

Nebulizer: A small, portable machine used to deliver certain asthma medications. It makes a mixture of liquid medicine and water into a mist that a person then inhales through a mask or a mouthpiece. They are often used for babies and children who are too small to coordinate using a MDI. They are also used for those having severe asthma symptoms, as it is easier to take in the medicine this way when having trouble breathing.

Peak flow meter: A small, portable hand-held device that measures how well the lungs are able to expel air, allowing people with asthma to detect airway narrowing and adjust medications accordingly.

Pulmonary function testing (PFT): A series of tests used to determine whether a person has breathing problems, and precisely what those problems are. These test lung function and capacity. They do not hurt, as they involve tests that include holding your breath, blowing into a tube as hard as you can, and exercising while wearing a special mask.

Quick relief or rescue medications: Medication taken to relieve asthma symptoms. Called “quick relief” because they can act immediately to reduce symptoms that appear suddenly.

Asthma Glossary

Spacer: A device that attaches to an inhaler (MDI) by a plastic chamber on one end and a mouthpiece on the other end. It is intended to help medicine from an MDI get into the lungs. A spacer works by holding the medicine in its chamber long enough for a person to inhale it in one or two slow deep breaths. Without a spacer, much of the medicine in an inhaler “puff” is deposited on the tongue or in the back of the throat.

Spirometry: Test for diagnosing asthma. A spirometer is an instrument that measures the maximum volume you can exhale after breathing in as much as you can. Small spirometers are available for home use, although peak flow meters are more appropriate for most people.

Trigger: Anything that causes asthma symptoms to worsen in a given person. Different things are triggers for different people. Some common triggers include exercise, cigarette smoke, pollen, dust, cold air, and upper respiratory infections.

Wheezing: A whistling sound that occurs when air moves through narrowed or tightened airways. May be heard on exhalation. Wheezing is a classic symptom of asthma.



288 North 1460 West
P.O. Box 142106
Salt Lake City, Utah 84114-2106

For additional copies of this report, visit our Web site at:
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Utah Asthma Task Force
www.health.utah.gov/asthma