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Preface

The Idaho Department of Health and Welfare and the Asthma Prevention and Control Program are pleased to present the *2003 Idaho Statewide Asthma Plan*. More than 130,000 Idahoans of all ages, races, and genders have been diagnosed with asthma and suffer varying levels of disability, decreased quality of life, and increased medical costs. The Department of Health and Welfare and the Asthma Prevention and Control Program extends their gratitude to the more than 425 stakeholders who contributed their time and expertise in the development of the *2003 Idaho Statewide Asthma Plan*. It is the committed efforts of the stakeholders statewide that enabled the plan to be developed and will ensure the success of the plan in the years to come.

The *2003 Idaho Statewide Asthma Plan* outlines effective prevention and control efforts. Idaho's plan supports the goals and objectives of the Center for Disease Control and Prevention and the Asthma Coalition of Idaho, and is consistent with the asthma guidelines from the National Heart Lung Blood Institute.

The plan is a framework for action and collaboration. It reflects concern that Idahoans address access to care and increase awareness and education about prevention and control of asthma. It challenges us to work as partners to address asthma in communities, the public health system, the medical care system, workplaces, schools, and childcare facilities.

The plan provides a variety of strategies to positively impact those with asthma. The intent of the plan is to coordinate and provide focus for the multitude of stakeholders statewide. The hope is that all stakeholders will become partners working in unison to improve the quality of life for those with asthma. As with the planning efforts, the success of implementation will depend on the active participation of all stakeholders.

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TABLE OF CONTENTS

Introduction	1
Asthma: Defining the Scope of the Problem	3
<i>Diagnosis</i>	
<i>Treatment</i>	
<i>Causes</i>	
<i>Cure</i>	
<i>Asthma in Idaho</i>	
Purpose	6
Process	7
Idaho Statewide Asthma Plan	10
<i>Health Care</i>	11
Clinical Guidelines	
Health Care Financing	
Professional Education	
Quality Improvement	
Access to Care	
<i>Environmental</i>	18
Indoor Environment – Homes	
Indoor Environment – Business	
Indoor Environment – Schools	
Occupational Environment	
Outdoor Environment	
<i>Schools and Childcare/Pre-Schools</i>	22
Asthma Management – Schools	
Health Services – Schools	
Education – Schools	
Physical Education – Schools	
Environment – Schools	
Asthma Management – Childcare/Pre-Schools	
Education – Childcare/Pre-Schools	
Environment – Childcare/Pre-Schools	
<i>Coordination</i>	28
<i>Collaboration</i>	29
<i>Communication</i>	30
<i>Surveillance</i>	32
<i>Policy</i>	34
Policy – Environmental	
Policy – Schools	
Policy – Childcare/Preschools	
References	36

Introduction

Despite evidence that asthma death rates are leveling off and asthma hospitalization rates are declining, asthma's impact on public health, quality of life, and economy remain significant (Center for Disease and Prevention Control [CDC], 2003). Data from 2002, estimated 24.7 million people nationwide have asthma; more than a third of those are children under 18 years of age (American Lung Association [ALA], 2002). National statistics show that asthma is the leading chronic disease among children and the number one cause for child hospitalizations (National Center for Environmental Health [NCEH], 2002). Asthma is the fourth leading cause of adult work absences, and asthma-related deaths in the elderly doubled during the 1990's (Asthma Allergy Foundation of America [AAFA], 2002). Asthma affects all ages, races, and genders (Centers for Disease Control and Prevention [CDC], 1998), and rates of severe asthma continue to affect poor, minority, and inner-city populations in a disproportionate manner (CDC, 2003).

Over 130,000 Idahoans of all ages have been diagnosed with asthma. Despite the availability of asthma care in Idaho, there has been no system to measure the efficacy of asthma care, outcomes of asthma interventions, and there is no way to compare Idaho's asthma care to national guidelines. To increase the quality of life for Idahoans with asthma, Idaho recognizes the need for a statewide asthma plan that will promote consistency of care from health care providers and caregivers to patients, reduce and control environmental factors of asthma, provide guidance for asthma education in schools and childcare/pre-school facilities, promote community involvement, and develop asthma policy.

To better serve Idahoans with asthma, over 425 stakeholders developed a comprehensive statewide asthma plan. The Idaho Statewide Asthma Plan provides a method for integration of statewide asthma activities, provides the means to monitor and measure progress toward long-term goals, and provides an opportunity to increase the quality of life of Idahoans with asthma.

The recommendations for the objectives and strategies in the Health Care component of Idaho's statewide asthma plan are consistent with the recommendations for key clinical activities for quality asthma care published by the CDC in March, 2003 (CDC, 2003), and also consistent with the asthma care guidelines from the National Heart, Lung, Blood Institute (National Heart, Lung, Blood Institute [NHLBI], 1997). The other components of the Idaho Statewide Asthma Plan are consistent with the recommendations and guidelines of the following national organizations:

- *2002. Asthma Research Strategy.*
U.S. Environmental Protection Agency
- *Action Against Asthma, A Strategic Plan for the Department of Health and Human Services.*
U.S. Department of Health and Human Services
- *Guide for State Health Agencies in the Development of Asthma Programs.*
Centers for Disease Control and Prevention, 2002
- *Healthy People 2010: Objectives for Improving Health (Part B – Focus Area 24)*
Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services
- *Managing Asthma: A Guide for Schools.*
U.S. Department of Health and Human Services
- *National Asthma Control Program: Reducing Costs and Improving Quality of Life – 2002.*
National Center for Environmental Health, Centers for Disease Control and Prevention.

It is hoped that the Statewide Asthma Plan will be used by all those involved in the diagnosis, treatment, and management of asthma to guide their efforts in assuring increased quality of life for Idahoans with asthma.

Asthma: Defining the Scope of the Problem

Asthma is a chronic, potentially life threatening, disease of the lungs characterized by airway inflammation and swelling, broncho-constriction, mucus production, and airway hyper-responsiveness to stimuli (allergens).

Symptoms of asthma include (NHLBI, 1997):

- Rapid and labored breathing
- Shortness of breath
- Wheezing, coughing
- Tightness of chest
- Increased mucus production

Diagnosis

Asthma is diagnosed through a combination of obtaining a medical history, conducting physical examination, and measuring lung function. The NHLBI recommends spirometry for the initial diagnosis and monitoring of asthma. Spirometry may also be used to assess asthma severity (NHLBI, 1997).

Treatment

Asthma is treated according to severity and persistence, or frequency, of symptoms. Long-term medications are used to control persistent asthma and decrease airway inflammation that can lead to asthma attacks. Short-term or quick-relief medications are used to treat acute symptoms and help prevent exercise-induced asthma.

Causes

The causes of asthma are not clearly understood, but we know that genetics and environmental exposures to asthma triggers play a part. The following can trigger asthma symptoms or lead to asthma attacks:

- Allergens: dander, dust mites, and cockroaches
- Environmental particulates: tobacco smoke, mold spores, and air pollution
- Strong scents
- Upper respiratory infections
- Exercise
- Cold, dry air
- Emotions and stress

Cure

There is no cure for asthma, but it can be successfully managed to improve the quality of life for people with asthma. Much of asthma-related disability and disruption of daily life is unnecessary, because effective treatments for asthma are available as outlined in nationally endorsed clinical practice guidelines from the NHLBI. The following are measures of well controlled asthma :

- Normal or near normal lung function
- Absence of coughing or difficult breathing
- Minimal or no adverse effects from medications
- Normal activities of daily living, including exercise and sport participation
- No asthma-caused absences from school or work
- No asthma-caused sleep interruption
- No asthma-related hospitalization or emergency department visits

Asthma in Idaho

According to data from the 2001 Idaho Behavioral Risk Factor Surveillance System (BRFSS), 11.7% of adults report having been diagnosed with asthma, and reported by parental proxy, 8% of children under the age of 18 have been diagnosed with asthma (Idaho Department of Health and Welfare [IDHW], 2001a). Using a conservative estimate of a 10% prevalence of asthma in Idahoans of all ages, over 130,000 people suffer varying levels of disability, decreased quality of life, and increased medical costs.

Demographically, 91% of Idaho is racially classified as White, 8% is classified as Hispanic of any race, and 1% of Idaho's population is classified as other racial or ethnic groups (U.S. Census Bureau, 2000). Based on data from the 2001 Idaho BRFSS, the asthma prevalence for Hispanics of any race is 15.6% (IDHW, 2001a). This prevalence has no statistical significance higher than the statewide prevalence of 11.7%. Because Idaho does not have a large racially and ethnically diverse population, BRFSS data do not show annual asthma prevalence among other disparate groups.

Women in Idaho are more likely to be diagnosed with asthma, and are twice as likely to die from asthma as men (IDHW, 2001b).

In 2001, over 21.1% of Idahoans with asthma reported fair to poor health compared to 11.9% for Idahoans without asthma (IDHW, 2001a).

Figure 1: 2001 Idaho Behavioral Risk Factor Survey Data.

Quality of Life Comparison

	<i>Days of Activity Limitation*</i>	<i>Days of Poor Health*</i>
Asthma	3.0	5.2
No Asthma	1.7	2.9

*Reported in a 30-day period

Figure 1 shows that Idahoans with asthma report more days of activity limitation (3 days) in a 30 day period, and more poor health days (5.2) in a 30-day period than Idahoans without asthma.

Asthma Facts, a report by the AAFA based on cost data from 1985 to 1994 which used an asthma prevalence of 5.5%, estimated the direct and indirect costs for asthma for Idaho in 1998 were 47 million dollars (AAFA, 2002). Costs of asthma in Idaho in 2003 could be more than twice the 1998 estimate in view of the following facts:

- Cost estimates are based on data from 1994
- Asthma prevalence estimates are half of actual Idaho asthma prevalence (5.5% vs. 11.7%)
- Health care costs have increased since 1994

Purpose

The complexity of asthma requires a comprehensive solution that involves many individuals and organizations, and extends beyond medical care into the realm of public health, behavioral and lifestyle modification, education, housing, physical environment, and other government and community services. To facilitate integration and provide a means to monitor and measure progress toward long-term goals, there must be a plan that guides the efforts of all who are involved in the management of asthma.

"Improving the care we provide patients is our top priority." The report "gets everyone - policymakers, hospitals, physicians, nurses, purchasers -- focusing on the same things. With everyone heading in the same direction, the health of America will improve more rapidly" (Parker, 2003).

Dick Davidson, President - American Hospital Association, discussing the Institute of Medicine's report:
*Priority Actions for National Action:
Transforming Health Care Quality*

The purpose of the Idaho Statewide Asthma Plan is to provide a framework to guide the future direction of asthma prevention and control efforts. The plan is intended to provide guidance for the efforts of community members and organizations involved with asthma statewide while meeting the needs of the local programs and individuals they serve.

This document is designed to be a dynamic and living plan that will not only guide efforts to prevent and control asthma today, but will also respond to meet Idaho's asthma needs in the future.

Process

The Idaho Asthma Prevention and Control Program (IAPCP), Division of Health, Idaho Department of Health and Welfare, in collaboration with the seven Idaho Health Districts initiated the first step to develop a comprehensive statewide asthma plan by conducting a statewide, Idaho Asthma Needs Assessment in May 2002. The IAPCP utilized a facilitated community forum design, a convenience sampling method, and employed the Comprehensive Health Education Model for the planning process because of its emphasis on early and continuous public participation. More than 225 individuals including state and local public health officials, medical professionals, educators, environmental health officials, media, public health advocates, students, those with asthma and their families, businesses and community coalitions participated in seven asthma forums. Forum participants identified the key local needs, resources, and issues of asthma. The comments gathered at the seven forums were analyzed for common themes, and those identified in at least six of the seven asthma forums were subsequently synthesized into the following four issue areas with fifteen sub-issues or elements:

- 1) **Health Care** – Diagnosis, treatment, patient adherence, education;
- 2) **Environmental Factors** – Environmental tobacco smoke, occupational impacts of asthma, and air quality;
- 3) **School and Childcare Settings** – Health staff, asthma management plan, access to medications, and asthma education;
- 4) **Community Involvement and Public Policy** – Surveillance (tracking), community support groups, asthma awareness, and coordination and collaboration.

The second step in the strategic planning process was the Idaho Asthma Summit. The statewide needs assessment was used by Summit attendees on September 23-24, 2002, as a platform for discussion, prioritization of statewide asthma issues, and recommendations for the development of a comprehensive statewide asthma plan. There were over 160 stakeholders who participated in the Summit including educators, nurses, health care providers, physicians, researchers, students, and public health officials.

Idaho Asthma Summit Sponsors

- Asthma Coalition of Idaho
- Centers for Disease Control and Prevention (CDC)
- National Institute of Environmental Health & Safety (NIEHS)
- U.S. Environmental Protection Agency (EPA)
- Idaho Dept. of Health and Welfare / IAPCP

The Summit goals were as follows:

- Use the statewide asthma needs assessment to develop recommendations for a comprehensive statewide asthma plan.
- Build and strengthen partnerships for an effective, inter-disciplinary approach to asthma management.
- Promote the health and wellness of those with asthma.

Upon completion of the Summit, committees of appropriate stakeholders participated in four task forces: Health Care; Environment; Schools/Childcare; and Community Involvement and Public Policy. The task force members used the Idaho Asthma Needs Assessment, priorities identified in the Summit, oversight from the Asthma Coalition of Idaho, and asthma plans developed by other states (Illinois, Michigan, Oregon, and Rhode Island) as guidance to develop the goals and objectives of the Idaho Statewide Asthma Plan. This completed the third and final step in the statewide asthma plan development process. See figure 2 for a list of task force participants.

Figure 2: Task Force Participants

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Idaho Statewide Asthma Plan

The preceding sections have defined asthma and illustrated the impact asthma has on millions of individuals nationwide including over 130,000 Idahoans.

Asthma is a complex disease, and this complexity requires a comprehensive solution involving many organizations and individuals to ensure optimal care and quality of life for persons with asthma. This solution extends far beyond medical care. The Idaho Statewide Asthma Plan requires the collaboration of public health and education, behavioral and lifestyle modification, housing and physical environments, and other government and community services.

The following plan is the result of the efforts of 425 stakeholders within the State of Idaho. The key issue areas are presented with a brief description followed by sub-issues and their specific goals, objectives, and strategies. The goals will define the overall asthma-related improvement desired, the objectives are the measurable achievements that show progress toward the goals, and the strategies are the actions required to fulfill the objectives.

There is no oversight or mandatory participation in the implementation of the Idaho Statewide Asthma Plan, therefore it is incumbent upon each stakeholder to put into action the strategies identified in the plan to achieve and sustain the goal of increasing the quality of life for all Idahoans with Asthma.

For further information on the Idaho Statewide Asthma Plan call the Idaho Asthma Prevention and Control Program at 1-800-491-1464 or 208-334-5544.

HEALTH CARE

Despite significant scientific advances in the understanding of asthma, development and increased availability of drug therapies, and a national standard for the diagnosis and management of the disease, there are still inconsistencies and gaps in diagnosis, treatment, and management of asthma in Idaho.

Idahoans with asthma require access to appropriate asthma care, asthma education, and necessary medications and devices for effective asthma treatment and management.

The complexity of asthma requires that clinicians be well equipped with the knowledge and skills to accurately diagnose, treat, and educate patients on how to manage their condition. However, asthma patients do not only interact with physicians, but a variety of health care providers such as nurses, clinical staff (asthma educators and respiratory therapists), pharmacy staff, and in a hospital setting, emergency department personnel. Thus, it is critical to ensure that all health care providers receive the training necessary to provide optimal asthma care.

Patient education is of equal importance. To understand and learn self-management of asthma, Idahoans with asthma require accessible, quality, culturally and age-appropriate educational resources. In addition to education delivered by clinicians, asthma patients may benefit from formally evaluated education programs or classes taught by certified asthma educators.

In addition to professional and patient education, health care components include clinical guidelines, health care financing, quality improvements, and access to care.

CLINICAL GUIDELINES

Goal:

Individuals with asthma will receive diagnosis and management in accordance with NHLBI guidelines.

Objectives:

1. Increase the number of asthma patients who receive appropriate diagnosis of asthma
 - Establish a pattern of symptoms and record history of recurrent symptoms
 - Conduct spirometry measurements (FEV₁ , FVC, FEV₁/FVC) before and after the patient inhales a short-acting bronchodilator
 - Exclude alternative diagnoses
2. Classify severity of asthma
 - National Asthma Education and Prevention Program classification
3. Increase the number of asthma patients who receive appropriate medication
 - Assure the provision of a short-acting inhaled bronchodilator (inhaled β 2-agonists) to all patients with asthma
 - Monitor β 2-agonist use
4. Assure anti-inflammatory medications are prescribed as the preferred long-term control medication for patients with mild, moderate, or severe persistent asthma (i.e., inhaled steroids, cromolyn, or nedocromil)
 - Use the ‘Rule of 2’ is an indication of need for anti-inflammatory therapy:
 - Take a “quick-relief” inhaler more than 2 times a week
 - Awaken at night with asthma more than 2 times per month
 - Refill “quick-relief inhaler” more than 2 times per year
5. Increase the number of persons with asthma who receive written asthma management plans
 - All patients with asthma (mild intermittent to severe persistent) should have a dated, written asthma action plan, including information on what to do in case of an exacerbation. The action plan should be based on either peak flow readings or asthma symptoms
 - Recommend a multi-copy action plan so that patients and those who care for them (physician, school, childcare, family) have a written copy of the plan
 - Review and update the action plan at least annually with the current medical practitioner

6. Increase the proportion of persons with asthma who receive formal patient education as an essential part of the management of their condition (whether in physician office or community setting), including information about community and self-help resources
 - Basic facts about asthma
 - The contrast between asthmatic and normal airways
 - What happens to the airways in an asthma attack
 - Roles of medication
 - How medications work
 - Long-term control: medications that prevent symptoms, often by reducing inflammation
 - Quick relief: short-acting bronchodilator relaxes muscles around airways
 - Environmental control measures
 - Identifying and avoiding environmental precipitants or exposures
 - Preventing infections
 - When and how to take rescue action
 - Symptom monitoring and recognizing early signs of deterioration
 - Responding to changes in asthma severity (written asthma action plan)
 - When to call for emergency medical services
 - Skills
 - Inhaler use
 - Spacer/holding chamber use
 - Peak flow monitoring (if prescribed)
7. Increase the number of patients who receive training on methods to reduce exposures to precipitants of asthma symptoms
 - Assess patient's exposure and sensitivity to individual precipitants (e.g., allergens, irritants)
 - Provide written and verbal instructions on how to avoid or reduce factors that make the patient's asthma worse
8. Increase the number of asthma patients who receive training on how to monitor their asthma
 - All patients should monitor symptoms
 - Patients with moderate-to-severe persistent asthma should also monitor their peak flow
 - Develop patient education kits to include:
 - Asthma Diary
 - Asthma action plan
 - Video
 - Booklet on asthma management
 - Peak flow meter with instructions on use
 - Spacer with instructions on use

- 
9. Increase the number of asthma patients receiving periodic assessment and monitoring
 - All patients with asthma should have, at least, an annual physician visit to include:
 - Review of the medical history
 - Physical examination
 - Appropriate pulmonary function testing
 - Assess attainment of goals of asthma therapy and patient's concerns
 - Adjust treatment, if needed
 - Review the action plan with patient and update as necessary
 - Review self-monitoring
 - Review asthma triggers
 - Check patient's inhaler and peak flow technique
 - Review medications usage and skills
 10. Increase the number of primary care providers who refer asthma patients to asthma specialists as appropriate
 - Distribute NHLBI guidelines for referral
 11. Increase the treatment and prevention of co-morbid conditions
 - Assure the provision of annual flu vaccine for all asthma patients
 - Counsel that all household contacts of people with persistent asthma should receive flu vaccine annually
 12. Increase patient adherence through patient-clinician partnership
 - Address patient's (or parent's, school's, coaches', etc.) concerns regarding asthma
 - Agree upon the goals of asthma therapy
 - Agree upon a written action plan for patient self-management
 13. Increase appropriate management of asthma exacerbations at home, school, workplace, community emergency medical services, in the emergency department, and in the hospital
 - Initiate prompt use of short-acting inhaled β_2 -agonists and, if episode is moderate to severe, a 3 to 10-day course of oral steroids
 - Work with emergency departments to routinely notify primary care physicians when their patients with asthma have been provided emergency asthma-related care
 - At in-patient admission, facilitate prompt communication and follow-up with primary care provider

HEALTH CARE FINANCING

Goal:

Asthma care financing will be based upon NHLBI best practice guidelines

Objectives:

1. Expand insurance coverage and benefit design
 - Determine whether there are appropriate asthma diagnostic and treatment services not currently covered, and explore means of providing those services
 - For groups with applicable benefits, develop an evaluation and approval process for certified asthma educators who provide asthma education
 - For groups with applicable benefits, offer coverage for spacers and peak flow meters and medication (if no medication plan)
 - Educate health care purchasers on how to use asthma-related medical services
 - Explore possible means of increasing the number of providers who complete an asthma management plan
 - Explore possible means of increasing the number of providers who prescribe appropriate asthma prevention medications
 - Visit provider offices to educate physicians and staff about teaching patients self-management skills
 - Review performance with high-volume providers
2. Provide access to asthma educational tools, including written and web-based materials

PROFESSIONAL EDUCATION

Goal:

Increase clinician capacity to diagnose and treat asthma patients in accordance with NHLBI guidelines

Objectives:

1. Promote asthma training for physicians and other health care professionals statewide who work with asthma patients
 - Target primary care physicians (such as pediatricians, family practice physicians, internists), emergency physicians, community emergency medical services providers, nurse practitioners, and physician assistants to receive asthma training
 - NHLBI classifications of asthma severity
 - Use of spirometry as objective measures of patient assessment
 - Long term control with inhaled corticosteroids for patients with persistent asthma
 - Initial baseline measures
 - Periodic assessment and monitoring intervals (step down/step up therapy intensity when controls are achieved)
 - Patient adherence to a self-management plan
 - Appropriate emergency medical treatment

2. Support role of pharmacists
 - Patient education (medications)
 - Monitoring
3. Support Asthma Educator Certification
 - Define role in health care delivery
 - Contribution to patient care improvement
 - Physician extender
 - Community resource
 - Provide asthma education training for physicians and other health care professionals (such as nurses, nurse practitioners, respiratory therapists, physician assistants, and local emergency medical services providers) who will serve as certified asthma educators
4. Promote NHLBI guidelines on asthma web sites, through local medical societies, Idaho Medical Association, Idaho Hospital Association, Idaho Association of Family Practice, etc., and in professional publications, at conferences, etc.
 - Publish articles in professional publications
 - Disseminate the NHLBI guidelines across the state
5. Develop an Asthma Care Provider Tool Kit (reviewed annually and updated as needed) and distribute to appropriate primary and specialty care providers in order to increase the information available to health care professionals and persons with asthma regarding local, state, and federal resources
 - Model of written asthma plan
 - NHLBI guidelines
 - Necessary office forms
 - Asthma education materials
 - Internet addresses for asthma-related resources
 - Posters for in-office use
 - Information about asthma coalitions and other locally-based organizations
 - Information about access to specialty care and consultative services
 - Sources of information on culturally appropriate approaches to health care
 - Evaluate and recommend cultural diversity appropriate materials for in-service training classes
6. Identify knowledgeable and culturally sensitive health care professionals and para-professionals as resources to improve competencies of others treating people of differing cultural heritage
7. Identify asthma experts who will provide training based on the NHLBI guidelines
8. Identify quality improvement experts to assist trainers in providing high quality asthma training

QUALITY IMPROVEMENT

Goal:

Develop and maintain systems to identify people with asthma and generate information to support patient, physician, and health care professional action in accordance with the asthma guidelines

Objectives:

1. Implement statewide asthma surveillance
 - Morbidity
 - Mortality
 - Quality of life
 - Lost school/work days
 - Hospital discharge
 - Cost
 - Un-insured
 - Underinsured
 - No coverage for asthma related care
 - Geographic distribution
 - Quality of care
2. Develop data to clarify current picture of insurance coverage's for adults and children with asthma, including the availability of asthma medications and devices, follow-up visits, and asthma education services

ACCESS TO CARE

Goal:

Ensure access to primary and specialty care services, education for asthma control, and other services necessary to achieve and maintain optimal asthma control for persons with asthma.

Objectives:

1. Encourage providers to adjust office hours to make them more compatible with the schedules of children and working families
2. Provide primary care physicians with contact information for asthma specialists who are available for consultation for the insured, underinsured, and uninsured
 - Encourage dissemination and utilization of universal referral forms to promote access to asthma specialists
3. Disseminate information regarding the availability of asthma medications and devices to include cost and programs that will assist patients who can't afford them
4. Disseminate information about asthma education programs and resources

ENVIRONMENTAL

A growing body of scientific evidence has illustrated that the air within homes and commercial buildings can be more highly polluted than outdoor air. A recent Institute of Medicine report cites compelling evidence that exposure to biological and chemical contaminants in indoor environments can exacerbate or even cause asthma (Institute of Medicine [IOM], 2002).

Asthma exacerbations can be triggered by allergens and irritants found in both indoor and outdoor environments (e.g., tobacco smoke, dust, mold, cockroaches, pet dander, and some chemicals). Persons with asthma should attempt to avoid exposure to these triggers in order to control their disease. Unfortunately, trigger avoidance cannot always be performed by the individual, it normally requires more extensive strategies in order to monitor the presence of asthma triggers, understand their impact, and develop effective interventions.

INDOOR ENVIRONMENT - HOMES

Goal:

Reduce the exposure of people with asthma to indoor environmental factors that contribute to the burden of asthma

Objectives:

1. Reduce the exposure of children with asthma to environmental tobacco smoke (ETS) in the home environment and in vehicles
 - Develop materials and dissemination plan to educate clinicians, parents, and children about the consequences of exposure to ETS
 - Promote cessation programs for students, parents, and other adult populations
 - Work with Idaho's smoking cessation programs
2. Increase the number of people with asthma who receive education on indoor air contaminants and their role in triggering asthma
 - Develop a mass media campaign to educate the public on indoor air contaminants and their affect on asthmatic populations
 - Distribute appropriate information to physicians, nurses, pediatricians, allergists, emergency departments, and other appropriate health care providers
 - Develop and provide posters for health care provider offices
 - Educate renters, homeowners, and homebuyers in the identification of indoor air contaminants

3. Establish economic assistance for cost effective environmental asthma controls in the home, including:
 - Integrated Pest Management (IPM)
 - Home Inspection
 - Master Home Environmental (MHE) Program, utilizing HEAL (Home Environmental Assessment List) as an intervention tool
4. Develop voluntary partnerships with housing organizations, building retailers, and interested public health organizations to train builders and inspectors on potential indoor triggers of asthma. Partners could include:
 - HUD
 - Home improvement retail stores
 - American Lung Association

INDOOR ENVIRONMENT - BUSINESS

Objectives:

1. Identify and educate building inspectors, building managers, sanitation engineers, and local public health officials on the indoor triggers of asthma and their abatement
 - Identify or create voluntary indoor air quality (IAQ) assessment training programs
 - Identify OSHA standards that apply to the indoor air environment and build upon these standards
 - Educate private and public building managers on the impacts of ETS on the prevalence of asthma in children and adults
 - Integrate indoor air quality education into all inspections
 - Restaurants
 - Businesses
 - Homes
2. Identify existing or create new indoor air assessment tools and make them available to health departments, asthma coalitions, property owners, building operators, and renters
 - Develop tools for businesses including:
 - Indoor air inspection forms, technical assistance, and resources

INDOOR ENVIRONMENT - SCHOOLS

Objectives:

1. Implement EPA's Tools for Schools program
 - Educate students, teachers, and other school officials on the identification of indoor environmental triggers of asthma and the abatement of those triggers
 - Work with school districts to identify potential funding sources to implement indoor air quality and environmental improvements
 - collaborate with Parent Teachers Association
 - Implement an annual/biannual school walk-through
 - Build an infrastructure for improving the indoor environment within schools and childcare facilities

- Ensure that all schools have a nurse or designate trained in asthma management and education
- Ensure smoke-free buildings and grounds during school and all school activities
- Ensure smoke-free childcare facilities
- Collaborate with Idaho Department of Water Resources' "Smart Schools" program

OCCUPATIONAL ENVIRONMENT

Goal:

Reduce or eliminate exposure to environmental triggers of asthma in the workplace

Objectives:

1. Increase work-related asthma education efforts
 - Develop appropriate education materials for:
 - Newsletters
 - Organizational meetings
 - Enlist the aid of local asthma coalitions to help in the dissemination of educational material
 - Provide in-service training
2. Collaborate in developing standards for asthma triggers in the occupational environment
 - Review workplace standards to determine adequacy of employee protection from environmental triggers
 - Human resources
 - Worker health & safety programs
 - Risk management programs
 - Coordinate with non-government agencies in education efforts and risk management
 - Insurance companies
 - Coordinate with other government agencies in education efforts and risk management
 - Occupational Safety and Health Administration (OSHA)
 - Environmental Protection Agency (EPA)
 - National Institute of Occupational Safety and Health (NIOSH)
 - Develop an evolving list of local industries that have high asthma prevalence
 - Review and update annually

OUTDOOR ENVIRONMENT

Goal:

Improve outdoor environmental factors that contribute to the prevalence of asthma

Objectives:

1. Develop specific reduction strategies for air pollution
 - Coordinate efforts between organizations involved in developing and promoting programs to ensure clean air
 - Promote emission reduction standards in vehicles and industry
 - Reduce school bus diesel emissions
 - Promote reduced emissions of criteria and toxic air pollutants
 - Provide for ambient air quality monitoring and reporting
 - Increase dissemination of air quality monitoring data especially in areas that experience elevated pollution levels

2. Promote further research and education efforts in understanding the effects that air pollution has on those with asthma
 - Develop educational materials for outdoor environmental triggers of asthma:
 - Outdoor allergens (pollen, irritants, molds, air pollution, wood smoke, agricultural burning, etc.)
 - Disseminate educational materials
 - Health Care Providers
 - Policy Makers
 - General population
 - Targeted high risk and underserved populations
 - Aged
 - Low socio-economic
 - Disparate groups
 - Rural
 - Educate families on the impact of agricultural and trash burning on individuals with asthma
 - Alternatives to burning
 - Provide for continued research on asthma related health effects of air pollution
 - Grants
 - University research
 - Establish a surveillance mechanism to identify the relationship between field burning and emergency department/inpatient admittance
 - Promote outdoor/ambient air quality awareness
 - Publish air quality reports on Idaho Asthma Prevention and Control Program website
 - Publish air quality health alerts
 - State and local health departments
 - COMPASS
 - Idaho Department of Environmental Quality (IDEQ)

SCHOOLS AND CHILDCARE/PRE-SCHOOLS

Asthma is a chronic disease that impacts a wide spectrum of community responsibilities and services including schools and childcare facilities. Asthma can hinder a student's attendance, participation, and ability to learn. Asthma is the leading cause of school absences due to chronic disease in the United States. Children generally spend six to nine hours per day in schools or childcare making it important that schools and childcare facilities are equipped to attend to children with asthma and that they provide an asthma-safe environment. However, schools and childcare facilities often lack the resources or oversight to properly attend to and support children with asthma and remediate the indoor environment.

ASTHMA MANAGEMENT - SCHOOLS

Goal:

Increase the number of children with asthma who receive asthma management services in accordance with NHBLI guidelines while at school

Objectives:

1. Develop and implement a universal Asthma Management Plan in schools throughout the State
 - School Asthma Management Model
 - Asthma basics
 - Standardized care plan
 - 504 accommodation
 - Emergency protocol
 - Medications
 - Administering
 - Handling
 - Storage
 - Asthma equipment
 - Inhalers, nebulizers, etc
 - Environmental triggers
 - Educational materials
 - Principal
 - School nurse
 - Teachers
 - Coaches
 - School staff
 - Parents
 - Students

2. Ensure that every child with asthma has a physician-directed current asthma action plan on file
3. Ensure that asthma is added to school physical forms
4. Provide a central repository for asthma educational materials and community resources

HEALTH SERVICES - SCHOOLS

Goal:

Increase the number of children with asthma who have access to appropriate health care in school

Objectives:

1. Provide NHLBI guidelines-based school health services in the school setting for children with asthma
 - Provide adequate funding for school asthma programs
 - Provide for adequate staffing
 - School nurses
 - Designated asthma coordinator
 - Provide a full-time registered school nurse, all day, every day for each school
 - Conduct asthma screening during school physicals
 - Ensure immediate access to medications as prescribed by physician & approved by parents
 - Evaluate each student to determine his/her ability to carry asthma medications
 - Use standard emergency protocols for students with asthma
 - Develop and implement a methodology for asthma-related school absence tracking

EDUCATION - SCHOOLS

Goal:

Children with asthma and those who have contact with or care for them in a school setting will have the training to appropriately manage asthma

Objectives:

1. Provide asthma education and awareness programs for students with asthma, parents, and school staff
 - Implement annual asthma in-service for all staff (school nurse, teachers, facilities maintenance, support staff, administration)
 - Pathophysiology
 - Asthma signs and symptoms
 - Triggers
 - Emergency protocols

2. Provide asthma awareness for all children
3. Ensure that children with asthma receive basic asthma management education utilizing age-appropriate materials
 - Open Airways for Schools
 - “A” is for Asthma
4. Educate, support, and involve family members in efforts to reduce students’ asthma symptoms and school absences
5. Collaborate with Idaho Parent Teacher Association

PHYSICAL EDUCATION - SCHOOLS

Goals:

Ensure that children with asthma receive access to physical education/activity and accommodation as necessary

Objective:

1. Provide students with asthma physical education or physical activity as appropriate to each child’s needs
 - Ensure all physical education classes incorporate standard asthma management principles to assure the fullest possible participation of students with asthma
 - Ensure that students have access to preventive medications before activity and immediate access to emergency medications during activity
 - Provide modified activity as indicated by student’s asthma action plan

ENVIRONMENT - SCHOOLS

Goal:

Provide a healthy physical school environment that is beneficial to children with asthma

Objectives:

1. Reduce children’s exposure to asthma triggers commonly found in schools
 - Implement EPA's Tools for Schools program
 - Train teachers, school nurses, and facilities staff in the identification and remediation of indoor environmental triggers of asthma
 - Implement an annual/biannual school walk-through
 - Provide awards for improvement
 - Provide awards for asthma-friendly facilities
 - Work with school districts to identify potential funding sources to implement indoor air quality and environmental improvements
 - Collaborate with PTA
 - Collaborate with Idaho Department of Water Resources' "Smart Schools" program.

- Assure smoke-free buildings and grounds during school and all school activities
- Reduce/prohibit vehicle idling
 - Diesel school buses
 - All vehicles
- Encourage replacement or re-fitting of school buses that are diesel fueled

ASTHMA MANAGEMENT – CHILDCARE/PRE-SCHOOLS

Goal:

Increase the number of children with asthma who receive asthma management services in accordance with NHLBI guidelines while being cared for in childcare/pre-school facilities

Objectives:

1. Develop and implement a universal Asthma Management Plan for childcare/pre-school facilities throughout the state
 - Asthma Management Model
 - Asthma basics
 - Standardized care plan
 - Emergency protocol
 - Medications
 - Administering
 - Handling
 - Storage
 - Asthma equipment
 - Inhalers, nebulizers, etc
 - Environmental triggers
 - Educational materials
 - Administration
 - Teachers
 - Other staff
 - Parents
 - Students
2. Ensure that every child with asthma has a completed health profile form with a care plan
 - Update annually for medication and regimen changes
3. Ensure that every child with asthma has a current physician-directed asthma action plan on file
4. Establish a complete file on existing asthma and allergy-related information sources
 - General background information on asthma
 - Sample copies of asthma policies and procedures
 - Community resources
5. Require all licensed childcare providers to obtain and implement Asthma Management Plan

EDUCATION – CHILDCARE/PRE-SCHOOLS

Goal:

Children with asthma and those who have contact with or care for them in a childcare/pre-school setting will have the training to appropriately manage asthma

Objectives:

1. Provide asthma education and awareness programs for children, parents, and childcare/pre-school staff
2. Implement annual asthma in-service for all staff (teachers, facilities maintenance, support staff, administration)
 - Pathophysiology
 - Asthma signs and symptoms
 - Triggers
 - Emergency protocols
3. Provide asthma awareness for all children
4. Ensure that children with asthma receive basic asthma management education utilizing age-appropriate materials
 - “A” is for Asthma
5. Educate, support, and involve family members in efforts to reduce children’s asthma symptoms and absences

ENVIRONMENT – CHILDCARE/PRE-SCHOOLS

Goal:

Provide a childcare/pre-school physical environment that is beneficial for children with asthma

Objectives:

1. Reduce children’s exposure to asthma triggers commonly found in pre-school/childcare facilities
2. Implement EPA's Tools for Schools program
 - Train teachers, childcare providers, and other staff in the identification and remediation of indoor environmental triggers of asthma
 - Implement an annual/biannual school walk-through
 - Provide awards for facility improvement
 - Provide awards for asthma-friendly facilities
3. Ensure smoke-free activities, facilities and grounds

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4. Reduce/prohibit vehicle idling
 5. Encourage replacement or re-fitting of school buses that are diesel fueled

COORDINATION

Asthma is a disease that impacts a wide spectrum of state and local responsibilities and services related to healthcare, environment, schools and childcare facilities, disease surveillance, among others. Coordination of asthma-related activities will provide Idahoans with asthma more effective means of asthma management. Linking coalitions, professional and community-based organizations, and state and federal agencies will improve their ability to implement asthma programs and share asthma related information.

Goal:

Increase statewide coordination of asthma-related education and outreach activities

Objective:

1. Ensure infrastructure to coordinate, implement, and evaluate a statewide asthma program
2. Expand and maintain an ongoing state-level asthma coalition (Asthma Coalition of Idaho) in support of state-level efforts to facilitate coordination and sharing of information and resources through local coalitions
 - Facilitate implementation of the statewide asthma plan
3. Develop a central educational material repository, web-site, and toll-free asthma information line
 - Catalogue and disseminate public awareness and educational materials
 - Provide linkages among coalitions, professional organizations, community-based organizations, and state and federal agencies
 - Maintain links to the State's aggregate surveillance and epidemiological data
 - Disseminate an asthma basics information packet
 - Disseminate asthma-related educational materials on indoor and outdoor air quality and occupational asthma
 - Provide links to existing state and federal web sites on real-time outdoor air conditions and ozone action information
 - Maintain a calendar and bulletin board for members of the public and health care professionals highlighting opportunities regarding asthma-related referrals, events, resources, training, and conferences
 - Provide toll-free access for asthma information

COLLABORATION

The complexities involved in asthma diagnosis, treatment, and management create a need for joint ownership of the statewide asthma plan. The statewide asthma plan will build and strengthen partnerships for an effective and interdisciplinary approach to asthma management and advocate for the safety and health of Idahoans living with asthma. The stakeholder partnerships will provide opportunities for individual stakeholders to meet, share best practices and resource information, and discuss all asthma related issues. In addition, stakeholder partnerships will not only ensure implementation of individual sections of the statewide asthma plan but are essential to the success of the Idaho Statewide Asthma Plan.

Goal:

Strengthen partnerships and collaboration efforts among health care systems and other sectors of society (governmental and non-governmental organizations) in all areas of asthma prevention and management.

Objective:

1. Develop the infrastructure for statewide collaboration
2. Provide leadership in local partnerships and collaborations (local asthma coalitions), program development and evaluation, advocacy, and resource referral for programs, materials and services, and identification of experts
 - Facilitate implementation of the statewide asthma plan
 - Ensure meaningful, community involvement in asthma prevention and control strategies
 - Promote all-county involvement in local asthma coalitions
 - Provide opportunities for stakeholders/partners to meet and share best practices, resources, and local concerns
 - Continuing education
 - Conferences
 - Workshops
 - Seminars
 - Collaborate with groups addressing asthma-related environmental issues
 - Support activities that increase knowledge and encourage asthma self-management including asthma camps for youth

COMMUNICATION

Effective asthma control is directly related to how well people with asthma, their care givers, and members of their health-care team communicate their knowledge of the disease and coordinate its management. It is also important to communicate with the general public to create awareness and increase general understanding of asthma. Communication methods should be tailored to specific groups which may include persons with asthma and their caregivers, health care providers, public health advocates, policy makers, disparate populations, schools, and licensed childcare providers. There are many methods of communication including newspaper and public service announcements, television and radio spots, the Internet, fact sheets, brochures, workshops and training seminars.

Goal:

Develop and implement a statewide public awareness strategy to increase understanding of asthma

Objective:

1. Develop infrastructure for a statewide asthma public awareness program
2. Implement a statewide asthma public awareness campaign
3. Develop simple, key asthma messages
4. Develop a statewide asthma media campaign with public service announcements (PSA's), television, and radio spots, billboards, Internet messages, fact sheets, brochures, and newspaper coverage that relay these messages consistently
 - Asthma signs and symptoms
 - Asthma is a chronic disease
 - Everyone with asthma needs a written asthma plan
 - Environmental triggers
 - Environmental tobacco smoke
 - Indoor air quality
 - Ambient air quality
 - Integrated pest management
 - Culturally and linguistically tailored
5. Promote & disseminate media messages and materials through local asthma coalitions
6. Develop asthma resource publication for asthma patients and caregivers

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7. Provide consistent asthma education for those outside the traditional health care provider network who have regular contact with persons with asthma
 - work site
 - community venues
 - state agencies
 - pharmacies
 - asthma coalitions
 - churches
 - retail shops
 - social service agencies
 - voluntary agencies
 8. Provide asthma-related education to individuals who influence public policy
 9. Disseminate findings from asthma surveillance activities
 - public service announcements
 - press releases
 - asthma web site, etc.

SURVEILLANCE

Surveillance, data monitoring and collection, is a critical part of the Statewide Asthma Plan. Surveillance is essential for planning and evaluation of public health programs. Asthma surveillance can monitor and measure efficacy of medial and public health asthma interventions. Surveillance data can also inform the decision-making process for public and private policy makers.

Goal:

Develop, expand, and maintain an asthma surveillance system

Objective:

1. Develop infrastructure for statewide asthma surveillance
2. Conduct accurate, timely statewide asthma surveillance to include at a minimum:
 - Prevalence
 - Mortality
 - Severity
 - Hospitalization
 - Emergency department
 - Quality of life
 - Economic impact
3. Conduct data needs gap analysis
4. Provide a forum for exchanging and strengthening health, economic, and environmental data relevant to asthma in the state
5. Work toward developing pilot projects and research programs to answer specific, priority questions by examining health and environmental data
6. Define surveillance standards to allow for tracking progress on asthma-related Healthy People 2010 objectives
7. Explore feasibility of defining and implementing appropriate, notifiable asthma-related sentinel events
8. Conduct survey of asthma patients to determine baseline level of knowledge and utilization of asthma self-management skills
9. Conduct survey of health care professionals to determine baseline-level of knowledge of NHBLI asthma guidelines



10. Explore the feasibility of tracking asthma-related school/work absence rates

10. Publish an annual asthma surveillance report

- Make the results publicly available to allow for analyzing and comparing baseline asthma rates

POLICY

Asthma policies will define a course of action that will ensure all Idahoans improved asthma health care, increased protection from environmental asthma causes and triggers, asthma education and management in schools, and childcare/pre-schools.

POLICY – HEALTH CARE

Develop policies at the State and local level that promote adherence to clinical guidelines, reduce asthma health care financing costs and expands benefit coverage, increase professional education, and improve access and quality of care

Objectives:

1. Organize a group of physicians who specialize in the treatment of asthma who will serve as a core advocacy group for the promotion and implementation of appropriate diagnosis and treatment of asthma
2. Increase insurance coverage for persons with asthma
3. Improve financial reimbursement for services to physicians, other health care professionals, and health care facilities
4. Encourage providers to adopt service hours that will be compatible with the work and school schedules of all persons with asthma including the insured, underinsured, and uninsured.

POLICY - ENVIRONMENTAL

Goal:

Develop policies at the State and local level that provide for environmental protection for those with asthma

Objectives:

1. Develop local ordinances to address environmental tobacco smoke (ETS) in and around schools, daycare facilities, and businesses
2. Establish smoke-free unit housing
3. Provide renters the legal ability to break a lease in the event that environmental triggers of asthma are prevalent
4. Implement legislative budgeting for education on environmental triggers of asthma

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5. Increase utilization of the Millennium Fund for a comprehensive tobacco prevention program
 6. Implement local ordinances to address field and trash burning
 7. Reduce vehicle and industrial emissions through increased air pollution controls

POLICY – SCHOOLS

Goal:

Develop statewide school policies that will provide for the optimal care, education, and environmental protection of children with asthma and develop minimum standards for school facilities and workers

Objectives:

1. Implement reduction of or the elimination of diesel emissions from school buses
2. Provide a school nurse or school designate who is able to educate and manage a school asthma program in every school
3. Provide funding for environmental remediation in schools
4. Ensure smoke-free buildings and grounds during school and all school activities

POLICY – CHILDCARE/PRE-SCHOOLS

Goal:

Develop statewide childcare/pre-school policies that will provide for the optimal care, education, and environmental protection of children with asthma and develop minimum standards for facilities and workers

Objectives:

1. Establish smoke-free childcare facilities
2. License all childcare providers
3. Include basic asthma awareness for all childcare providers in the required First Aid class

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