



Colorado Asthma Plan
Putting The Pieces Together



COLO RADO
ASTHMA COALITION

February 2005

An Open Letter to the People of Colorado:

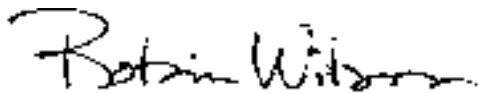
As a community, how do we address an escalating chronic health problem? Asthma, a chronic lung disease that impacts children and adults, has rampantly grown over the past two decades. Nationally, 14.6 million people are affected by asthma. In Colorado, asthma is a significant health factor for 284,000 individuals.

For months, concerned community partners have contemplated strategies and potential interventions to this chronic disease, determined to learn from prior efforts. Given the magnitude of asthma and its complexities, solutions require diverse approaches that are coordinated. A comprehensive plan is critical to focus efforts, data and financial resources.

The Colorado Asthma Plan is the result of over 100 individuals and organizations that have contributed their best thinking and most passionate energies. Many strategic plans are optimistically presented as complete documents; yet the Colorado Asthma Plan is intended as the beginning of *“Putting the Pieces Together”*. As improved information surfaces from the results of more ardent data analyses and outcomes of specific projects, the Colorado Asthma Plan will evolve to the next set of interventions, ever-building refined success in the process.

The Colorado Asthma Coalition, with its statewide membership, presents the Colorado Asthma Plan. May this plan serve as a blueprint for community action as we all work together in improving asthma diagnosis, education and intervention.

Sincerely,



Robin Wilson, President
Colorado Asthma Coalition



EXECUTIVE SUMMARY

Following four years of planning, the first Colorado Asthma Summit was held October 12, 2000. With representatives from throughout the state, participants solidified their commitment to forming a state-wide asthma coalition. In December 2000, the Colorado Asthma Coalition (CAC) was formed, with a board of directors and workgroups to focus CAC activity. On November 5, 2004, the CAC board of directors voted to become an independent non-profit corporation, separating from its host, the American Lung Association of Colorado (ALAC).

The Colorado Department of Public Health and Environment (CDPHE) and the Environmental Protection Agency (EPA) have had strong involvement in CAC since its inception. This partnership, with funding from Rose Community Foundation and Caring for Colorado Foundation, has enabled CAC to pursue meaningful projects, providing resources and networks of information to the state.

The Centers for Disease Control and Prevention (CDC) provides funding to states that form comprehensive asthma plans. CDPHE, EPA, and ALAC reaffirmed their partnership in August 2003 as they empowered CAC to develop a state asthma plan. These four entities became the steering committee for Colorado's Asthma Plan.

After much preparatory work, CAC hosted the initial state asthma plan workshop – *Putting the Pieces Together* – October 2003.

Over the course of the next several months, the focus was on developing goals and strategies related to workgroups; Provider Education and Best Practices, Public Education and Awareness, School Health and Childcare, and Environmental and Occupational Health. As the groups worked creatively to put the plan together, mindful consideration was given to overlapping areas of interest – Surveillance and Data Analysis, and Health Disparities.

Workgroups emphasized coordination of strategies to maximize future funding opportunities, include multiple organizations in activities, and reach underserved populations.

The Colorado Asthma Plan will augment CDPHE's proposal to CDC to fund elements of the plan. Further development of the plan will continue through the workgroup process. As components of the plan evolve, a variety of funding sources and effective methods for implementation will be paramount.

We are grateful for the collective thinking of over 100 Coloradans who have developed strategies to better understand asthma, and design inclusive interventions to curb the prevalence and severity of asthma.

Photo Credit: Denver Metro Convention & Visitors Bureau



ACKNOWLEDGMENTS

The Colorado Asthma Plan is the result of statewide, collaborative stakeholders working to improve the lives of those with asthma. Participants in each workgroup met often, and diligently defined goals and strategies incorporated in this comprehensive strategic plan for future asthma intervention.

A special thanks to:

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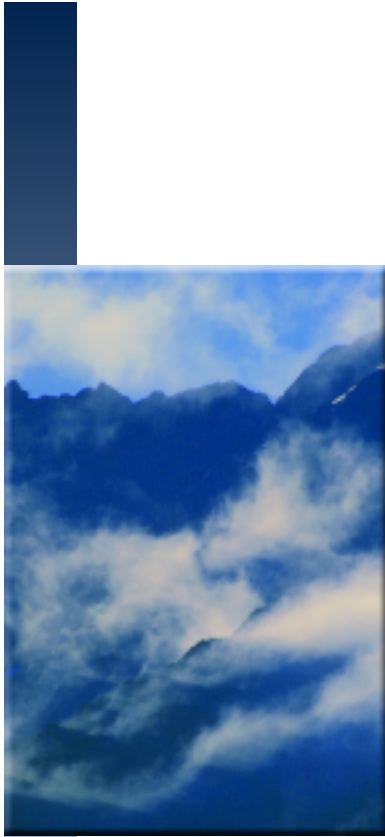
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TABLE OF CONTENTS



Colorado Asthma Coalition Welcome	i
Executive Summary	ii
Acknowledgments	iii
Introduction	2
Scope of Asthma	3-4
Colorado Asthma Plan Goals	5
Provider Education and Best Practice - Goal A & Strategies (1-5).....	6-11
Improve Access to Care - Goal B & Strategies (1-2)	12-14
Environmental and Occupational Health - Goal C & Strategies (1-6)	15-21
Public Education and Awareness - Goal D & Strategies (1-3)	22-25
School Health and Childcare - Goal E & Strategies (1-5)	26-31
Summary	32
Appendices	
A - Sequence of Activities	33
B - Workgroup Process	34
C - Participants	35-36

Seven-year-old Timmy always walks; he will not run because he fears that his asthma will cause him to start wheezing. Dr. Gauge struggles to find the right medication to keep his 35-year-old asthma patient from her frequent visits to the emergency room. A researcher studies the effects of tobacco smoke on asthma; and a public relations firm creates a message that will prompt the public to seek appropriate asthma diagnosis.

Each of these puzzle pieces expose some of the complexities that are evident with asthma. Generally, these intricacies are addressed in isolation, which often do not produce the quality measures necessary for success.

The Colorado Asthma Plan is intent on *“Putting the Pieces Together”* as a means of capturing a full picture of this chronic disease – to convey this image to people who can alter asthma awareness and treatment, and improve the lives of children and adults with asthma.

Stakeholders, from throughout the state, crafted this plan with the guiding assumption that these problems require greater resources than have previously been applied to asthma issues. The goal of the Colorado Asthma Coalition, through its various partners, is an infrastructure that is sustainable.

Sustainability mandates collaborative solution. Therefore, as the workgroups addressed asthma (school health and childcare, provider education and best practices, public education and awareness, and environmental and occupational health) a predominant theme of shared responsibility emerged. This collective ownership of the issues and potential strategies offers a strong, fresh energy that leverages resources and inspires creative solutions.

Interwoven within the planning process have been overlapping areas of interest – disparities, surveillance and data, and coordination. These strategic issues were consciously incorporated into each workgroup’s activities.

Early in the process, the group acknowledged that disparities in asthma care challenge us to reach across ethnic boundaries, address urban as well as rural communities, and consider the differences between the insured and under-insured populations. Although the Colorado Department of Public Health and Environment (CDPHE) has initiated an understanding of the scope and impact of asthma in our state, aggressive surveillance and data analysis are required to drive interventions that ultimately lead to successful solutions. Coordinated efforts in data collection carry power. Colorado’s data collection and insights must bridge multiple departments within CDPHE and regularly broadcast to external groups. Evaluation and findings will guide future direction, innovative problem-solving, and measurements of progress toward the Coalition’s goals.

An over-arching approach in Colorado’s Asthma Plan includes focused intervention in selected communities. These concentrated efforts provide fertile opportunities to explore applicability to larger audiences.

The Colorado Asthma Plan identifies pieces of the asthma puzzle and invites continued collaboration as solutions are put together.



SCOPE OF ASTHMA

National Summary

While the past 20 years have brought major, national advances in the diagnosis and treatment of asthma, this chronic disease still affects more than 14 million people in our country. Asthma is annually responsible for an estimated 1.8 million emergency room visits and 465,000 hospital admissions. In the decade between 1990 and 2000, the health-related cost of asthma more than doubled, with costs rising from \$6.2 billion to \$12.7 billion. Racial disparities among people with asthma are evident. For example, Non-Hispanic Blacks have an asthma death rate over 200% higher than Non-Hispanic Whites, and 160% higher than Hispanics.

These statistics continue to garner the United States' continued strength to improve access and quality of asthma care among the populace of this country. The Centers for Disease Control and Prevention (CDC) are among the leaders of this national effort.

Colorado's Asthma Perspective

Colorado has the second highest national prevalence of asthma, according to CDC's 1998 National Health Interview Survey. The 2002 Behavioral Risk Factor Surveillance System shows that Colorado remains above the national asthma average in many categories. Colorado exceeds national rates for both male and female adults with asthma. The percentage of White Non-Hispanic adults, and percentage of Black Non-Hispanic adults are both above U.S. asthma norms.

Children are a major concern of asthma experts. Children represent a sector of the population whose health outcomes are often adversely impacted by declines in economic fortunes, like those of the past few years. The rate of asthma hospitalizations for children under five-years has been increasing since 2000. The rate per 10,000 children was 51.3 in 2000, 56.8 in 2001, and 60.8 in 2002. Data from the largest urban hospital in Colorado, Denver Health and Hospitals, shows from 2000-2002 an estimated rate of asthma in their diverse service population for 32.8 per 1,000 in those nine-years-old or less, and 35.6 per 1,000 in those children between 10 and 19 years of age. These statistics clearly express the significant need to address asthma in our urban Colorado areas.



In rural areas of the state, such as Weld County, prevalence rates are estimated to be high, possibly due to the migrant populations, according to reports from Northern Colorado Medical Center, the major hospital in this primarily agriculture and livestock-based area of the state. These rural numbers also reflect elevated asthma values seen in migrant farm worker populations in other parts of the state, another disparate and often underserved group in Colorado.

Funding from CDC established the Colorado Asthma Program at the Colorado Department of Public Health and Environment (CDPHE). This program, over the past four years, established several vital projects to lay the foundation for intensive data collection and analysis. These data will contribute to an expanded understanding of asthma and provides direction for interventions.

CDPHE provides the underpinning for the Colorado Asthma Plan. State-wide data collection and analysis serve to monitor, as well as direct the course of intervention. CDPHE provides communication about national trends, training and funding. They also share information about other state programs, services and interventions.

CDPHE will provide technical support, data collection and analysis, and coordination across those state departments that can assist with implementation of the Colorado Asthma Plan. Examples of CDPHE's Asthma Program coordination include the following:

- Collaboration with nutrition/obesity programs to deliver coordinated message;
- Collaboration with tobacco programs to deliver coordinated second-hand smoke and cessation messages;
- Collaboration with CDPHE Air Pollution Division on focused environment issues including high particulate pollution, high ozone levels, confined animal feeding operations, high concentrations and prolonged periods of blowing dust, agricultural operation impacts and industrial impacts;
- Collaboration with CDPHE Health Statistics Section on data analysis and use of the Geographic Information System; and
- Collaboration with the CDPHE Turning Point Initiative to identify and address disparity issues.

CDPHE's Asthma Program will continue to promote and facilitate the statewide exchange of information regarding asthma management, research, treatment, guidelines, and data collection. CDPHE offers a solidified partnership, as the Colorado Asthma Coalition embarks on its work to reduce the prevalence, morbidity, and mortality of asthma in Colorado.



COLORADO ASTHMA PLAN GOALS



GOAL A

PROVIDER EDUCATION AND BEST PRACTICE

GOAL B

IMPROVE ACCESS TO HEALTHCARE

GOAL C

ENVIRONMENTAL AND OCCUPATIONAL HEALTH

GOAL D

PUBLIC EDUCATION AND AWARENESS

GOAL E

SCHOOL HEALTH AND CHILDCARE

GOAL A – PROVIDER EDUCATION AND BEST PRACTICE

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Statement of Need

The nonspecific symptoms of asthma and complicated socioeconomic and cultural factors can play a role in the diagnosis and treatment of asthma. Recent data have shown that many cases of asthma are unrecognized or misdiagnosed. As a result, patients are not properly diagnosed, provided with appropriate treatment, and their care is often delayed.

Strategies

1. Conduct focus projects in specific communities to assess need for provider behavior change programs
2. Develop behavior change models for healthcare providers regarding the importance of accurate treatment, with emphasis on identifying asthma as a persistent chronic disease
3. Increase number of Certified Asthma Educators in the State of Colorado
4. Increase access to best practice resources for healthcare providers
5. Utilize available data to evaluate treatment practices



“ASTHMA AFFECTS AN ESTIMATED 284,000 PEOPLE IN COLORADO.”

GOAL A – STRATEGY 1

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Strategy 1

Conduct focus projects in specific communities to assess need for provider behavior change programs

Selected Population

Assessment of asthma provider patterns among healthcare providers is the emphasis of this strategy. Projects will be conducted in focal areas, with involvement of physicians, nurse practitioners, physician assistants, respiratory therapists, nurses, pharmacists, and other healthcare providers.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, and in partnership with the Colorado Department of Public Health and Environment, the Provider Education Committee will assess the need for provider behavior change programs. The objective is to implement programs that address proper diagnosis and treatment of asthma. Partners in this project will include local healthcare institutions, universities and colleges, medical societies, professional associations, local public health, and other local asthma partners.

Measurable Indicator

Assessment of this strategy is to be based upon the number of providers responding to the survey, the identification of provider needs for provider behavioral change based on the analysis of the surveys, and the identification of evidence-based changes among providers.

Projected Outcome

Year I - Data collection methods will be determined and the need for provider behavior change programs will be measured. Results of this study will guide decisions about designing education programs that will be receptive to medical providers.

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Strategy 2

Develop behavior change models for healthcare providers regarding the importance of accurate treatment, with emphasis on identifying asthma as a persistent chronic disease

Selected Population

This strategy focuses on behavior change models among healthcare providers. Focal areas will be identified for inclusion of physicians, nurse practitioners, physician assistants, respiratory therapists, nurses, pharmacists, and other healthcare providers from these territories.

Partnership for Action

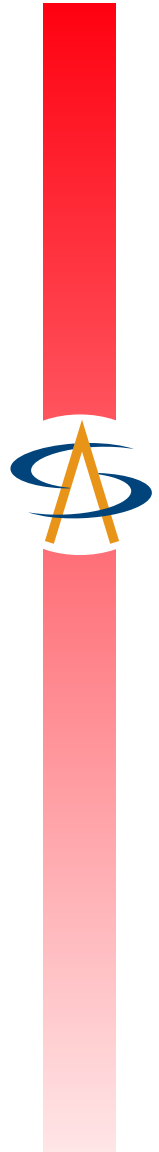
Under the lead of the Colorado Asthma Coalition, and in partnership with the Colorado Department of Public Health and Environment, the Provider Education Committee will identify provider behavior change programs for implementation. These programs will emphasize proper diagnosis and treatment of asthma. Partners in this activity will include local healthcare institutions, universities and colleges, medical societies, professional associations, local public health agencies, and other regional asthma partners.

Measurable Indicator

CAC will publish a completed behavior change model and implementation plan, which will be based on the results of healthcare provider focus groups and surveys. Behavior changes of participants will be tracked to measure the program's success. Data analysis will measure hospitalizations and emergency department visits to determine the impact of the program. Pharmacy data, if available, will also be used to assess the success of this strategy.

Projected Outcome

Years II and III – Based on the needs assessment of strategy 1, provider behavior change programs will be implemented in focus areas to increase proper asthma diagnosis and treatment. The model will be evaluated for potential revision and applicability to other communities.



GOAL A – STRATEGY 3

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Strategy 3

Increase number of Certified Asthma Educators in the State of Colorado

Selected Population

Healthcare providers who are eligible to become a Certified Asthma Educator are the foci of this strategy.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, the Provider Education Committee will, with other community partners, organize training and promote certification for asthma educators.

Measurable Indicator

This strategy's progress will be measured by tracking the number of individuals who complete trainings toward certification, and the number of those who become Certified Asthma Educators.

Projected Outcome

Years I, II, and III - Programs to prepare for the certification exam will be held at a pre-determined frequency, with the objective of increasing, throughout the state, the number of Certified Asthma Educators by 10% each year. The Certified Asthma Educator preparation course and certification program will be evaluated, with survey input from participants. This assessment will determine modifications to the program.

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Strategy 4

Increase access to best practice resources for healthcare providers

Selected Population

Distribution of best practice resources to healthcare providers is the aim of this strategy. Healthcare providers include physicians, nurse practitioners, physician assistants, respiratory therapists, nurses, pharmacists, and others.

Partnership for Action

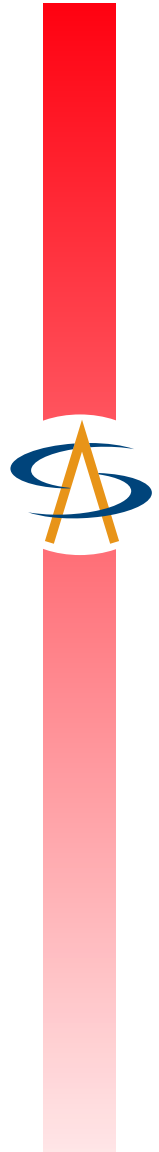
Under the lead of the Colorado Asthma Coalition, the Provider Education Committee will ensure that providers throughout the state will have access to best practice resources. Utilizing partnerships with organizations such as the Colorado Clinical Guidelines Collaborative, workgroup members and other physicians will develop and distribute best practice materials based on National Asthma Education Prevention Program Guidelines.

Measurable Indicator

Strategy 4 will be verified by the numbers of materials distributed, locations of the state where materials distributed, website visits, and training programs offered.

Projected Outcome

Year III - Healthcare providers will have increased access to consistent resources, based on National Asthma Education Prevention Program Guidelines, including access to best practice resources.



GOAL A – STRATEGY 5

Goal A

Healthcare providers in Colorado will correctly identify and treat asthma

Strategy 5

Utilize available data to evaluate asthma treatment practices

Selected Population

Treatment practices of asthma healthcare providers is the core of this strategy. Healthcare providers include physicians, nurse practitioners, physician assistants, respiratory therapists, nurses, pharmacists, and other healthcare providers.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, treatment practice deficits will be identified among specified providers, utilizing data from partnerships with insurance providers, healthcare institutions, and involving other collaborative efforts in evaluating asthma treatment practices.

Measurable Indicator

This strategy relies on measurements including a decrease in the number of hospitalizations, emergency department visits, and deaths due to asthma. Further study will evaluate the appropriateness of the types and levels of medications prescribed to people with asthma, including the ratio of short-term to long-term medications.

Projected Outcome

Years I, II, and III - An asthma surveillance program that measures the use of appropriate treatment practices will be established for the state, and utilized to collect data and evaluate practices. [Monitoring may require five to six years in order to attain a meaningful dataset and multilevel outcome.]

Goal B

Improve access to appropriate healthcare for all people diagnosed with asthma

Statement of Need

Data reveals differences in asthma care between urban and rural communities. Disparities in healthcare for disparate and underserved populations also contribute to a lack of access to appropriate asthma treatment and continuing care.

Strategies

1. Utilize available data to develop effective methods to ensure those with asthma receive appropriate healthcare.
2. Promote statewide asthma advocacy for increased access to care.



“ANNUALLY, COLORADOANS WITH ASTHMA HAVE 160% MORE DOCTOR VISITS THAN THOSE WITHOUT ASTHMA.”

GOAL B –STRATEGY 6

Goal B

Improve access to appropriate healthcare for all people diagnosed with asthma

Strategy 1

Utilize available data to develop effective methods to ensure those with asthma receive appropriate healthcare

Selected Population

Strategy 1 is targeted to individuals with asthma who are uninsured, under-insured, or possess other barriers to appropriate asthma healthcare.

Partnership for Action

The Colorado Asthma Coalition will use data to advocate for increased access to healthcare. Partnerships with other organizations that share this mission will be established or strengthened, and will include working closely with insurance providers and pharmaceutical companies.

Measurable Indicator

Changes in payer source data from hospitals, HMO's and Medicaid will be analyzed and monitored to determine if meaningful increases in access have been achieved. Surveying of community-based agencies will also be used to assess impact of this strategy in the community.

Projected Outcome

Year I – Partnerships will be increased to expand advocacy for access to asthma health care. In addition, Colorado will demonstrate an improved utilization of evidence-based practice to increase access to appropriate asthma healthcare.



Goal B

Improve access to appropriate healthcare for all people diagnosed with asthma

Strategy 2

Promote statewide asthma advocacy for increased access to care

Selected Population

Individuals who are uninsured, under-insured, underserved, or possess other barriers to appropriate asthma healthcare in Colorado are the foci of this strategy.

Partnership for Action

The Colorado Asthma Coalition will launch a collaborative promotion, regarding access to healthcare for selected populations. Coalition partners will work together to ensure availability to healthcare for those in need through increased public awareness.

Measurable Indicator

CAC will track the number of partnerships with advocacy organizations, the number of memberships in health policy-making organizations, and relevant state or local legislative and policy initiatives.

Projected Outcome

Years II and III - Partners will collaborate to consistently advocate for increased access to care for all people with asthma, resulting in increased healthcare for the uninsured, under-insured, underserved, or possess other barriers to healthcare.



GOAL C – ENVIRONMENTAL AND OCCUPATIONAL HEALTH

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Statement of Need

Recent data indicates that Colorado has the second highest prevalence of asthma in the country. This clearly indicates the need for data collection and education regarding environmental factors that affect asthma, with an emphasis on the impact of indoor and outdoor environments that result in hospitalizations, activity limitations, and death.



Strategies

1. Develop a statewide asthma surveillance program
2. Facilitate the development of university projects that are designed to better understand the etiology of asthma and to evaluate the effectiveness of control strategies and interventions
3. Provide education regarding triggers for asthma and asthma exacerbations, including known indoor and outdoor agents, focusing on those triggers unique to Colorado
4. Decrease children's exposure to secondhand smoke (SHS) through education regarding effects and dangers of SHS, with a focus on skills training in SHS harm reduction techniques, smoking cessation techniques, and other relevant resources
5. Promote appropriate air quality standards by seeking, developing, and disseminating guidelines and regulations regarding the control and remediation of asthma triggers in indoor, outdoor, and occupational environments
6. Develop and distribute a list of qualified professionals and resources for evaluation and remediation of home and occupational environments

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 1

Develop a statewide asthma surveillance program

Selected Population

Those at high risk for asthma will initially be sought to better understand the impact of asthma. These predisposed individuals comprise groups that are medically underserved, such as low-income families, disparate populations, migrant workers, the uninsured or under-insured, children, and students.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, and in partnership with the Colorado Department of Public Health and Environment, a broad range of partners and collaborators will play a role in asthma surveillance. Colorado Asthma Coalition partners such as, healthcare institutions, insurance providers, businesses, local health departments, school districts, school nurses, and other organizations will be significant contributors in the development of a surveillance plan for the state.

Measurable Indicators

Strategy 1 requires a Colorado asthma surveillance report, published annually, that characterizes asthma-specific outcomes. The surveillance report should identify specific risk factors (environmental, residential, and occupational) that contribute most frequently to asthma morbidity and mortality. A validated, confidential, readily accessible asthma surveillance data repository will be developed.

Projected Outcome

Year I - Colorado will develop an asthma surveillance program implementation plan, establish a network of collaborators and data providers, and write protocols for reporting to address data needs, and develop the infrastructure for a data repository.

Years II and III - A registry for people with asthma in Colorado will be developed and utilized throughout the state.



GOAL C –STRATEGY 2

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 2

Facilitate the development of university projects that are designed to better understand the etiology of asthma and to evaluate the effectiveness of control strategies and interventions

Selected Population

People with asthma in Colorado affected by environmental factors are the selected groups of interest for this strategy.

Partnership for Action

Under the lead of the Colorado Department of Public Health and Environment, partnerships include Colorado universities, individuals with asthma, schools, employers and business associations, local healthcare institutions, and other Colorado Asthma Coalition partners that are committed to a better understanding of occupational and environmental asthma factors.

Measurable Indicators

Success for this strategy includes measurement of the number of new collaborative investigations of asthma outcomes, risk factors and interventions, as well as peer-reviewed technical reports and scientific journal articles.

Projected Outcome

Year III – An increase in research partnerships with universities will be established, resulting in improved knowledge and understanding of residential, environmental and occupational sources that trigger asthma.

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 3

Provide education regarding triggers for asthma and asthma exacerbations, including known indoor and outdoor agents, focusing on those triggers unique to Colorado

Selected Population

The selected populations for this strategy are high-risk asthma patients and those organizations that serve high numbers of people with asthma, including low-income populations, urban dwellers, disparate communities and children.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, partners will educate high-risk populations regarding asthma. Partners include healthcare providers, home visit nurses, healthcare institutions, employers, schools and childcare providers, local health departments, and others who are dedicated to reducing environmental factors that impact asthma.

Measurable Indicator

Strategy 3 tracks the number of people receiving education and other resources. Analyses of results from pre-and post-testing of participants' knowledge will be monitored. Counting the number of participating facilities and monitoring their changes will guide this strategy.

Projected Outcome

Year I - An effective program to educate selected populations about asthma triggers will be developed.

Years II and III - Selected populations throughout the state will participate in educational programs and receive resources to reduce asthma triggers in homes, schools, and occupational settings.



GOAL C –STRATEGY 4

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 4

Decrease children's exposure to secondhand smoke (SHS) through education regarding effects and dangers of SHS, with a focus on skills training in SHS harm reduction techniques, smoking cessation techniques, and other relevant resources

Selected Population

Individuals at high risk of exposure to secondhand smoke and those organizations that serve those at risk are the hub of this strategy, including low-income populations, urban dwellers, disparate communities, and children.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, the Environmental and Occupational Health Committee will utilize evidence-based programs to reduce the impact of secondhand smoke exposure. Collaborators include healthcare institutions, insurance providers, local community organizations, schools, childcare programs, established tobacco prevention and cessation programs, and other Coalition partners dedicated to reducing secondhand smoke.

Measurable Indicator

Through the utilization of Child Health Survey, Behavioral Risk Factor Surveillance System, Colorado Quitline Questionnaires, and other relevant data, the number of people with asthma that are exposed to SHS are expected to decrease.

Projected Outcome

Year I - An effective program to address secondhand smoke, based on theory, will be identified for implementation or development.

Years II and III - An evidence-based program, based on theory, will be identified or developed and implemented to specifically reduce children's exposure to secondhand smoke.

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 5

Promote appropriate air quality standards by seeking, developing, and disseminating guidelines and regulations regarding the control and remediation of asthma triggers in indoor, outdoor, and occupational environments

Selected Population

This strategy targets organizations with control or influence over potential asthma triggers in indoor, outdoor, and occupational settings.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, the Environmental and Occupational Health Committee will develop and disseminate guidelines to promote proper control of asthma triggers. Partners will include local health departments, environmental health groups and organizations, housing associations and programs, business owners, schools and childcare providers, and advocacy groups.

Measurable Indicator

Evaluation measurement urges the development of a guideline document, addressing air quality standards, its distribution, and subsequent environmental remediation.

Projected Outcome

Year I – The development, publication and dissemination of laws, guidelines, and regulations regarding air quality in Colorado will be completed.

Years II and III - A revised Colorado guideline for control of asthma triggers in indoor, outdoor, and occupational settings will be developed and distributed.



GOAL C –STRATEGY 6

Goal C

Reduce asthma mortality and morbidity in Colorado through strategies that influence indoor, outdoor, and occupational environments

Strategy 6

Develop and distribute a resource list of qualified professionals and resources for evaluation and remediation of home and occupational environments

Selected Population

Foci of this strategy are individuals and organizations seeking information or environmental analysis about remediation of home and occupational environments, so as to reduce environmental factors that affect or trigger asthma.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, the Environmental and Occupational Health Committee will develop and maintain a resource list to assist those seeking information on evaluation and remediation of home and occupational environments. Other partners include local health departments, environmental health groups and organizations, housing associations and programs, business owners, schools and childcare providers, advocacy groups, and other partners dedicated to reducing asthma triggers in home and occupational environments.

Measurable Indicator

Success of this strategy will be measured by the number and sources of requests for resources on removal of triggers from home and occupational environments.

Projected Outcome

Year I - Information will be collected and a system to further disseminate information will be developed.

Years II and III - A system for distributing information about qualified professionals and resources for evaluation and remediation of home and occupational environments will be maintained and the list will be expanded, particularly in rural areas.

Goal D

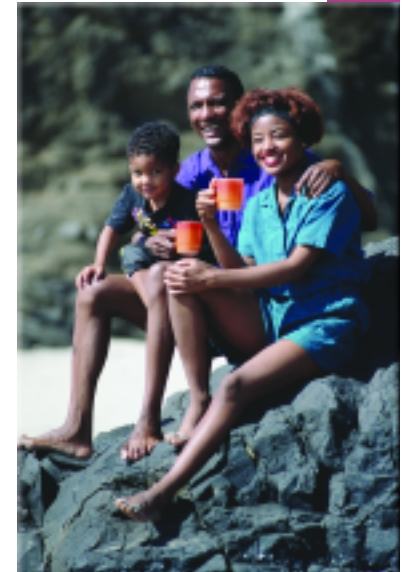
Increase awareness of asthma prevalence rates, the impact of asthma in Colorado, and how to effectively manage this chronic disease, emphasizing culturally diverse populations, and regional and rural areas of the state

Statement of Need

Changing the public's perceptions about asthma is a key component in changing or developing policies and behaviors that impact this chronic disease. Given the state's geographic barriers and cultural diversity, the Colorado Asthma Plan must address inclusiveness in its strategies.

Strategies

1. Develop a comprehensive, statewide media campaign utilizing available data to increase the awareness of asthma
2. Increase asthma awareness in culturally diverse populations through the use of culturally appropriate resources
3. Increase regional Coalition activity and membership by increasing members' and community leaders' awareness of asthma data specific to the individual regions of the state



“IN COLORADO, AFRICAN-AMERICANS ARE HOSPITALIZED AT A RATE OVER 3.5 TIMES THAT OF WHITES.”

GOAL D –STRATEGY 1

Goal D

Increase awareness regarding asthma prevalence rates, the impact of asthma in Colorado, and how to effectively manage this chronic disease, emphasizing culturally diverse populations, and regional and rural areas of the state

Strategy 1

Develop a comprehensive, statewide media campaign utilizing available data to increase public awareness of asthma

Selected Population

This campaign is directed to Colorado’s general public, including children and adults with diagnosed and undiagnosed asthma or those people who are at-risk. The campaign will focus specifically on increasing awareness of asthma with policy makers, community leaders, and the media.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, the Public Education and Awareness Committee will work with other Coalition workgroups to increase awareness of asthma. Information will be distributed utilizing a variety of community resources including hospitals, insurance companies, local health departments, schools, and churches.

Measurable Indicator

Indicators, such as the number of media events, website visits, locations for distribution of written materials, will be tracked. In addition, evaluative survey methods will assess market penetration of the message.

Projected Outcome

Year I – The workgroup will collaborate with community partners in the development of an effective public relations campaign that relays consistent messaging about asthma to Colorado, through a variety of media which may include television, radio, print media, billboards, asthma fact sheets, brochures and websites.

Years II and III – The workgroup will implement the media campaign, evaluate the audiences it reaches, and modify its timeline and components as needed.

Goal D

Increase awareness regarding asthma prevalence rates, the impact of asthma in Colorado, and how to effectively manage this chronic disease, emphasizing culturally diverse populations, and regional and rural areas of the state

Strategy 2

Increase asthma awareness in culturally diverse populations through the use of culturally appropriate resources

Selected Population

This strategy serves culturally diverse communities throughout Colorado, including African Americans, Asians, Hispanics, and Native Americans.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, and in partnership with the Colorado Department of Public Health and Environment, the workgroup will establish partnerships with leaders and community members within culturally diverse groups, to assist in the development of culturally appropriate media messages to reach selected communities. Partnerships will include community-based organizations that serve culturally diverse populations including, but not limited to social service agencies, churches, hospitals, community health clinics, local health departments, and other healthcare organizations.

Measurable Indicator

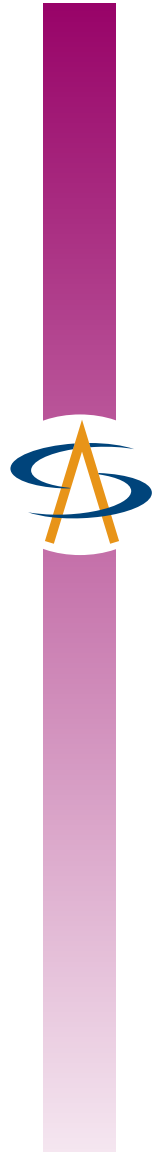
Measurable indicators will be the expansion of CAC membership, targeting partnerships with culturally diverse communities. Colorado asthma data, specific to each community will be shared with leaders and interested organizations. Effective strategies and programs will be developed to reach the intended community. Following implementation, participants within the specific communities will evaluate the results and methods, helping to design future strategies.

Projected Outcome

Year I - The workgroup will develop relationships with leaders and organizations in culturally diverse populations to assist in developing asthma awareness strategies specific to the selected communities.

Year II - The workgroup and community members will implement these strategies within selected communities and evaluate its reach.

Year III – Based on evaluation, future strategies will be designed or modified, and implemented.



GOAL D –STRATEGY 3

Goal D

Increase awareness regarding asthma prevalence rates, the impact of asthma in Colorado, and how to effectively manage this chronic disease, emphasizing culturally diverse populations, and regional and rural areas of the state

Strategy 3

Increase regional Coalition activity and membership by increasing members' and community leaders' awareness of asthma data specific to the individual regions of the state

Selected Population

Community members and leaders of regions outside the Denver Metropolitan area, including rural areas of the state are central to the success of this strategy.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, and in partnership with the Colorado Department of Public Health and Environment, the workgroup will utilize existing resources including coordinators in the Steps to a Healthier U.S. communities, to increase asthma awareness by disseminating information based on specific regional data and community needs. Partners within the communities will develop strategies specific to their areas. These partners will include local healthcare providers, hospitals, health agencies, community centers, home oxygen companies, pharmaceutical companies, county health departments, and insurance companies.

Measurable Indicator

Based on Colorado's data on the prevalence and morbidity of regional areas, more extensive data collection and analysis will be conducted, specific to the selected communities. The data will provide direction for implementation of strategies. After implementation, the recipients from the regional areas will be surveyed, regarding the effectiveness of these strategies.

Projected Outcome

Year I - Regional Coalition workgroups will be developed. Open Colorado Asthma Coalition Board positions for regional representation will be filled with members of each identified region. Regional workgroups will assist in developing strategies specific to their community's needs.
Year II - The regional workgroups will implement the strategies within communities and evaluate the effectiveness of these methods.
Year III – Based on the data and information from year II, future strategies will be developed.

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Statement of Need

Asthma is the most common reason for school absences due to chronic illness. Healthcare services for children, proven education programs, and communication between healthcare providers, parents, guardians, schools and childcare personnel is key to providing safe and healthy environments for children with asthma.

Strategies

1. Advocate the use of National Asthma Education Prevention Program guidelines and need for health services for children in school and childcare settings
2. Provide asthma information to school and childcare personnel, and increase the availability of asthma education for children in those settings
3. Increase communication among healthcare providers, parents, guardians, schools, and childcare personnel to promote a continuum of care for children with asthma
4. Increase the number of asthma management plans used among children in school and childcare settings
5. Increase the extent to which asthma management plans are implemented and utilized by school personnel and childcare providers



“FOR EVERY COLORADO CLASSROOM OF 30, AT LEAST TWO CHILDREN ARE LIKELY TO HAVE ASTHMA.”

GOAL E – STRATEGY 1

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Strategy 1

Advocate the use of National Asthma Education and Prevention guidelines and need for health services for children in school and childcare settings

Selected Population

The selected populations for strategy 1 include parents/guardians of children with asthma, school decision-makers, policy-makers, community leaders, parent/teacher associations, uninsured and under-insured persons.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, the support of parents, guardians, teachers, school administrators, school nurses, school and childcare leaders, school-based healthcare programs, and other similar organizations will facilitate policy changes or increased awareness of asthma management.

Measurable Indicator

Measurable indicators for this strategy include monitoring children with asthma regarding school absenteeism and the potential impact on achievement scores, as a means to receive support from decision-makers for student health services. These data gathering efforts will require strong school administration approval.

Projected Outcome

Year III – Partnerships will be developed with health organizations to advocate for increased children’s asthma health services, utilizing data to promote the need for such services.

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Strategy 2

Provide asthma information to school and childcare personnel, and increase the availability of asthma education for children in those settings

Selected Population

School and childcare personnel including health educators, teachers, administrative staff, school nurses, coaches, athletic trainers, childcare providers and other staff members are included in this strategy.

Partnership for Action

Under the lead of the Colorado Asthma Coalition and in partnership with the Colorado Department of Public Health and Environment, the School Health and Childcare Committee will establish partnerships with organizations to deliver asthma education in school and childcare settings. These partnerships will strengthen the availability of asthma education, resources, and tools. Collaboration with local public health, school districts, childcare agencies, professional associations, healthcare institutions, pharmaceutical companies, and healthcare providers will provide education and resources throughout the state.

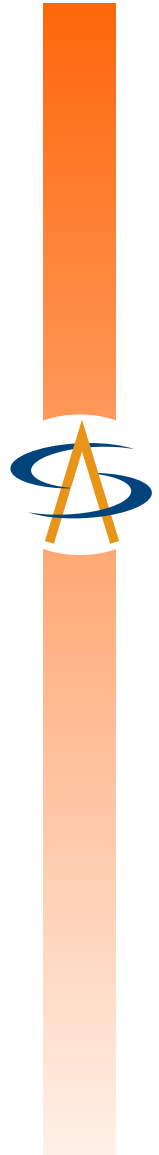
Measurable Indicator

Monitoring includes the number of participants attending workshops and training. Participants will be evaluated after receiving asthma education to test information retained and utilized.

Projected Outcome

Year I - A comprehensive, asthma education program and plan for implementation will be designed.

Years II and III - Programs will be implemented in focal areas throughout the state. Evaluation of the programs will be conducted and analyzed.



GOAL E – STRATEGY 3

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Strategy 3

Increase communication among healthcare providers, parents, guardians, and school personnel in order to promote more continuity in the care of children with asthma

Selected Population

Foci of this strategy include healthcare providers, parents/guardians of children with asthma, schools' and childcare personnel, and parent or teacher associations.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, the workgroup will recruit partners with a vested interest in increasing communication to improve the continuum of care for children with asthma. Partners will include healthcare providers, professional associates, schools and childcare health providers.

Measurable Indicator

Surveying of school and childcare staff will assess the need for and impact of increased communication among healthcare providers, parents, guardians, and childcare and school personnel. Surveying of students and their families will assess the need for and impact of increased communication among healthcare providers, parents, guardians, and childcare and school personnel.

Projected Outcome

Years I, II, and III - Partners throughout the state, especially utilizing regional Colorado Asthma Coalition subgroups and coordinators in the Steps to a Healthier U.S. communities, will provide education about the importance of communication between childcare and school, parents, guardians, and healthcare providers.

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Strategy 4

Increase the number of asthma management plans used among children in school and childcare settings

Selected Population

Children with asthma, and school personnel or childcare providers who actively participate in the adherence to children's asthma management plans are the subjects of this strategy. Participants include healthcare providers, parents/guardians of children with asthma, school and childcare personnel, and parent or teacher associations.

Partnership for Action

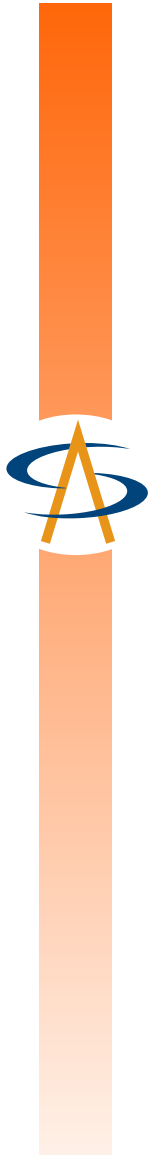
Under the lead of the Colorado Asthma Coalition, partnership with local healthcare providers, healthcare institutions, insurance providers, school and childcare health personnel, and other school and childcare staff, to provide education regarding the importance of asthma management plans. The Colorado Department of Public Health and Environment will track changes in children's asthma-related hospitalizations.

Measurable Indicator

An increase in the number of asthma management plans in school and childcare settings is an important monitor for this strategy. Changes in hospitalization data for school-age children, pre-and post-intervention are also significant measures.

Projected Outcome

Year III - A statewide effort to increase the number of healthcare providers who administer asthma management plans in school and childcare settings will be established.



GOAL E – STRATEGY 5

Goal E

Children with asthma, their families, and those individuals working with children in Colorado will receive safe and effective asthma management services, tools, and education

Strategy 5

Increase the extent to which asthma management plans are implemented and utilized by school personnel and childcare providers

Selected Population

The selected populations for this strategy include decision-makers and those individuals who have influence over children's health in school or childcare settings, comprising healthcare providers, parents/guardians of children with asthma, school and childcare personnel, and parent/teacher associations.

Partnership for Action

Under the lead of the Colorado Asthma Coalition, and in partnership with Colorado Department of Public Health and Environment, local healthcare providers, healthcare institutions, insurance providers, school and childcare health personnel, and other school and childcare staff will develop and implement education regarding the importance of consistently employing asthma management plans.

Measurable Indicator

Monitoring the achievements of this strategy include tracking the number of asthma management plans that are actively utilized in school and childcare settings. Evaluating the impact of management plan usage incorporates collection of the number of asthma exacerbations at school, number of requests for and observations of inhaler use, and other asthma management indicators.

Projected Outcome

Year I - An evaluation instrument will be used to track the number children with asthma in childcare and schools that are currently utilizing an asthma management plan.

Years II & III - An educational plan focusing on the importance of asthma management plans will be implemented. In addition, the evaluation instrument will be implemented and the data analyzed.

Summary

Charting a collaborative, robust course of action resulted in over a hundred people convening to create Colorado's Asthma Plan. These dedicated individuals, from throughout the state, contributed to the foundation that will guide asthma exploration and interventions for the next several years.

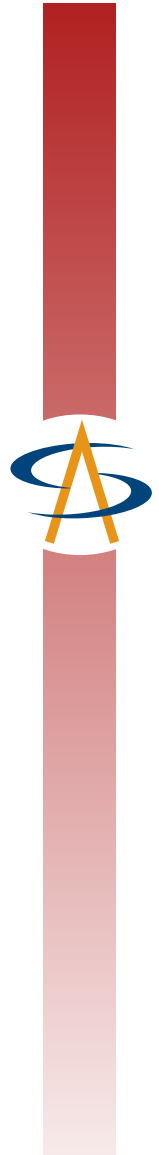
The Colorado Asthma Plan purposefully concentrates on expanding information, changing attitudes, and modifying behaviors that impact the diagnosis and treatment of asthma. A broad spectrum of partners is required for successful Coalition's strategies, with emphasis on provider education, environmental and occupational health, public education and awareness, and school health and childcare.

Each strategy is complemented by the fundamental belief that additional data are needed to expand the understanding of asthma in Colorado, and to continue studies that include diverse populations, socio-economic factors, and geographic factors that affect asthma.

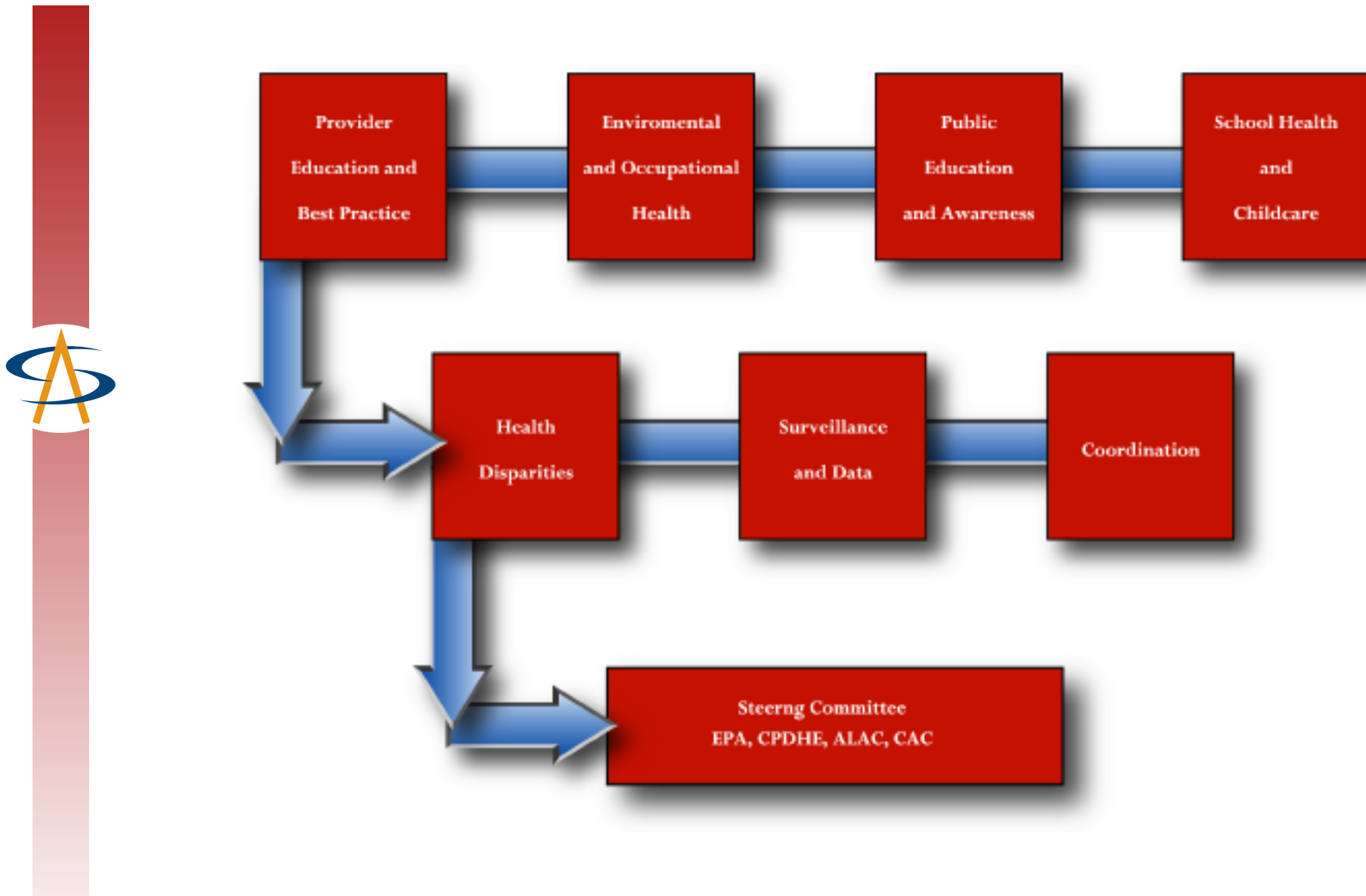
Planners of this document are mindful that needs outpace the resources essential to address the issues surrounding asthma. Therefore, gaps in knowledge and interventions are likely best filled through coordinated systems of care that minimize duplicated efforts. By working with a broad-based network of partners, the Colorado Asthma Coalition, through its use of the Colorado Asthma Plan intends to strengthen and connect individual activity undertaken by many organizations throughout the state.

As Colorado resolves to answer the puzzles that surround asthma, concentrated efforts to leverage resources toward common objectives are required. This collaborative spirit is the essence of the dynamic process that has brought the Colorado Asthma Plan to this stage. This cooperative strength will enable the strategies to be implemented and refined, resulting in positive outcomes throughout the state.

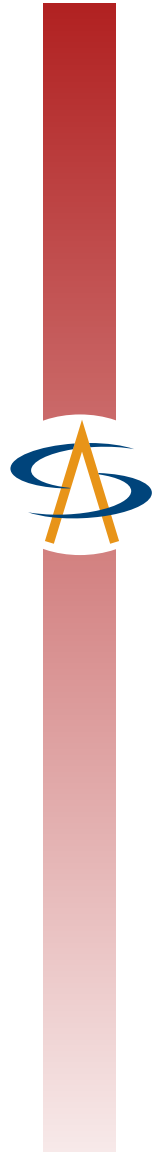
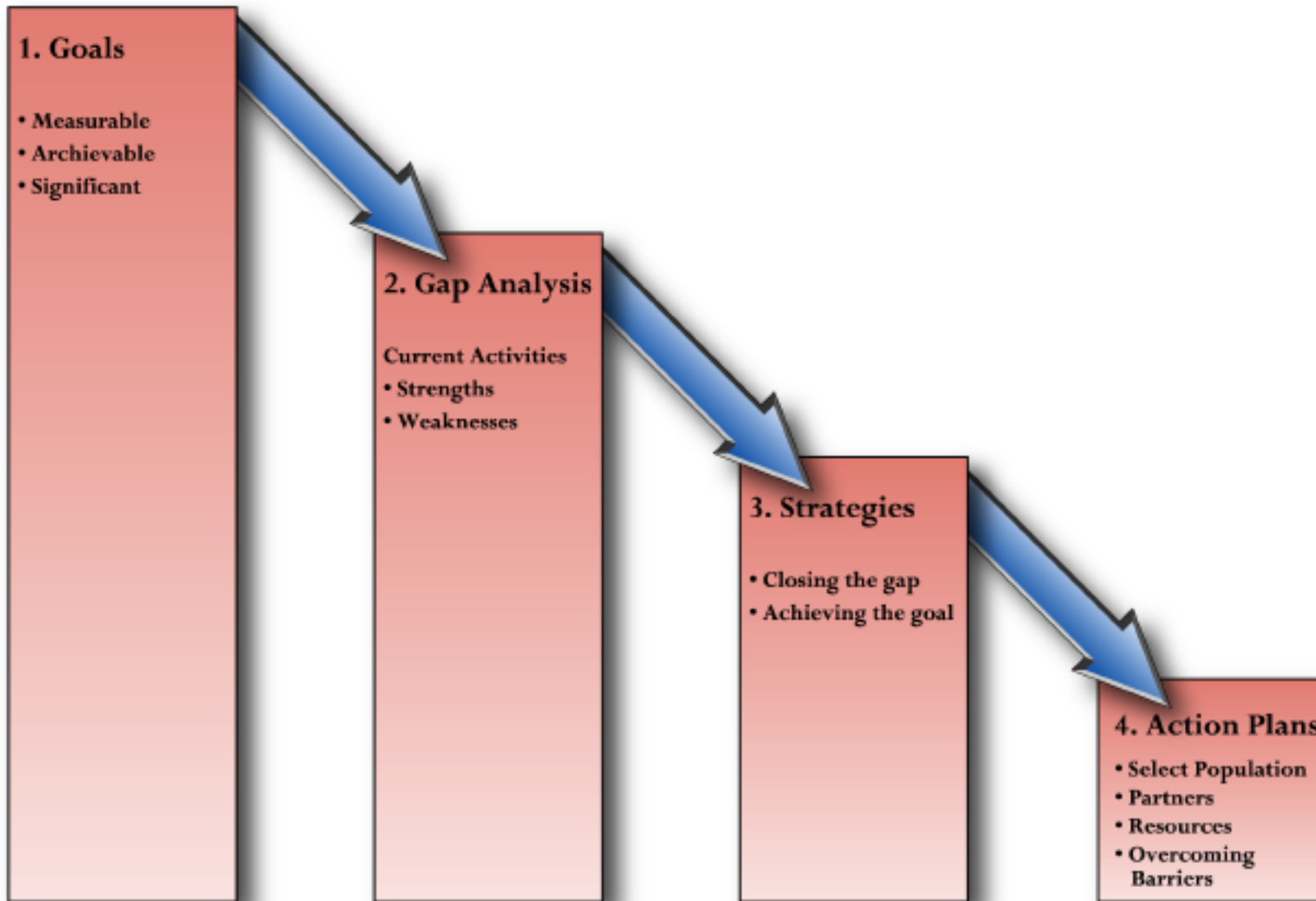
Working through the strategies, the implementers of the Colorado Asthma Plan must incorporate mechanisms of sustainability. Progress can only be assured if the infrastructure solidly anchors research findings and interventions. When the state adopts and nourishes cultural and social changes regarding asthma issues, the Colorado Asthma Plan will triumph.



APPENDIX A – SEQUENCE OF ACTIVITIES



APPENDIX B – WORKGROUP PROCESS



APPENDIX C – PARTICIPANTS



Mark Anderson, MD	Denver Health Medical Center	Shannon Greek	Yuma Clinic (Yuma District Hospital)
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Lynn Gilfillian-Morton	DogBoneZ Consulting	Ann Mullen	National Jewish Medical and Research Center

APPENDIX C – PARTICIPANTS

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Faith Winter	Coalition for Healthy I-70 Neighborhoods
Mary Zahller	Parent and wife of asthmatics
Cathy Zirkelbach, RN	The Children's Hospital



COLORADO
ASTHMA COALITION



COLO R A D O
ASTHMA COALITION

Mission Statement

Collectively solving the public health crisis caused by asthma

2005 Board of Directors

Robin Wilson, MS
Julie Degenstein, RN
Cathy Fletchall, RRT
Gwen Kerby, MD
Cindy Martin, RN
Ann Mullen
Nanci Parkhurst, RRT

Colorado Allergy and Asthma Centers, P.C. Breathe Better Foundation
Nurse Consultant
Apria Healthcare
The Children's Hospital
Kaiser Permanente
National Jewish Medical and Research Center
Parkview Medical Center



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