

**STRATEGIC PLANNING PHASE:
RECOMMENDATIONS FOR INCREASING THE CAPACITY
OF PUBLIC AND ENVIRONMENTAL HEALTH AGENCIES**

TURNING POINT INITIATIVE



Colorado's



Public Health



Improvement Plan



Colorado Public Health Improvement Plan Colorado Turning Point Initiative August 2001

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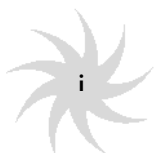
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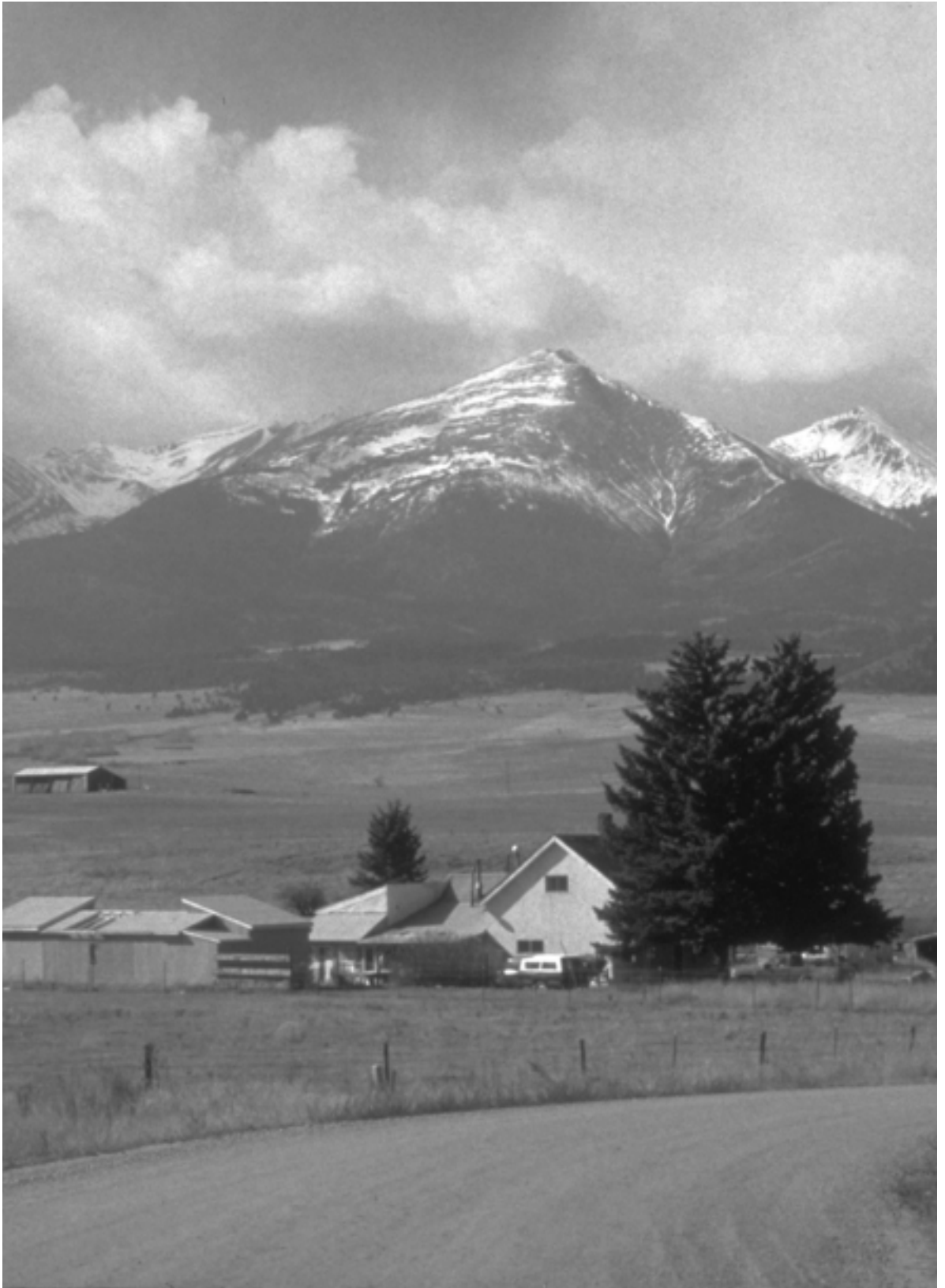
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Background

ALMOST 14 YEARS AFTER THE PUBLICATION of the breakthrough report *The Future of Public Health* by the Institute of Medicine (IOM), some would contend that the U.S. public health system today is not much closer to realizing the goals of the IOM study than it was in 1988. While there have been public health achievements since then, new and more complex challenges have presented themselves. Among these new challenges are an increasingly diverse political constituency, the resurgence and spread of drug-resistant strains of disease-causing microbes, global transmission of new and emerging diseases, the threat of bioterrorism, decreased funding for public health programs and infrastructure, reduced health insurance coverage and overall access to health care, and health disparities. All of these issues present overwhelming challenges to safeguarding the future health of the public.

In the summer of 1999, the Colorado Department of Public Health and Environment (CDPHE) received a Turning Point strategic planning grant from the Robert Wood Johnson Foundation. The purpose of the grant was to facilitate a collaborative process to assess the health of Colorado residents, examine public health systems in Colorado, and then create a state public health improvement plan. This document is one product of that work. Colorado is one of 21 states participating in the National Turning Point Initiative and is guided by the overriding mission to transform and strengthen the public health system to make the system more effective, more community-based, and more collaborative.

A steering committee carried out the strategic planning process with input from workgroups. In examining health status and health systems within Colorado, it became clear that while Colorado is a relatively healthy state, there are still barriers that prevent optimal health for the general population, and there are specific population groups that are disproportionately impacted by disease, disability, and death, especially minority communities. In looking toward the future, public health is likely to face challenges never before seen, where a strong public health infrastructure and visionary leaders will be critical to maintaining the health of

Colorado residents. Through its assessment, the Turning Point Steering Committee determined that many groups in Colorado have a difficult time accessing health care. This is due in part to a lack of insurance coverage and the fact that many rural areas in Colorado have been federally designated as Health Professional Shortage Areas. In terms of public health infrastructure, funding constraints currently prevent expanding the workforce, increasing information and data systems capacity, and enhancing organizational capacity, especially in local agencies.

Through its public health systems assessment, the steering committee determined that the key strategies for improving health status in Colorado include:

- * Increasing the capacity of public health and environmental agencies
- * Increasing the capacity to conduct population-based health status assessment
- * Assuring access to quality health care
- * Assuring access to insurance coverage
- * Eliminating health disparities
- * Promoting leadership development within the public health field and community partners

Beyond the steering committee and workgroups, the Turning Point Initiative used key informants, a review of the literature, and national and state data to examine each key strategy area. In this document, a national perspective will be included, as these key strategy areas are not unique to Colorado. This planning process was conducted by a diverse set of partners, many of whom are not from governmental public health agencies. The Colorado Turning Point Initiative believes that maintaining and improving the public's health requires partnerships with many different sectors and communities. This plan is meant to be carried out in collaboration and should be used as a guide. We believe that any person, community, or entity can take a leadership role in mobilizing partners around the recommendations in this plan, and we invite this participation in maintaining the health of our state.

Data Issues

This document attempts to provide the latest data available; however, data availability varies by year depending on the data source. In most cases, 1999 is the most recent year for available data. When 1999 data is not yet available, earlier data will be presented.

In preparing this plan, guidance was sought from the *Healthy People 2010* document, which will be referenced often. *Healthy People 2010* is a set of national health objectives to be achieved over the first decade of the 21st century. The objectives were developed by a consortium of partners, led by the U.S Department of Health and Human Services.

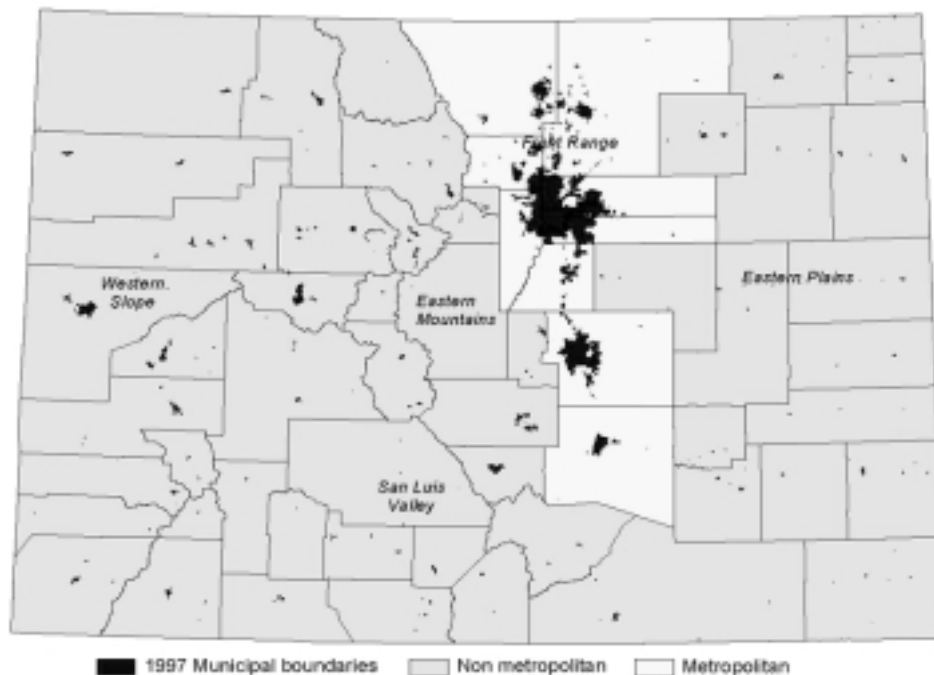
Colorado Turning Point also wishes to recognize the difficult issue of using labels when discussing race and ethnicity. It is hard to gain a consensus on the preference of categories such as “people of color/minority,” “American Indian/Native American,” “African American/black,” “Hispanic/Latino(a),” and “Caucasian/white.” We acknowledge that not everyone identifies himself or herself with these categories, and we very much respect the importance of cultural differences in how communities prefer to be defined.

Finally, in accordance with the Centers for Disease Control and Prevention, Colorado Turning Point also recognizes that race and ethnicity are social constructs representing distinct histories and cultures of groups within the United States and that they are not valid biological or genetic categories.

Profile of Colorado

Colorado’s population is young, healthy, rapidly growing, and increasingly wealthy, relative to national averages. With a population of approximately 4.3 million, Colorado is home to only 1.5 percent of the United State’s population. Colorado’s population density is 39.2 persons per square mile compared to the rest of the nation at 77.1.¹ Colorado is a geographically large state with 80 percent of its residents living in 10 metropolitan counties on the east side of the Rocky Mountains. This region is known as the Front Range. The remaining 20 percent of residents are scattered throughout the mountains, eastern plains, and western plains of the state (Figure 1). Colorado consists of 63 counties, 29 of which are considered rural and 23 are considered frontier (less than 6 people per square mile).^{2,3} In November of 2001, Broomfield will become Colorado’s sixty-fourth county.

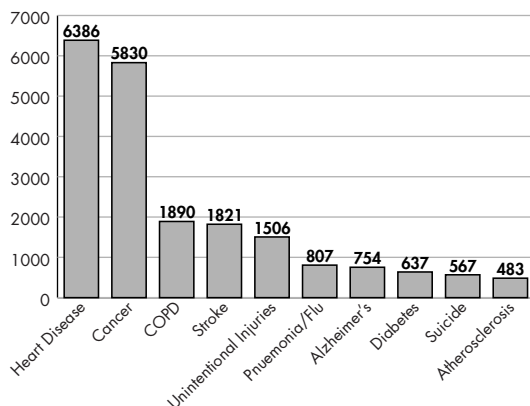
Figure 1: Metropolitan and Rural Regions of Colorado



Health Status

Colorado, by any number of measures, is a healthy state. In 1999, Colorado's age-adjusted death rate for all causes was 801.2 per 100,000 persons, well below the national rate of 881.9.⁴ Colorado's death rate has remained lower than the U.S. rate for the past 16 years.⁵ The fact that this rate has been adjusted for age indicates that the difference between Colorado and U.S. death rates is not due to Colorado's relatively younger population. Many of Colorado's health indicators are better than national health indicators, including leading causes of death. Colorado's death rates are lower than national death rates for chronic disease such as heart disease, cancer, stroke, and diabetes.⁶ Leading causes of death in Colorado are displayed in Figure 2.

Figure 2: Leading Causes of Death, Colorado 1999



Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999*. Denver, CO: June 2001.

From a public health perspective, Colorado has much in its favor. In 1998, the state was declared the third healthiest in the nation. When considering *Healthy People 2000* national health objectives, Colorado exceeded or was close to meeting objectives on such preventive indicators as mammograms and pap smears for women over age 50, reducing a number of infectious diseases such as HIV and gonorrhea, reducing births among teens, and reducing infant deaths.^{7,8}

According to 1998 data, the latest data available nationally, Colorado does have a few health indicators that are poorer than the national average, including the death rates from chronic obstructive pulmonary disease, unintentional injuries, suicide,

atherosclerosis, and Alzheimer's disease. Also, Colorado residents failed to meet the *Healthy People 2000* national health objectives for physical inactivity, smoking, and cholesterol screening.⁹

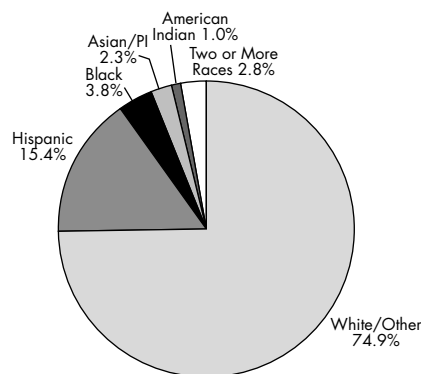
Demographics

In terms of racial and ethnic composition, minority groups account for 25.3 percent of Colorado's general population, and the number is increasing. The percentage of minorities in Colorado has increased over the past decade, mostly due to a nearly 33 percent increase in the number of Hispanics between 1990 and 2000. Population figures are provided in Figure 3. (Percentages do not add to 100 due to rounding.)¹⁰

Colorado's racial and ethnic composition differs from the national composition in that: the number of Hispanics in Colorado is higher, the number of Asian/Pacific Islanders is lower, and the number of blacks is significantly lower than national numbers. The number of American Indians in Colorado is proportionately similar to the rest of the nation.¹¹

In 1999, Colorado's male to female ratio was 49.6 to 50.4. The median age was 35.7. The percentage of the population over age 65 was 10.1 compared to 12.7 percent nationally, and the percentage of the population over age 85 was 1.2 compared to 1.5 percent nationally.¹²

Figure 3: Colorado's Population by Race/Ethnicity, 2000



Source: Colorado Division of Local Government, "Table 3A: Census 2000 Counts of Colorado County Population by Race/Ethnicity and Hispanic Origin," *U.S. Census Bureau: Census 2000 Counts of Colorado Population*, Denver, April 13, 2001.

Poverty

In Colorado, the percentage of people living in poverty has been decreasing since the early 1990s and is below the national rate. In 1999, 8.3 percent of the Colorado population was below the federal poverty level, compared to 11.8 percent nationally. The difference is even more significant for children; 11.2 percent of school-age children in Colorado are below the federal poverty level versus 15.89 percent nationally.¹³

Education

The level of educational attainment for Coloradans is relatively high compared to U.S. average levels. In 1999, 90.4 percent of the population had a high school degree compared to 83.4 percent nationally. Also, 38.7 percent had at least a bachelor's degree, compared to 25.2 percent nationally.¹⁴



Notes

1. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Colorado 2001, State Health Profile* (Atlanta, Ga.).
2. Colorado Rural Health Center, *Colorado Rural Health Plan: Submitted for Colorado's Participation in the Medicare Rural Hospital Flexibility Program* (Denver, January 1999).
3. Colorado Rural Health Center, *Colorado Rural, Frontier, and Urban Counties, 2000 Census* (Denver, 2001).
4. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1999* (Denver, June 2001).
5. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1998* (Denver, March 1999).
6. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado Vital Statistics, 1998* (Denver, March 2000).
7. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, *Colorado 2000 State Health Profile* (Atlanta, Ga.: 2000).
8. U.S. Department of Health and Human Services, Public Health Service, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* (Washington, D.C.: U.S. Government Printing Office, 1991), No. PHS 91-50212.
9. Colorado Department of Public Health and Environment, Health Statistics Section, *Colorado's Progress Toward Year 2000 Objectives*, Brief No. 26 (November 1998).
10. Colorado Division of Local Government, "Table 3A: Census 2000 Counts of Colorado County Population by Race/Ethnicity and Hispanic Origin," *U.S. Census Bureau: Census 2000 Counts of Colorado Population*, (Denver, April 13, 2001).
11. U.S. Department of Health and Human Services, *Colorado 2000 State Health Profile*.
12. U.S. Department of Health and Human Services, *Colorado 2001 State Health Profile*.
13. *Ibid.*
14. *Ibid.*





KEY STRATEGY:

Increase the Capacity of Public and Environmental Health Agencies

EXECUTIVE SUMMARY

Purpose

The Turning Point Initiative identified public and environmental health capacity as one of several priority issues for Colorado. The Initiative's strategic planning process has determined that Colorado requires an assessment of its capacity, an agreement on essential services, and increased infrastructure to meet the needs associated with protecting and improving the health of the public. This report outlines the elements of successful capacity building as well as recommendations for ensuring successful capacity building in Colorado.

Problem

As defined by the Centers for Disease Control and Prevention, the public health system is a complex network of people, systems, and organizations working at the local, state, and national levels. This complex system requires ongoing assessment of its ability to adequately provide health services. However, recent scrutiny of the U.S. public health system unveiled a lack of evidence and support of established guidelines for capacity building. New efforts are needed to determine the best means to ensure the health of the public in the 21st century. It is in the interest of all public health systems to clearly define guidelines. With guidelines in place, essential services can be provided and the health needs of the public will be met. Contributing to a current lack of capacity building efforts is a shortfall of allocated resources. Sixty percent of Colorado's local public health resources are aimed at providing direct services and enabling activities rather than infrastructure and population-based services. To meet the national goal of decreasing the amount of direct services and increasing population-based services and infrastructure, it will take more than a strong philosophical commitment. Funding constraints that currently prevent expanding the workforce, increasing information and data systems capacity, and enhancing the organizational capacity of local public health agencies will have to be overcome.

Findings

Colorado's public health system consists of the Colorado Department of Public Health and Environment (CDPHE), 14 (soon to be 15) local or district health departments, and 39 public health nursing service agencies that typically serve smaller counties in the state. A Colorado state statute provides for the creation of regional health departments, of which there are none currently. Most counties, and some cities are served by environmental health departments. In accordance with *Healthy People 2000's* National Health Objective 8.14, the Colorado Department of Public Health and Environment is planning to facilitate an effort to strengthen the relationship between state and local agencies by initiating a statewide local capacity building assessment.

By developing public health performance standards to identify and benchmark superior performance, state public health systems will be better equipped to assess and improve delivery of the essential public health services and achieve improved health of the public. Several initiatives across the state will have an impact on Colorado's capacity building efforts. They include the Colorado Health Advisory Network for Government Efficiency, the Local Capacity Building Project targeted at Environmental Health, and Health Alert Network. In addition, Washington and Illinois provide leadership as two model states that have experienced continued accomplishments in building local public health infrastructure. Keys to their success have been federal, state, local, and community partnerships. In addition, the state legislatures embraced their work and committed of general funds to support public health, not only in their current level of service provision but for improving future capacity.

Colorado Analysis

In September 1999, at the suggestion of the Office of State Planning and Budgeting, the Colorado Department of Public Health and Environment developed a long-term plan to address specific outcomes that are of a particular concern to the state.

This resulted in the development of a capacity building plan by the Office of Local Liaison, which is currently in the planning phase. Impacting and building the capacity of local public and environmental health service providers is a complex task that requires significant focus. Understanding past and current efforts has provided the foundation for recognition of the level at which Colorado's public health system has been operating. Building upon this through the use of models developed and lessons learned by national partners paves the way for a competent and effective yet uncomplicated process design to guide the future.



Recommendations

The concept of enhancing the capacity of public health providers involves a significant degree of complexity demanding a sophistication that is multifaceted and purposeful. The process can be simplified through an organized step-by-step approach. Characteristics of such a plan must include a distinct review of past capacity building efforts, a baseline assessment of the current level of service delivery, and a well-developed, thoughtful itinerary of how to achieve the ultimate vision. In support of this, the Turning Point Initiative developed a set of recommendations that provide important considerations for future capacity building efforts. The committee encourages the implementation of the "Principles of Collaboration" between state and local health officials; mechanisms at the state level to support expanded cross-jurisdictional health promotion/disease prevention efforts; flexibility of efforts to reach all parts of the state and that allow funding to go to consortia of local health departments; and the promotion of regionalization of selected services. The Turning Point Initiative also supports collaborative partnerships; an increase in general fund appropriations; investigation of nontraditional funding sources; and additional personnel to enhance prevention efforts, in particular, local health educators and grant writers.



Public and Environmental Health Capacity

The topic of capacity often arises when assessing the ability to adequately provide health services by public health systems. The Centers for Disease Control and Prevention (CDC) defines the public health system as a “complex network of people, systems, and organizations working at the local, state, and national levels.”¹ With such a complex system, the clarification of roles and the delineation of responsibilities are important tasks that require the appropriate and adequate capacity to achieve. Yet the overall goal of improving health is a significant underlying theme in evaluating the capacity levels in public health.

Capacity building can be described in several ways, each pertinent to the assessment of local public and environmental health capacity. Capacity used alone is the actual or potential ability to do something. To build public health capacity, one must recognize it as an approach to the development of sustainable skills, structures, resources, and the commitment in health and other sectors to prolong and multiply health gains many times over.² But building capacity in public health requires an effective local health plan that includes partners from the federal, state, local, and community levels. Once these partners have been identified, the local and environmental capacity plan should maximize people, programs, and fiscal resources; deliver maximum services to local constituents; and recognize and incorporate local priority setting.³

In Colorado, the assessment of the ability to provide essential public health services in local public health agencies has primarily been the result of budget and funding requests. However, the provision of these services has long been the foundation and purpose of the public health system. Public health leaders acknowledge that the assurance of essential public health services can only be gained when there is a solid foundational relationship between local agencies and their state counterparts.⁴ This point of view can be traced to the Institute of Medicine’s seminal report, *The Future of Public Health*, which has been the acknowledged touchstone for understanding the role of local public health departments.⁵ It delineates the three core public health functions of assessment, policy development, and assurance that continue to provide the conceptual framework for understanding

the mission and goals of public health organizations. Over time, through the efforts of various national public health organizations and the CDC, these three core functions have come to be associated with “ten essential services.”⁶

Given the scrutiny of and discussion surrounding the U.S. public health infrastructure, it is not surprising that the Institute of Medicine, the authoring body of the work outlining core public health functions in 1988, has just initiated a new 18-month interagency-sponsored study to determine the best means to ensure the health of the public in the 21st century. “The overarching goal of the study will be to describe a new, more inclusive framework for assuring population-level health that can be effectively communicated to and acted upon by diverse communities.”⁷ Thus, the 10 essential services provide guidance when planning to build local public health capacity. These will serve as areas of focus when developing measures to assess performance and prepare for the future.

Ten Essential Services in Building Local Public Health Capacity

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and ensure the provision of health care when otherwise unavailable.
8. Ensure a competent workforce—public health and personal care.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Conduct research for new insights and innovative solutions to health problems.⁸

Additionally, the latest CDC status report, *Public Health's Infrastructure*, was written in response to a U.S. Senate Appropriations Committee request for an assessment of the nation's public health infrastructure.¹ Its timely release of recommendations provides additional guidance during the development of a capacity building planning process. Specifically, the CDC recommends a major national initiative, linking partners at the local, state, and federal levels to address crucial gaps in: (1) workforce capacity and competency; (2) information and data systems; and (3) organizational capacities of local and state health departments and laboratories.

The CDC also proposes a performance-based approach to capacity building to: (1) assess capacity at the local and state levels using consensus performance standards; (2) develop statewide public health infrastructure-improvement plans based upon the capacity assessment; (3) provide core capacity grants and technical assistance to close specific gaps; and (4) evaluate the impact of the assistance using the consensus performance standards.

The Colorado Department of Public Health and Environment is Office of Local Liaison is leading the effort to strengthen relationships by initiating a statewide local capacity building assessment to address many issues related to increasing the local public health and environmental capacity. In the 1999 document *Challenges and Opportunities for a New Century: A Four-Year Strategic Plan, A Twenty-Year Perspective*, the Colorado Department of Public Health and Environment identified capacity building as one of the critical investment areas for the state.⁹ The mission of the Office of Local Liaison is to increase the capacity of local health partners through workforce development, collaboration, technical assistance, consultation, monitoring, funding, and technology resources. One of the office's primary objectives is to assist in the provision of all core public health functions and the 10 essential public health services. To fulfill these obligations, assurances of essential public health services can only be gained when there is a solid foundational relationship between local agencies and their state counterparts. There has been a lack of agreement on the state's minimum service standards for local public health, which has impacted current service provisions. Thus became the need to develop an effective local public health

plan—including federal, state, and local community partners—that maximizes people, programs, and fiscal resources and at the same time delivers maximum services to local constituents while recognizing and incorporating the local priority setting.³

The Turning Point Initiative Steering Committee has identified public and environmental health capacity as a priority issue for Colorado. The committee believes that Colorado needs an assessment of its capacity, an agreement on essential services, and increased infrastructure to meet the needs in order to protect and improve the health of the public.

Overview of Colorado's Public Health System

Colorado's governmental public health system includes a state agency (Colorado Department of Public Health and Environment); 14 (soon to be 15) local health departments (Appendix A); 39 county nursing service agencies (Appendix B); and environmental health agencies (Appendix C), which serve less-populated counties. A Colorado state statute provides for the creation of regional health departments, of which there are none currently.

The statutory requirements for the Colorado Department of Public Health and Environment are extensive. They include investigating and controlling the causes of epidemics and communicable diseases (CRS 25-1-107 (a)), licensing hospitals and health facilities (CRS 25-107 (l)), as well as implementing the policies of Colorado for cleaning up waste sites (CRS 25-1-107 (w)). In contrast, the responsibilities of the county and district health departments, environmental health departments, and the county nursing services are more circumscribed. As every local board of health must ensure the provision of public health nursing services to areas within its jurisdiction, those counties not under a local health department receive state general fund dollars to provide public health activities within their individual counties. These services include providing public health nursing services along with the performance of a community assessment every five years to be submitted to the Office of Local Liaison. This information is used to complete a statewide summary of local public health services and needs. Additionally, counties may opt



to provide environmental services and may charge necessary fees (25-1-608 (3)). Nonetheless, the 14 organized health departments administer a number of different programs, including epidemiological investigations and epidemic control. Additionally, health departments may initiate and carry out health programs that are thought to be important for the protection of the public's health and the control of disease. Also, these jurisdictions act as local registrars of vital statistics.

The four components, in rank order, of public health capacity are infrastructure, population-based activities, enabling services, and direct services. Infrastructure should garner the lion's share of public health expenditures, and direct services the least.

The professed goal of national public health policymakers is to decrease the amount of direct services and to increase population-based services and infrastructure in local public health agencies. In fact, 60 percent of Colorado's local public health resources are aimed at providing direct services and enabling activities, rather than infrastructure and population-based services. In Colorado, despite a decrease in the resources devoted to direct services and an increase in the resources targeted for population-based activities between 1999 and 2000 (direct services dropped to 30 percent from 40 percent, and population-based activities increased to 30 percent from 20 percent), the local public health infrastructure continues to garner only 10 percent of total local funding.¹⁰ Even in the presence of a strong philosophical commitment to increasing the local public health infrastructure, funding constraints continue to prevent expanding the workforce, the information and data systems, and the organizational capacity of local public health agencies.

A joint study conducted by the National Association of County and City Health Officials (NACCHO) and the Robert Wood Johnson Foundation reveals new data about the unique infrastructure needs of nonmetropolitan (rural) local public health agencies. One could view these rural public health agencies as a proxy for Colorado's smaller, nonurban county health agencies. Predictably, nonmetropolitan agencies lack the financial and workforce resources of metropolitan agencies. They also heavily depend upon state funding and service reimbursement funds, such as Medicare, Medicaid, insurance, and patient fees (as opposed

to local governmental sources for metropolitan local public health agencies).

The kinds of services provided varied by local public health agency type as well. While nonmetropolitan agencies provided more direct care services such as prenatal care and disease screening, they also provided more "classic" public health services such as immunization and family planning programs. In contrast, metropolitan agencies administered more environmental health programs as well as inspection and licensing services.¹¹

As stated earlier, past attempts at assessing the ability to provide essential public health services in Colorado has primarily been the result of budget and funding requests. The state general fund partially supports the provision of public and environmental health services across all 63 counties in Colorado in accordance with the Colorado Revised Statutes, which mandates that "the State shall provide support on a per capita basis for local and regional health services."¹² Each legislative session, the appropriation of general funds for public health is reviewed. Three legislative footnotes were critical factors in the identification of resource appropriations to the local agencies. Despite assiduous efforts, each of these items were defeated and not funded as suggested.

Footnotes 150/151 and 168

In 1997, a funding request from the Joint Budget Committee of the Colorado General Assembly titled Footnote 150 and Footnote 151 was sent to the Colorado Department of Public Health and Environment. Footnote 150 requested that the state health department compile detailed information of the expenditures of public health nurses, sanitarians, and local health departments and for it to include this information in the annual budget submission. Footnote 151 required the Colorado Department of Public Health and Environment to complete a detailed report on local health services. Task forces were formed in June 1997 to determine how to address the issues set forth in Footnotes 150 and 151. As a result, a task force developed a survey to capture the necessary information and the results were analyzed in September 1997. The four tasks of this committee were to:

1. Identify funding supporting public health services.



2. Propose a level of state support, as well as alternatives for annually adjusting the appropriation based on a quantitative analysis of the data.
3. Examine the need for a performance-driven funding formula.
4. Determine if consolidation of local health funding streams would enable a more efficient public health delivery system.

The task force concluded that many local health agencies lacked the resources to address population-based, essential public health services that impact the leading causes of death and disability in the state. The following proposals were recommended:

1. State support for public health should be increased for the purpose of maintaining a minimum public health infrastructure for now and in the future.
2. Basic health services should be provided in every county to a minimum standard.
3. Counties should be provided with incentives to enhance basic public health services; the Executive Director of the Colorado Department of Public Health and Environment decided to prioritize seven essential services that could be most efficiently addressed by state and local public health.

In response to the Footnote 151 report, and as a result of the task force recommendations, the Joint Budget Committee requested a new formula for funding local public health.¹³ Additionally, unmet needs for each agency as they related to the seven essential basic services were identified. Local health agencies responded to provide documentation of current levels of funding and the cost of unmet public health needs in response to Footnote 151. The Footnote 151 report identified service gaps but did not quantify revenues and expenditures relative to those service gaps. The Colorado Legislature defeated the request for the increase in funding.

The following year, 1998, Long Bill Footnote 168 instituted continued efforts building on the outcomes of Footnote 151. In addition, Footnote 168 requested supplemental public health funding for local health departments and county nursing services. This legislative initiative was not supported, primarily because of requests from legislators that funding not be based on individually decided local needs but more on specific health outcomes.¹⁴

In September 1999, the Office of State Planning and Budgeting suggested that the Colorado Department of Public Health and Environment develop a long-term plan to address specific outcomes, which are of a particular concern to the state (e.g., immunization, suicide rates, prenatal care). This plan was to tie outcomes to local health funding and include information on how additional funding helps local agencies to address health issues in their community.¹⁵ There was also a need for a strong partnership between the state and its local governments to ensure that services can be provided, that local needs can be addressed, and that state goals for protecting and promoting health can be met.¹³ Despite increases in the counties' contributions to general public health funds, local health agencies have not been able to address the growth in demand for public health services. These recommendations have resulted in the development of the capacity building plan by the Office of Local Liaison, which is currently in the planning phase.

Local health agencies have consistently documented that public health needs have not been adequately met. In a statewide survey conducted by the Colorado Department of Public Health and Environment in the summer of 1996, county health agencies and nursing services identified a wide variety of unmet needs resulting from insufficient funding.¹⁶ This was stated as the primary reason for the inability to meet goals and adequately provide the essential public health services. In 1998, a report was submitted to the Joint Budget Committee that identified the essential public health needs that local health agencies were, at the time, unable to meet along with the associated costs to deliver the services.¹⁷

In comparison to the state's current financial contribution, local funding per capita is almost 13 times as much as the state's per capita funding of local health. Of the total funding currently being spent on local health needs in Colorado, about 3 percent comes from the Colorado Department of Public Health and Environment's local health services line items.¹⁸ In the future, nontraditional funding sources including partners from the business community and foundations could be a possible new means to generate revenue.



Initiatives That Impact Public Health Capacity in Colorado

Colorado Health Advisory Network for Government Efficiency

In October 1997, the Colorado Health Advisory Network for Government Efficiency (CHANGE) charged state, local, and private-sector leaders with producing a blueprint to help the Colorado Department of Public Health and Environment create a more streamlined and user-friendly agency.¹⁹ An Outcomes/Indicators Task Force was assigned to help the department become one of a small number of state public health agencies in the country to use a defined set of performance measures to rate its quality of service. A tool was designed to evaluate effectiveness by focusing on overall performance rather than processes. Final recommendations of the CHANGE Task Force on building constituencies and advocates for public health were completed in January 1998. The goal of this plan was to raise awareness of how public health policies, services, and activities touch the lives of Coloradans every day. An action plan was developed and suggestions for implementation were made. However, changes at the state level caused both the network and task force to dismantle.¹⁴

Local Capacity Building Project—Environmental Health (1993–1997)

In late 1993, state and local environmental health officials initiated a critical examination of Colorado's environmental health program. This effort was designed to bolster the partnership between state and local health departments and to gradually increase the credibility and effectiveness of the Colorado environmental health program. Task forces were convened along with a local capacity building steering committee. The steering committee, consisting of state and local environmental health partners, established a framework for completing its work and then identified eight environmental health programs warranting assessments. The local health agencies were the primary lead on the project and program reviews, with minimal involvement by representatives of the state.²⁰ Three major policy recommendations resulted from the project along with summaries of the findings and recommendations for each program

assessment. Three priorities were put forth: (1) begin responding to the major policy recommendations; (2) develop a reliable process for ensuring that implementation plans are actually implemented; and (3) complete implementation plans for all programs that have been assessed.²¹ Despite fragmented and incomplete implementation efforts, the model for increasing capacity in environmental health still exists.²⁰

Turning Point Steering Committee Recommendations—2000

The Turning Point Steering Committee made recommendations for the topic of prevention in Colorado. As a result of these recommendations, the chapter on prevention evolved into the Public and Environmental Health Capacity chapter for the State Health Improvement Plan.²² Several of these recommendations are important considerations that future capacity building efforts should recognize:

- * Implement the “Principles of Collaboration” between state and local public health officials, which were developed by the National Association of City and County Health Officials.
- * Establish mechanisms at the state level to support expanded cross-jurisdictional health promotion/disease prevention efforts; allow flexibility to reach all parts of the state; and allow funding to go to consortia of local health departments.
- * Promote regionalization of selected services to enhance capacity in smaller communities; regional health departments should be examined as a vehicle for achieving this goal.
- * Work collaboratively (state, local, community partners, etc.) to ensure access to the continuum of strategies to promote preventive health care.
- * Continue the state/local collaborative effort to increase general fund appropriations for the public health infrastructure.
- * Look for nontraditional funding sources (business community, foundations, etc.) to provide financial assistance.
- * Support additional funding for additional personnel to enhance prevention efforts, for example, local health educators and grant writers.²²



Health Alert Network

The Health Alert Network (HAN), funded by the CDC, allocated money to Colorado to improve the information and communications infrastructure that the state would need during a bioterrorism event. Part of the process for the evaluation of information technology systems included a baseline survey of county health departments' capacity to provide necessary services for communication. One of the goals of HAN is to ensure that public health agencies achieve high levels of organizational capacity.²³ The results of the survey, once available, will be instrumental in evaluating the current capacity levels of health agencies in relation to technical needs.

Health Insurance Portability and Accountability Act

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 could result in decreased public health assessment capacity. The Act states that pharmacists, hospitals, doctors, clearinghouses, health plans, insurers, and people or entities working with them must protect patient information that might allow an individual to be specifically identified. Hospital discharge data, as currently compiled by the Colorado Health and Hospital Association, is an important and essential source of public health information. HIPAA regulations, as they currently exist, would require that before data are collected, they be "de-identified;" that is, that zip code, date of admission, and date of discharge information be stripped away from patient records.²⁴

In the past, rules requiring health privacy protection were enacted on a state-by-state basis. By enacting HIPAA, Congress has recognized the importance of a national health privacy policy and framework. Those activities that involve providing direct services—whether administered by the state, any county health department, or any local health agency—require compliance with the provisions of the Act. The Colorado Department of Public Health and Environment, the county health departments, and the public health nursing services will need to review their involvement in direct service programs, as well as examine their existing databases and assess the need for changes in procedures for compliance with HIPAA.

National Perspective on Local Public and Environmental Health Capacity

Objective 8.14 of *Healthy People 2000* called for 90 percent of the population to be served by a local health department that was effectively addressing the core functions of public health. Although selected studies have provided a snapshot of local health departments' effectiveness in carrying out the core functions, systematic monitoring of this objective over time has not been done.²⁵ By developing public health performance standards to identify and benchmark superior performance, state public health systems will be better equipped to assess and improve delivery of the essential public health services and achieve improved health of the public.²⁶

The state health improvement plans developed by Turning Point partners in other states have provided access to groups involved in building local public health infrastructure. The Office of Local Liaison is in the process of conducting a systematic review of capacity building methods utilized throughout the nation, to draw references and learn valuable lessons. Thus far, several states have been identified as leaders for building local public health capacity.

Two states that stand out because of their continued accomplishments are Washington and Illinois. Both states have embarked on major planning processes lasting approximately 10 years. This was a collaborative process among federal, state, local, and community partners, in addition to the state legislatures. This partnership has been described as the key to creating long-term sustainable success. Another valuable asset to their planning has been the commitment of general funds to support public health, not only in their current level of service provision but for improving future capacity. Colorado is utilizing both Washington and Illinois as potential models during the process design stage of building local public health capacity.



Future Steps in Building Public and Environmental Health Capacity in Colorado

The concept of enhancing the capacity of public health providers involves a significant degree of complexity demanding a multifaceted and purposeful approach. Characteristics of such a plan must include a distinct review of past capacity building efforts, a baseline assessment of the current level of service delivery, and a well-developed, thoughtful itinerary of how to achieve the ultimate vision.

A review of past capacity building efforts in Colorado provided earlier in this report sets the stage for building an eminent plan. Merging the outcomes of such projects as well as utilizing the lessons learned are dual key philosophies that guide future working efforts. Programs, projects, and people have to be evaluated to combine all past ideas and efforts with the purpose of laying groundwork for the future. Before beginning to build capacity within programs, practitioners need to identify pre-existing skills, structures, partnerships, and resources, and work with and respect these. In addition, programs that are integrated into existing structures, and linked into existing positions and accountability processes are more likely to be sustained.²⁷ Simultaneously, while the local review is being conducted, a national review of specific capacity building projects must also occur. The data gathered from other states in combination with the local perspectives will provide firsthand expertise in ultimately achieving the vision.

Much more complicated is the second phase of the full capacity building process in which an assessment must be conducted to determine the current level of capacity in Colorado. Many Colorado local and state public health leaders anecdotally maintain that in order to build statewide public health capacity, there is a great need to realize the current level of service provision. Recently, the Colorado Association of Local Public Health Leaders, in addition to the Public Health Directors of Colorado, discussed the high priority of assessing the current level of capacity in relationship to essential public health services. There is agreement within many organizations and associations that the first and most critical step is to know where Colorado

is today in its ability to provide quality, effective public health services. Additionally, the opportunity to assess direct service capacity will present itself in the work of complying with HIPAA requirements.

The final characteristic of building public health capacity is to define a simple yet effective process that will maximize talent, abilities, and expertise while minimizing expenditures, systematic pressures, and time. When determining a potential guiding process, several factors were recognized as key elements for success.

- * **Utilize lessons learned** from past and national efforts to construct the foundation of the design.
- * **Value relationships and create ownership** in the process and outcome by bringing together various partners from a diverse set of interests to ensure a high degree of value. To affect long-term systematic change while concurrently building infrastructure will require an elevated level of collaboration between state and local health departments, county nursing services, health care organizations, universities, state and local boards of health, nonprofit organizations, community-based foundations, state health associations, and others. As stated in the book *Collaborative Leadership*, collaboration is more than simply sharing knowledge and information (communication) and is more than a relationship that helps each party achieve its own goals (cooperation and coordination). The purpose of collaboration is to create a shared vision and joint strategies to address concerns that go beyond the purview of any particular participant.²⁸
- * **Begin with a sincere level of trust.** Trust in the process between stakeholders and trust in the outcome does not always exist upon commencement. When describing the significance of trust in collaborative procedures, Darrel Ray and Howard Bronstein state that a general lack of trust at all levels leads to greater caution and a stifling of growth and development.²⁹ Robert Fitzgerald states that the notion of trust is “absolutely imperative to capacity building.” He also believes that capacity building is underpinned by trust and respect and that these qualities “sit at the heart” of why so many otherwise good initiatives have failed.³⁰



* **Accountability** occurs at all levels and must be integrated early on. The degrees of accountability are: (1) ability to identify the level of realization; (2) commitment to the visions, goals, objectives and processes; (3) obligation to the larger community for ongoing and direct communication and feedback; and (4) assurance from resource holders and leadership in the value of conducting the overall capacity building process. Explained further, the degrees of accountability distinctively affect the long-term goal of improving the public health infrastructure. For the design to lead to a worthwhile and meaningful outcome, all proposed activities should have a time-phased, measurable strategy to identify the level of realization. When goals are not attained, concrete documentation is mandatory to both continue momentum and apply the exact amount of change needed. The second degree of accountability is commitment on behalf of key stakeholders to the visions, goals, objectives, and processes created. It is critical that members of the group believe and carry out the functions that are created. Without this, the process will experience a general sense of weakness and eventually failure. As stewards of public health, the stakeholders must have a responsibility to their community (including organizations where they are employed) to communicate progress, concerns, and issues that affect service provision (past and future); acquire input prior to and after making critical decisions; and ensure a system to receive effective appropriations. Last, accountability is required from resource holders and leadership that funding will be provided for the process to be completed in full. Stakeholders require assurance that the work involved is not for naught. Often, large-scale, capacity building processes such as these get shelved (i.e., Local Colorado Environmental Capacity Building Project—1997) as either funding runs out, leadership objectives change, or the project becomes too unwieldy to support continuance.

Proposed Process Design for Building Public Health Capacity in Colorado

With respect to the principle of creating ownership and demonstrating a truly collaborative process, the process design described below is merely a proposal that will require further exploration and discussion by key stakeholders. Taking into consideration the massive body of works about collaborative decision-making processes as well as the factors mentioned above, the following is recommended (Figure 1):

Preliminary: Planning Process

Phase I

1. Approval and commitment from leadership to engage in process
2. Introduction of process design at community level
3. Organization of initial Guiding Committee
 - a. Assess potential key stakeholders
 - b. In-depth analysis of process design/outcome/purpose
 - c. Define participant assurances/roles/responsibilities
 - d. Plan formal launch meeting

Potential key stakeholders include but are not limited to county nursing services, local health departments, the state health department, administration, public health associations, universities, foundations, nontraditional partners, and health care organizations.

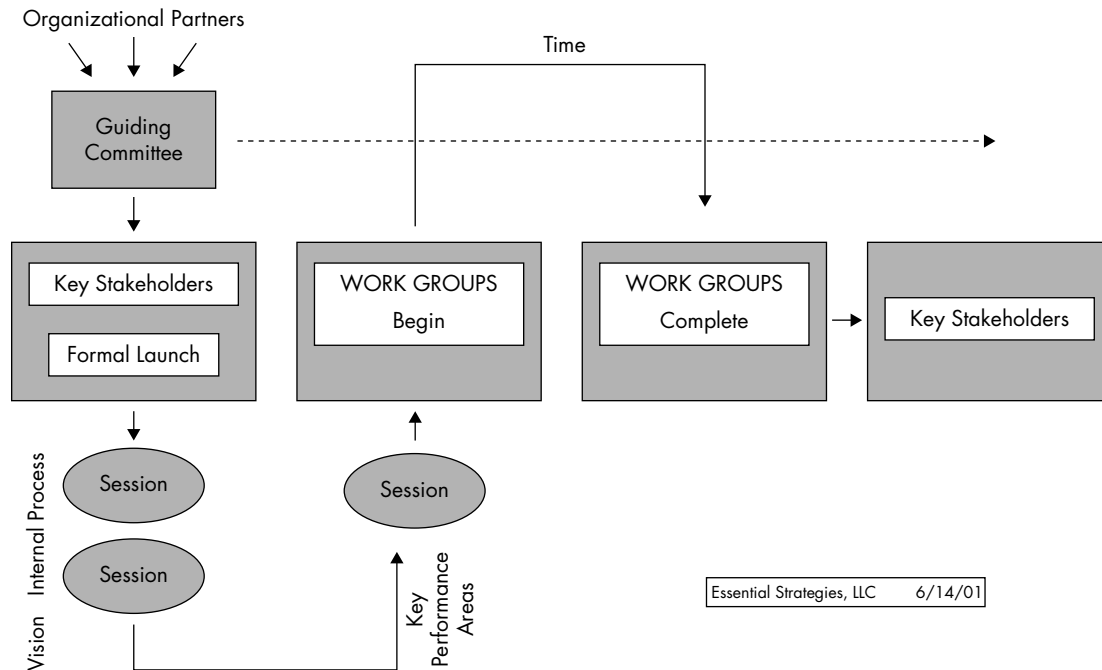
Actual: Shifting from Planning to Implementation

Phase II

1. Formal launch of capacity building process—kick-off
2. Determine internal processes
3. Generate vision of public health infrastructure after capacity is built
4. Identify key performance areas (goals/objectives)
 - a. Memorandum of understanding: roles/responsibilities of state health versus local health/county nursing



Figure 1: Capacity Building Process Design



- b. Assessment of current level of services (baseline) in conjunction with essential public health services
- c. Additional areas to be generated by stakeholder group
5. Define key performance areas and workgroups
 - a. Identify structure for coordination and accountability
 - i. Leadership
 - ii. Meeting schedule
 - iii. Strategy for developing work plan
 - iv. Process evaluation plan
6. Continue ongoing guiding committee meetings to ensure communication, coordination, and collaboration
7. Workgroup plans completed; assemble a full stakeholder meeting to prioritize and determine level of readiness for implementation

Outcome: Building Public Health Capacity

Phase III

The steps associated with this phase will be introduced formally upon completion of the workgroups. As directed by the informal request from

members of the Colorado Association of Local Public Health Leaders, it is imperative that the final outcome of the plan to build capacity includes elements of the following:

- * Each of the 10 essential public health services are provided more than adequately.
- * Funding distribution is sufficient so that health services may be delivered to communities with maximum capacity.
- * Detailed knowledge is secured about the current level of service delivery in the state of Colorado, which in turn identifies areas for improvement.
- * A clear, concise delineation of roles and responsibilities between state and local health entities is outlined.
- * Effective training for the public health workforce is provided so that there is a significant degree of competency among providers.
- * Gaps in electronic surveillance, information, and data systems are addressed and solved.³¹

Finally, the outcome—actually *building* local public health capacity in Colorado—must keep in step with national standards as well as the critical local perspective.



Conclusion

Impacting and building the capacity of local public and environmental health service providers is a complex task that requires significant focus. Understanding past and current efforts has provided the foundation of recognizing the level at which Colorado's public health system has been operating. Building upon this through the use of models developed and lessons learned by national partners paves the way for a competent and effective yet uncomplicated process design to guide the future.

Notes

1. Centers for Disease Control and Prevention, *Public Health's Infrastructure: A Status Report*, Atlanta, Ga., 2000.
2. P. Hawe et al., *Indicators to Help with Capacity Building in Health Promotion*, New South Wales Health Department, Sydney, Australia, 2000.
3. Colorado Department of Public Health and Environment, *Efficiency and Effectiveness Analysis*, Denver, May 3, 2001: 3.
4. Jeff Stoll, director, Office of Local Liaison, Colorado Department of Public Health and Environment, Denver, personal communication (pertaining to "Efficiency and Effectiveness Analysis," May 3, 2001), May 25, 2001.
5. Institute of Medicine, *The Future of Public Health* (Washington, D.C.: National Academy Press, 1988).
6. W. L. Roper et al., *Strengthening the Public Health System*, *Public Health Reports* 107 (1992): 609–16.
7. Institute of Medicine, *Assuring the Health of the Public in the 21st Century*, National Academy of Sciences, 2001. Online at <http://www.iom.edu.IOM/IOMHome.nsf/Pages/assuring+the+Health+of+the+Public+objectives>.
8. Public Health Functions Steering Committee, *Public Health in America*, July 1995. Online at <http://www.health.gov/phfunctions/public.htm>.
9. Colorado Department of Public Health and Environment, *Challenges and Opportunities for a New Century: A Four-Year Strategic Plan, A Twenty-Year Perspective*, Denver, September 1999.
10. Karen O'Brien, director of Public Health Nursing, Office of Local Liaison, Colorado Department of Public Health and Environment, Denver, personal communication, June 8, 2001.
11. *NACCHO News* 16, No. 3 (May/June 2001): 7.
12. Colorado Revised Statutes, Section 25-1-516.
13. Colorado Department of Public Health and Environment, *Efficiency and Effectiveness Analysis*, Change Request: Decision Item 101, Denver, October 12, 1999, Chapter 2: 4.
14. O'Brien, personal communication, June 12, 2001.
15. Colorado Department of Public Health and Environment, *Executive Budget Briefing FY 2000–0001, Recommendations*, Denver: 19.
16. Local Public Health Services, *Executive Report, Decision Item 2 and Footnote 151*, Denver, December 8, 1997: 9.
17. Judy Robinson, public health nursing director, *Report on Cost of Funding Public Health Needs*, Colorado Department of Public Health and Environment, Denver, February 2, 1998.
18. Colorado Department of Public Health and Environment, *Efficiency and Effectiveness Analysis*, October 19, 2000, Chapter 5: 6.
19. CHANGE Outcomes/Indicators Task Force, *Colorado Public Health Outcomes and Indicators*, Colorado Department of Public Health and Environment, Denver, October 1997: 4.
20. Tom Dunlop, director, Pitkin County Environmental Health Department, Aspen, personal communication, June 25, 2001.
21. Kate Fay, *Local Capacity Building Project*, presentation for the Colorado Department of Public Health and Environment and local environmental health directors, November 1997.
22. Colorado Turning Point Initiative, Steering Committee meeting, "Prevention Capacity in Colorado," panel presentation and dialog, Denver, August 2000.
23. Health Alert Network, Centers for Disease Control. Online at www.phppo.cdc.gov/han.
24. Peg O'Keefe, vice president, Public Affairs and Education, CHA, Denver, personal communication, April 2001.
25. U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000. Part B: Focus Areas 23.
26. National Public Health Performance Standards Program, *State Public Health System Performance Assessment Instrument*, May 2000. Online at www.phppo.cdc.gov/dphs/nphpsp/.
27. New South Wales Health, *A Framework for Building Capacity to Improve Health*, State Health Publication No. (HP) 990226, 2d ed., Australia, June 2000. Online at <http://www.health.nsw.gov.au>.
28. David D. Chrislip and Carl E. Larson, *Collaborative Leadership* (San Francisco: Jossey-Bass, 1994): 5.
29. Darrel Ray and Howard Bronstein, *Teaming Up* (New York: McGraw-Hill, 1995): 135.
30. Robert Fitzgerald, *The New Agenda for Community Services (presentation at Capacity Building: Mastering the Art of the Invisible, Sydney University, March 6, 2000)*. Online at www.health.msw.gov.au/public-health/health-promotion.
31. Survey and interviews conducted at a Colorado Association of Local Public Health Leaders (CALPHL) meeting, Lakewood, CO., May 2001.



Appendix A

Local or District Health Departments*

Boulder County Health Department
Broomfield County Health Department (beginning November 2001)
Delta County Health Department
Denver Department of Environmental Health
El Paso County Department of Health and Environment
Jefferson County Department of Health and Environment
Larimer County Department of Health and Environment
Las Animas–Huerfano Counties District Health Department
Mesa County Health Department
Northeast Colorado Health Department (serving the counties of Logan, Morgan, Phillips, Sedgwick, Washington and Yuma)
Otero County Health Department
Pueblo City–County Health Department
San Juan Basin Health Department
Tri-County Health Department (serving the counties of Adams, Arapahoe and Douglas)
Weld County Department of Public Health and Environment

* (All organized local health departments provide environmental protection services in addition to public health services.)

Appendix B

Public Health Nursing Services

Alamosa Colorado Public Health Nursing Service
Baca County Public Health Nursing Service
Bent County Public Health Nursing Service
Chaffee County Public Health Nursing Service
Cheyenne County Public Health Nursing Service
Clear Creek County Public Health Nursing Service
Conejos County Public Health Nursing Service
Costilla County Public Health Nursing Service
Crowley County Public Health Nursing Service
Custer County Public Health Nursing Service
Dolores County Public Health Nursing Service
Eagle County Public Health Nursing Service
Elbert County Public Health Nursing Service
Fremont County Public Health Nursing Service
Garfield County Public Health Nursing Service
Gilpin County Public Health Nursing Service
Grand County Public Health Nursing Service
Gunnison County Public Health Nursing Service
Jackson County Public Health Nursing Service
Kiowa County Public Health Nursing Service
Kit Carson County Public Health Nursing Service
Lake County Public Health Nursing Service
Lincoln County Public Health Nursing Service
Mineral County Public Health Nursing Service
Moffat County Public Health Nursing Service
Montezuma County Public Health Nursing Service
Montrose County Public Health Nursing Service
Ouray County Public Health Nursing Service
Park County Public Health Nursing Service
Pitkin County Community Health Service
Prowers County Public Health Nursing Service
Rio Blanco County Public Health Nursing Service
Rio Grande County Public Health Nursing Service
Routt County Public Health Nursing Service
Saguache County Public Health Nursing Service
San Juan County Public Health Nursing Service
San Miguel County Public Health Nursing Service
Summit County Public Health Nursing Service
Teller County Public Health and Environment



Appendix C

Environmental Health Departments

Chaffee County Environmental Health Department
Clear Creek County Environmental Health Department
Eagle County Environmental Health Department
Fremont County Environmental Health Department
Hinsdale County Environmental Health Department
Kit Carson County Environmental Health Department
Lake County Environmental Health Department
Montezuma County Environmental Health Department
Montrose County Health and Human Services
Park County Health Division
Prowers County Environmental Health Department
Pitkin County Environmental Health Department
Rio Blanco County Development Department
Routt County Environmental Health Department
San Miguel County Environmental Health Department
Southeastern Land and Environment (serving the counties of
Baca, Bent, Kiowa, and Prowers)
Summit County Environmental Health Department
Teller County Public Health and Environment





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