Environmental and Organizational Assessment of the Arkansas Department of Health

Submitted to: **The Arkansas Bureau of Legislative Research**
December 2004

Public Works LLC
1690 East Strasburg Road
West Chester, PA 19380
t. 610-296-9443
f. 610-2969434
www.public-works.org

Executive Summary

In the summer of 2004, the Arkansas General Assembly expressed concern about the existing organizational structure of the Arkansas Department of Health (ADH) and whether this structure was resulting in operational problems at ADH's local health units. To address these concerns the legislature launched a two-part process to determine the degree to which ADH's organizational structure impeded or assisted the department in accomplishing its statutory responsibilities.

The first part involved the Division of Legislative Audit (DLA) undertaking a narrowly focused audit to answer specific questions posed by the Legislature including ones related to barriers to accessing client services, ADH's compliance with policies and procedures related to travel reimbursement and employee dismissals, and reasons for the decline in demand for services at the local health units. Following the release of DLA's report the legislature retained an independent consultant, Public Works, LLC to examine ADH's organizational structure in more detail and offer recommendations for improvement.

As part of its effort to address the concerns raised by the legislature, Public Works, LLC completed the following tasks:

- A review of information collected by DLA.
- A review of the literature on public health best practices including the Ten Essential Public Health Services as outlined by the Institutes of Medicine and Centers for Disease Control.
- A comparison of ADH's organizational structure to that of other states' departments of health.
- An in-depth analysis of the reporting relationship between employees within ADH to determine whether the existing levels of management are appropriate.
- An electronic survey of all ADH employees to determine their level of understanding regarding ADH's strategic direction and how decisions are made within the department.
- Analysis of ADH's current funding sources and how these influence the agency's operations.

A summary of our research, key findings and recommendations follow.

Public Health Has Entered a New Era

Public Health has made a difference in people's lives. As early as 1800, public health helped stem infectious disease through quarantine, improved sanitation and research to identify the causes and cures for communicable and infectious disease. Through the 1980s, public health professionals continued to place an emphasis on the eradication of communicable and infectious diseases such as polio and measles.

By then, however, the biggest public health threats arose from chronic and environmental diseases – heart disease, asthma, diabetes, and tobacco-related diseases such as lung cancer and emphysema. In addition to the growing public health threat arising from chronic disease, public health has recently had to take a greater role in emergency response planning resulting from the country's heightened awareness of bioterrorism and potential environmental threats.

Also, public health has seen its responsibilities as a primary provider of personal health services decline. While in the 1930s health departments were the only source of health care for rural and poor populations, by the mid-1960's the federal government had created other means for people to access medical care such as the Medicaid program. In Arkansas, residents with incomes up to 200 percent of poverty or slightly over $37,000 per year for a family of four may qualify for private sector health care paid for by the state and federal governments.

Together the shift from infectious disease, increased emergency response duties, and diminished personal health services delivery has created a profound change in the field of public health. In response ADH has had to change the way it conducts its business.

How Is ADH Doing?

Arkansas' public health challenges are many. According to a 2004 report issued by the United Health Foundation, Arkansans ranked 46th in health status based on various health indicators. This ranking reflects high rates of smoking and obesity as well as high prevalence of diabetes and heart disease relative to levels of these health risk factors in other states.

Many of the health indicators on which Arkansas scores poorly can be positively affected by changes in behavior – and, in fact, there is good news on this front. In recent years, initiatives implemented by ADH and supported by the Governor and Legislature like the Department's Hometown Health Improvement program have placed new emphasis on the state's health status and have resulted in slight declines in both smoking and obesity which have moved Arkansas from a ranking of 47th in 2003 to its current ranking of 46th.

While we found ADH is doing a good job of moving toward a 21st Century model of public health and accomplishing its mission of assuring a healthy quality of life for Arkansans for the most part we wanted to take a closer look at how it was doing in specific areas.

We used the Ten Essential Public Health Services devised by a broad group of public health experts to measure how well the department was meeting its stated mission "To promote public health policies and practices that assure a healthy quality of life for Arkansans."

We found that ADH was doing a good job with regard to essential public health services 1-4, 6,8, and 10, but not as well as it could with regard to 5,7, and 9 as described in the table below.

Essential Public Health Services	Doing Well?
1. **Monitor** health status to identify community health problems.	Yes
2. **Diagnose and investigate** health problems and health hazards in the community.	Yes
3. **Inform, educate, and empower** people about health issues.	Yes
4. **Mobilize** community partnerships to identify and solve health problems.	Yes
5. **Develop policies and plans** that support individual and community health efforts.	Needs Improvement
6. **Enforce** laws and regulations that protect health and ensure safety.	Yes
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.	Needs Improvement
8. **Assure** a competent public and personal health care workforce.	Yes
9. **Evaluate** effectiveness, accessibility and quality of personal and population-based health services.	Needs Improvement
10. **Research** for new insights and innovative solutions to health problems.	Yes

Source: Institute of Medicine, 1998

Number five of the ten essential public health services includes developing regulatory and statutory policies, planning to ensure appropriate public health services are available and being delivered, and ensures a constructive dialogue between public health decision makers and those affected by their decisions. Although ADH has done an admirable job of developing legislation, codes, rules, and regulations that support individual, community, and state health efforts, it is not doing as well with regard to systematic planning, maintaining and tracking the data that allow the agency to establish measurable health objectives.

ADH has developed strategic plans for specific programs including diabetes, cancer, and disease and injury prevention. However, the most recent agency-wide strategic plan was completed in 1999. Subsequent strategic planning efforts have resulted in "updates", but have not given the department an opportunity to obtain a holistic view of its operations particularly in light of its changing responsibilities and functions. Lack of data and planning may account, in part, for some of the legislature's concerns regarding how the ADH chose the personnel cuts it made recently. Both DLA and the consulting team found that, while ADH is attempting to correct its data-related shortcomings, it still has a way to go.

Public Works also discovered substantial evidence of the agency's desire to create and maintain an environment where a democratic process of dialogue and debate exists – from referring to all staff as "colleagues" to maintaining a team-based leadership structures. However, in extensive interviews with ADH leadership, we found that they may be confusing a more inclusive *process* with actual *dialogue*.

Number seven of the essential public health services seeks to ensure that links to quality personal health services have been established. Public Works identified a number of

strategies and activities undertaken by the Department to ensure the quality of the services it provides, however, we found little evidence that ADH takes an active role in the assessment of access to and availability of high-quality personal health care services. ADH lacks adequate systems to track its service utilization or to measure the degree to the need for any particular service is being met at the local level when ADH is no longer delivering a service.

Number nine of the essential public health services focuses on evaluation of programs and resource allocation using evidence-based data. As alluded to previously, ADH does not possess or maintain the utilization data necessary to determine program effectiveness or the information necessary for allocating resources.

E-Survey

Public Works fielded an electronic survey (or e-survey) that was made available to all ADH employees. Over 36 percent – or almost 1,000 ADH employees – responded to the survey. Many of the issues identified in our investigation of ADH's performance related to the delivery of the Ten Essential Public Health Services were echoed in responses to our survey. These included issues related to information and data, communication, and organizational structure.

An overwhelming 98 percent of the respondents felt the job they do makes a difference. These same individuals also believe the Department is doing a good job of delivering the essential public health services. However, in areas such as where the agency is headed over the next five years, the effectiveness of communications throughout the agency, how (and how timely) decisions are made, nearly half of ADH's employees, on average, felt the agency needs improvement.

ADH's Organizational Structure

The key question the legislature charged Public Works with answering was "Does ADH's current organizational structure help or hamper the agency in achieving its mission?" We learned from our examination of their delivery of essential public health services and employee survey responses that the Department has some challenges related to data and communication. We also confirmed what DLA found from its review – few employees are happy with the current organizational structure.

We looked to public health experts including Association of State and Territorial Health Organizations (ASTHO) and the Robert Wood Johnson Foundation (RWJF) to see if there is any particular "right" organizational structure for a state public agency and found none. However, we did find that ADH's current organizational is among the most unique for a public health agency.

Although the experts specified no one right structure they identify what they considered to be themes associated with successful public health organizations. We also learned that ADH had established a "litmus test" for determining the soundness of its organizational structure.

Using these themes and ADH's "litmus tests," we evaluated the Department's current structure. As we did with the Ten Essential Public Health Services, we found that ADH structure supported some elements of the "litmus test", but not all. ADH's organization is clearly centered on the customer, encourages innovation, facilitates quality and mission, is

team-based, and promotes colleague development and core public health functions. However, the agency needs improvement in the following areas:

- Promoting open, direct, two-way communication between colleagues.
- Providing a data infrastructure for making evidence-based decisions.
- Setting clear direction and accountability.

Funding Constraints

Finally, in addition to the many things ADH can do to strengthen its operations, there is an issue related to funding that arises from how the legislature has chosen to fund the Department. Federal funds comprise at least 65 percent of the agencies funding. Federal funds almost always come with strings attached that limit their use to the specific purposes for which they were originally awarded. Fees and tobacco settlement funds account for another 15 percent of the agency's funds. These funds also have restrictions regarding their use. This leaves ADH with discretion over less than 20 percent of its funds.

As a result, the Legislature may need to examine not just aggregate funding figures for the Department, but also the earmarking or restriction of large portions of that funding to specific purposes. The degree to which funds are earmarked or restricted will affect ADH's ability to pursue objectives desired by the Legislature that are not covered with federal or grant funds or are necessary to maintain public health.

Findings and Recommendations

Our research identified thirty-four opportunities for improvement as well as a need to modify the Department's existing organizational structure. Our key findings and recommendations follow below:

Core Public Health Functions

The Department is doing a commendable job on core public health functions.

We recommend:

- *ADH should stay the course with Hometown Health Improvement.*

Public Health Informatics

Informatics is the application of IT to public health for analysis and decision-making. ADH has acknowledged that its data have not been adequate and in July 2004, the agency implemented a new, online clinical visit reporting system to address issues related to personal services utilization. However, there are system wide data needs that must be addressed.

We recommend:

- *Improve data collection and use overall.*
- *Upgrade the Department's data maintenance software.*
- *Form a Health Data Work Group involving cross-agency representatives who collect health and socio-demographic data, epidemiologists, along with public and private health care providers to identify data sources that could be analyzed in an integrated fashion at the state and county levels to better inform the strategic choices of ADH and the LHUs.*
- *Provide local health coalitions with evidenced based, integrated and outcome data that provide comprehensive profiles of each local community*.
- *Pursue a partnership between ADH and the School of Public Health to bring together cross state agency data and resources* to *conduct the studies outlined above.*
- *Pursue a grant proposal to the National Institute of Health and/or philanthropies such as the Robert Wood Johnson Foundation to create an Informatics Fellowship to assist with data development efforts.*

Communications

Though the leadership of ADH strongly believes in a philosophy of two-way communication and practices a participatory management style with the Leadership Team this perspective is not shared by nearly half of the local health unit staff (44 percent), who do not believe that "communication is two-way: from the top down and bottom up." Text entries from staff state that despite the many meetings they attend, they don't believe that management "listens" to them with the biggest target of discontent being the District Managers. However, these complaints also surfaced from respondents throughout the agency. More than half say that they are not involved in decisions that affect them. Most felt that the organization's structure does not offer clear-cut lines of authority, which they believe, is a major contributing factor to the communications "disconnect."

We recommend:

- *Continue Dr. Boozman's meetings with local health units and HHI coalitions throughout the state to share the mission of the agency and the changing state of public health.*
- *Provide communications and management training to District Managers and Local Health Unit Directors*.
- *Reassess the frequency, nature, and purpose of meetings.*
- *Continue to promote teleconferencing and use e-mail as a complement to personal communications*.
- *Provide laptops and cell phones to specialists who need to be accessible for timely decisions and guidance*

Strategic Planning

As has been noted, ADH has strategic plans for specific programs but not completed an agency-wide since 1999.

We recommend:

- *Engage in a rigorous process to produce a five-year strategic plan.*
- *Require that all objectives in the strategic plan include quantifiable performance and outcome measures.*

Organizational Structure

Numerous comments from ADH survey respondents indicate wide-spread discontent with the agency's current structure. Other research conducted by the team suggests ADH has communication and decision-making issues requiring attention. In particular we believe the agency's central office management reporting arrangement can be streamlined and improved. A discussion-only alternative organizational chart appears as Appendix C of the report. This chart reduces the number of direct-reports to the Director and brings additional focus on data management and communications by creating a Deputy for Administrative Operations and a Deputy for Services. We believe that creating direct lines of accountability that vertically integrate services will also address the communication problems cited by employees in the e-survey.

We recommend:

- *Engage in a robust discussion on revising ADH's organization chart and structure (using our chart as a starting point).*
- *Redefine the District Manager role to encompass more of a "product line manager" role.*
- *Conduct a cost/benefit/time study analysis of the numbers of District Managers and Regional Managers.*

Customer Service

While ADH is a "customer-centered" organization, we heard from the field that recent cuts in staff and resources have dealt blows to employee morale which in turn as negatively affected "customer service" in the local health units. We also received negative comments about the Department's "same day service" appointments system and the physical condition of some clinic locations. Finally, the changing face of the average LHU customer came up repeatedly with numerous comments on the need for bi-lingual and culturally competent staff.

We recommend:

- *Provide customer service training for "first contact" staff and other staff likely to come into contact with the public at Local Health Units*
- *Review the "same day service" scheduling policy and determine if another scheduling system can be implemented that meets both customer and clinic needs*.

- *Ask the Department of General Services to conduct on-premises assessments of physical property for affordable upgrades*
- *Accelerate efforts to address the needs of the changing minority customer base and provide cultural competency training to staff at all levels*.

Continuous Investment in Improvement

With limited resources, ADH will need to pursue and maintain robust private-public partnerships to assist the Department with accomplishing its many responsibilities well.

We recommend:

- *Pursue public private partnerships and funding at the leadership level to assist the department in areas of strategic planning, and evidenced-based data and outcome measures.*
- *Continue to monitor and, when needed, increase salaries for competitive recruitment and retention of high-quality*
- *Ask staff throughout the organization what they want to learn and what training they would like to receive to better perform their jobs.*

Funding

Recent changes in ADH's funding mix – increasing federal and special grant funds and declining general revenue funds -- have limited its flexibility in dealing with public health-related matters outside these funding streams, including COLAs, services for Arkansans who are not eligible for federal programs, and basic departmental infrastructure.

We recommend:

- The Legislature should review and consider the Department's current funding mix prior to making further cuts in the agency's appropriated general revenue.

Conclusion

ADH is making great strides towards meeting its current and future obligations. However, there are areas in need of improvement – specifically communications and data management, and the agency's current organizational structure isn't helping. We recommend a number of changes, which if implemented, should assist the Department and enable them to keep up the good work.

Chapter I
Overview

1.1 Background

In the summer of 2004, the Arkansas General Assembly expressed concern about the existing organizational structure of the Arkansas Department of Health (ADH) and whether this structure was resulting in operational problems at ADH's local health units. Specifically, the Legislature wished to determine whether recent cuts in personnel at the local health units were justified and whether these cuts resulted in barriers to services for Arkansans seeking medical services through the local health units.

In response to these and other concerns, the Legislative Council launched a two-part process to determine the degree to which ADH's organizational structure impeded or assisted the department in accomplishing its statutory responsibilities. The first part of the process involved the Division of Legislative Audit (DLA) undertaking a narrowly focused audit to answer specific questions posed by the Legislative Council. The second part would be an assessment of ADH's organizational structure by an independent consultant.

On October 8, 2004, DLA issued its Special Report regarding the ADH local health units. This report compared ADH's current organizational structure with its prior structure and reviewed structures of other state health departments. DLA also examined whether barriers to accessing client services exist, measured ADH's compliance with policies and procedures related to travel reimbursement and employee dismissals, and attempted to analyze the reasons for the decline in demand for services at the local health units.

DLA limited its interviews to ADH employees assigned to local health units who work directly with clients and provide direct services. No supervisory level or central office administrative employees were interviewed. DLA found that of the 77 local health unit employees interviewed, almost 90 percent were unhappy with the current organizational structure. These employees felt it was difficult to determine who was responsible for policy decisions and where to direct questions. They also expressed displeasure with the number of managerial staff who does not contribute directly to client services.

1.2 Project Scope and Methodology

The Arkansas Legislative Council retained Public Works LLC to assess whether ADH's organizational structure hampers the department's operations. Public Works' assessment was intended to build upon the DLA review. Public Works therefore reviewed DLA's report and supporting materials, but we also examined other existing studies, strategic plans, program evaluations, consumer satisfaction survey results, and other relevant background materials on ADH.

In addition, because DLA's review had been narrowly focused, Public Works determined that a broader examination of the environment in which ADH operates would be necessary. We therefore conducted an "environmental scan" or high-level examination of the internal and external pressures affecting ADH operations. Further, we sought input from all levels of the

organization. In fact, Public Works developed an electronic survey that was made available to *all* ADH employees in order to address the Department leadership's concerns as to the initial narrow survey conducted by DLA. This broader survey sought to explore further the issues raised by the other research and to tap the insights of a broader sampling of ADH employees

Public Works also reviewed research on what makes a state level public health agency successful. This best practices research establishes the basis for our diagnostic impact analysis, which examines the degree to which ADH's existing organizational structure enhances or hinders ADH's mission.

Finally, Public Works spoke extensively with both officials of the Arkansas Department of Health, including Director Fay Boozman, and members of the Legislative Council about their concerns and priorities, and their perceptions as to the findings and recommendations emerging from this research. This report reflects the diversity of input we were able thereby to obtain, including:

- A review of information collected by DLA.
- A review of the literature on public health best practices including the Ten Essential Public Health Services as outlined by the Institutes of Medicine and Centers for Disease Control.
- A comparison of ADH's organizational structure to that of other states' departments of health.
- An in-depth analysis of the reporting relationship between employees within ADH to determine whether the existing levels of management are appropriate.
- An electronic survey of all ADH employees to determine their level of understanding regarding ADH's strategic direction and how decisions are made within the department.
- Analysis of ADH's current funding sources and how these influence the agency's operations.

1.3 This Report

The remainder of the report is organized as follows:

Chapter Two surveys the definition and role of public health, covering the evolution of public health functions nationally and in Arkansas. It assesses how the focus, delivery, funding and management of public health have changed in recent years.

Chapter Three introduces the Ten Essential Public Health Services by which public health delivery is evaluated today. It assesses how well ADH is delivering each of these ten essential services, and notes where there are problem areas.

Chapter Four provides the results of our ADH employee e–survey. These result address some of the issues raised in the previous chapter and raise additional issues that are addressed in the subsequent chapters.

Chapter Five provides an overview of structural and management issues in public health agencies today across the country, including several best-practice models. It then assesses how well ADH's structure and organization match up against these models as well as ADH's own "litmus test" for a successful organizational structure.

Chapter Six turns to a problem ADH faces not from within but from without – funding. It focuses attention on the fact that, while overall funding levels for ADH have been reduced only minimally, the changing nature of that funding – particularly, the increasing role of restricted federal funding – means that funding for other services the Legislature and ADH consider important has in fact decreased substantially.

Chapter Seven contains our recommendations for addressing all of these issues, along with a timeframe for the implementation of each.

Appendices are included at the end of the report, containing the e-survey questionnaire, other state health agency organizational charts, and a new discussion-only organizational chart for ADH.

Chapter II
Environmental Scan: Public Health Yesterday and Today

2.1. Overview

This chapter defines "public health" and provides a brief history of public health in general, and in Arkansas specifically, examining the changing emphasis in public health over time.

2.2. Public Health Defined

The World Health Organization (WHO) defines "health" as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. "Public health" concerns the overall health of a population or community. Public health as a discipline promotes the "health" of the community and seeks to prevent threats that endanger the community's or population's health.[1] Such threats can arise from environmental situations such as polluted air or water, personal behaviors such as smoking or poor nutrition, or natural or man-made disasters such as tornadoes or terrorism.

James Ware of the Harvard School of Public Health characterizes the difference between "Public Health" and "Clinical Medicine," or health care, as follows:

Exhibit 2.1 Denfition of Public Health versus Clinical Medicine

Public Health	Clincal Medicine
Prevent Disease	Preventive Medicine (i.e. tests, diagnoses)
Promote Health	Treat Illness
Focus on Populations	Care for Individuals
Environmental Health	Results for Individual Patients

Source: James H. Ware, Dean for Academic Affairs, Harvard School of Public Health, University of Cyprus October 11, 2004

As one author has observed, "When public health "is at its best nothing happens: no epidemics, food and water are safe to consume, the citizens are well informed …children are immunized, the air is breathable, factories obey safety standards, there is little class-based disparity in disease or life expectancy, and few members of the citizenry go untreated when they develop addictions" or acquire infectious diseases.[2]

2.3. Origins of Public Health

Infectious diseases emerged with the dawn of civilization.[3] As civilization developed, people began to concentrate in villages and cities. As cities and villages grew, trade among population centers increased. Increased trade between population centers led to epidemics (sudden outbreaks of disease in particular locations in excess of what is expected) and pandemics (sudden spread of disease in excess of what is expected over a wide geographic

area). Lack of sanitation and close quarters contributed to the spread of influenza, Salmonella, tuberculosis infections, and parasitic worms[4].

The first response to these "public health" threats was to quarantine or isolate individuals infected with disease. However by the close of the 19th Century, sanitation reforms and the arrival of the bacteriologic era significantly increased the effectiveness of public health efforts and resulted in the discovery of the causes of most diseases. For example, public health experts discovered that mosquitoes cause yellow fever, which led to mosquito control actions resulting in dramatic reductions in yellow fever-related deaths.[5]

As little as a century ago a child had only a 50-50 chance of reaching the age of 5. By the turn of the 20th Century, public health advances that identified the causes of disease, as well as medical, sewage and water supply improvements, dramatically cut infant mortality. Today, 98 percent of the infants born in this country make it to their fifth birthday.

Early in the last century, mortality and morbidity were most often the result of infectious and communicable disease. As a result public health focused on containing and curing these diseases.

Public health was well established in Arkansas by the mid-1800s. Little Rock's town council created the first city board of health in the Arkansas Territory in 1832. When a yellow fever epidemic swept through the Arkansas in 1878, it led to the organization of the first state board of health.

Governor George Washington Donaghey appointed a permanent state board of health 35 years later, in 1913. The new board of health focused on eradicating hookworm disease, and, later, the spread of malaria.

During the Depression, many people turned to the state's public health system for medical care because either income or geography left them with no other means of obtaining needed care. Local public health units dispensed immunizations to combat typhoid fever, smallpox, and diphtheria as well as other preventive and routine health care services.

Although vaccines had been introduced in the 1920s and '30s, it wasn't until the 1950s with mass immunization events that these efforts began to control the spread of vaccine-preventable disease. Vaccines and antibiotics discovered in the 1940s, '50s, and '60s would eradicate diseases that once threatened entire populations. **Exhibit 2.2** shows the date of introduction of various vaccines.

Exhibit 2.2 Vaccinations Available After World War II

Vaccinations Available After World War Ii[6]	
1955	Injectable Polio Vaccine (IPV)
1962	Oral Polio Vaccine (OPV)
1964	Measles
1967	Mumps
1970	Rubella
1978	Swine Flu
1981	Hepatitis B

By the 1960s, a striking decline in tuberculosis, influenza and other communicable diseases had taken place. In 1963, before the measles vaccine became available, about 500,000 cases were reported annually in the U.S. Measles were one of the leading causes of deafness and blindness in children. By 1982, measles, mumps, and rubella (MMR) vaccines were routinely given to children, and by 2000, fewer than 200 cases of measles were reported per year – a 99 percent decline.

By 2000, the widespread deployment of immunizations and the ubiquity of antibiotics had gone a long way toward eradicating infectious disease. Public health efforts in Arkansas and elsewhere have largely been responsible for increased life expectancy, improved birth outcomes, improved sanitation, and safer drinking water.

Recently, however, more and more parents are choosing not to vaccinate their children. Anti-vaccination sentiment inside the U.S. has grown significantly due in part to hotly disputed links between certain vaccinations and autism. Most state's mandatory vaccination laws contain religious exemptions for parents who oppose vaccination on religious grounds. However, recently a number of states, including Arkansas, have passed laws that allow parents to decline to vaccinate their children for "philosophical" reasons. The growing numbers of children who are not properly vaccinated has caused the American Medical Association to register grave concern.

Where vaccination levels have declined significantly disease outbreaks have already occurred killing hundred and hospitalizing thousands more. "Hot spots" are on the rise around the U.S. This has left public health agencies in the position of supporting individual freedoms while having to devote resources to address increasing rates of diseases such as rubella and mumps that had been all but eradicated only a decade or two ago.[7]

2.4. The Changing Challenge

A Different Focus for Public Health

Through the 1980s, public health professionals continued to place an emphasis on the eradication of communicable and infectious diseases such as polio and measles. By then, however, the biggest public health threats arose from chronic and environmental diseases – heart disease, asthma, diabetes, and tobacco-related diseases such as lung cancer and emphysema. Environmental toxins and obesity had become greater threats than infection or sanitation.

Exhibit 2.3 shows trends in selected causes of death from 1900 to 2000. This exhibit illustrates the decline of communicable diseases from 1900 to 2000 and the rise of cancer, heart disease, and preventable injury.

Exhibit 2.3
Selected Causes of Death from 1990 to 2000 in the U.S per 100,000 population.

Year	Tuberculosis, all forms	Influenza and pneumonia	Malignant neoplasms (cancer)	Major cardio-vascular/renal diseases	Motor vehicle accidents
1900	194.4	202.2	64.0	345.2	n.a.
1910	153.8	155.9	76.2	371.9	1.8
1920	113.1	207.3	83.4	364.9	10.3
1930	71.1	102.5	97.4	414.4	26.7
1940	45.9	70.3	120.3	485.7	26.2
1950	22.5	31.3	139.8	510.8	23.1
1960	6.1	37.3	149.2	521.8	21.3
1970	2.6	30.9	162.8	496.0	26.9
1980	0.9	24.1	183.9	436.4	23.5
1990	0.7	32.0	203.2	368.3	18.8
2000	0.3	24.3	200.5	340.4	15.2
2001	0.3	21.8	194.4	323.9	15.4

Source: 1900-1970, U.S. Public Health Service, *Vital Statistics of the United States,* annual, Vol. I and Vol II; 1971-2001, U.S. National Center for Health Statistics, *Vital Statistics of the United States,* annual; *National Vital Statistics Report (NVSR)* (formerly *Monthly Vital Statistics Report)*; and unpublished data. From *Statistical Abstract of the United States: 2003.*

Exhibit 2.4 shows today's leading causes of death in the U.S. and Arkansas. Heart disease and cancer top the list, closely followed by tobacco related diseases such as emphysema and chronic bronchitis. Arkansas closely tracks the nation in leading causes of death.

Exhibit 2.4 Leading Cause of Death in Arkansas and the U.S. 2001

Ten Leading Causes Of Death, U.S., 2001	Informal Name	% All Deaths U.S.	% All Deaths AR
(1) Diseases of the heart	heart attack (mainly)	29.00%	29.80%
(2) Malignant neoplasms	cancer	22.90%	22.00%
(3) Cerebrovascular disease	stroke	6.80%	8.10%
(4) Chronic lower respiratory disease	emphysema, chronic bronchitis	5.10%	4.90%
(5) Unintentional injuries	accidents	4.20%	4.80%
(6) Diabetes mellitus	diabetes	3.00%	2.70%
(7) Influenza and pneumonia	flu & pneumonia	2.60%	2.60%
(8) Alzheimer's Disease	Alzheimer's senility	2.20%	1.60%
(9) Nephritis and Nephrosis	kidney disease	1.60%	1.90%
(10) Septicemia	systemic infection	1.30%	1.80%

Source: National Vital Statistics Report, Volume 52, Number 9, November 2003.

Unlike the leading threats to human life and health heretofore, which were generally driven by society-wide factors, the rates of these diseases in a community are influenced by what is often referred to as "lifestyles" choices – that is, diet, amount of exercise, alcohol

consumption, and other behaviors over which individuals themselves have control. Research suggests that the prevalence of chronic diseases and those arising from environmental factors can be reduced by changing people's behaviors. One of the best known examples is smoking: When the percentage of people in a community who smoke declines, so does the incidence of lung disease, heart attack and stroke. Similarly, when the percentage of a population that is obese diminishes, so do the rates of heart disease, diabetes, and certain types of cancer.

Thus, as deaths resulting from infectious disease have declined and the rate of chronic disease has increased, public health has had to adjust. A new approach that addressed individual behaviors and environmental factors (such as second-hand smoke and diminished physical activity levels) was required.

A Changing Delivery System

At the same time that the nature of public health services has been changing, the *mode of delivery* of many of these services has changed, as well. In the 1930s, public health provided the sole source of medical services for many poor and rural Arkansans who had no other means of obtaining needed health care. In 1965, Congress created Medicaid, a joint state-federal funded program that pays for medical care for certain qualified low-income people, thus relieving the public health system of some of its responsibility to provide some types of personal health services for low-income individuals. ADH is no longer the sole provider of direct health care services for the state's poor and rural residents because of programs like Medicaid and ARKids. The public health system would continue to be the primary, and in some cases the sole, provider of some personal health services, however, such as those related to communicable and sexually transmitted diseases as well as prevention and diagnostic services such as immunizations and medical screenings to detect cancer.

In general, though, these changes have meant a shift in the function of public health from the direct provider of services to *individuals* to a focus on *population-based* strategies. This function is not entirely new: With an increase in the availability of vaccines came an increased need for public health awareness. An outbreak of polio in the 1950s prompted ADH to develop a public health education initiative to educate parents on the importance of early vaccination.[8] ADH eventually developed public health educational campaigns to promote vaccinations, sanitation, and awareness about the availability of treatments for diseases that had previously been life-threatening. Today, such public outreach and education efforts, aimed at changing unhealthy behaviors and raising public health awareness, are a *central* part of any public health department's mission.

Changing Funding Constraints

Today, public health also must contend with bioterrorism preparedness. Several events in the past several years highlighted some glaring shortcomings in our nation's emergency planning and public health systems. The most notable, of course, was the September 11, 2001 terrorist attack. Another was delivery of the anthrax virus through the U.S. postal system. These incidences served to put the nation on notice that more needed to be done to protect the public against potential biological attack and assaults against the country's water and food supplies.

These issues were upper most on the mind of those forming the department of Homeland Security. When money was appropriated to fund the new Homeland Security Department a considerable sum was allocated to bring the nation's emergency response and public health system's "up to snuff."

Among the key activities delegated to state public health agencies was the development of regional and local hospital preparedness and response plans to enable an adequate response to an act of bioterrorism or other infectious disease outbreak or emergency. Working with 500 Arkansans, ADH helped create seven regional hospital preparedness plans.

The federal government has given the department over $32.5 million between 2002 and 2004 to carry out its new responsibilities, but these moneys may only be used for services that address emergency preparedness. These new responsibilities have required the department to create a new business unit designated to handle bioterrorism and other related emergencies. While the new emphasis on homeland security at the national level has provided additional funding for ADH, this funding has done nothing to increase the Department's ability to address its other pressing public health responsibilities because these new moneys only may be used for bioterrorism preparedness or other emergency-related activities.

Both internal and external governmental factors also affect an organization's structure, function, and effectiveness. Shrinking state revenues, federal funds that come increasingly with restrictions, and unfunded expenses like cost of living adjustments (COLA) for state employees have affected ADH's operations. In addition, shifts in responsibilities among state agencies such as the transfer of oversight responsibilities for alcohol and substance abuse programs to the Arkansas Department of Human Services (ADHS) from ADH have affected the Department's operations and funding.

A Changing Operational Environment

To address the rapidly changing environment with which today's public health agency must contend requires clear, strong management and modern organizational approaches.

2.5. Conclusion

The historic and nationwide shift in emphasis from disease eradication, service delivery, and sanitation to emergency management, lifestyle change, and environmental monitoring has necessarily resulted in changes in the way ADH conducts its business. The next chapter assesses in detail the degree to which ADH provides essential public health services. Chapter IV then reviews the findings of an electronic survey of ADH employees arising out of some of the concerns raised in Chapter III. Chapter V discusses ADH's organizational and management challenges. Chapter VI then turns to the issues arising from the Department's increasingly restricted funding. Finally, Chapter VII outlines our recommendations to ensure the Department can meet the state's current and future challenges.

Chapter III
ADH Functional Analysis and Response to Environment

3.1. *Overview*

In this chapter, we introduce the Ten Essential Public Health Services. Each of these services is mission critical if a state wishes to preserve and improve the population's health. This chapter briefly describes Arkansans' current health status and the functions and operations of the Arkansas Department of Health (ADH). We review ADH's operations in light of the Ten Essential Public Health Services, to assess the degree to which the department is delivering these services.

3.2. *How is ADH Doing?*

Arkansas' public health challenges are many. According to a 2004 report issued by the United Health Foundation, Arkansans ranked 46th in health status based on various health indicators, an improvement over the state's 2003 rank of 47th, but still in the bottom five nationwide.[9] The state's public health challenges include:

- Arkansans ranked 34th in the percentage of people who smoke or 25 percent of the population.
- Arkansans ranked 43rd out of 50 in terms of obesity with more than 25 percent of the population being obese.
- Cancer-related deaths per 100,000 population actually *increased* from 198 to 213.1 between 2003 and 2004, while the national average was 204 per 100,000 in 2004.

Smoking is associated with high rates of heart attack, stroke, and lung disease. Obesity is associated with high rates of diabetes and osteoarthritis. Arkansas ranks 11th in the nation in prevalence of diabetes meaning only 10 states have a *higher* rate of diabetes than Arkansas.[10] Individuals with diabetes are two to four times as likely as those without to die from heart attack or stroke. Heart attacks account for 30 percent of deaths annually in the state.

Arkansan's health status has a direct impact on the state's economy. On average, Arkansans report being unable to work or perform household tasks 2.4 days out of the previous thirty. In comparison, the rate for the nation as a whole was 2.1 days per person and for the healthiest states a mere 1.4 days. That amounts to lost productivity of at least $2.3 billion annually in the state due to illness – more than $300 million above what it would be if Arkansas simply achieved health levels at the national average. The state is losing about $1 billion per year by not achieving the health levels of the healthiest states.

Many of the health indicators on which Arkansas scores poorly can be positively affected by changes in behavior – and, in fact, there is good news on this front. In recent years, initiatives implemented by ADH and supported by the Governor and Legislature have placed new emphasis on the state's health status with the creation of its Hometown Health Initiative, which attempts proactively to implement preventive and education programs targeted at improving the health of all populations within the state. In addition, ADH has issued a number of topic-specific strategic plans such as the Department's Process Improvement Plan for Diabetes and the plan developed with the Injury Prevention Coalition.

ADH has aggressively attacked smoking, particularly among school-aged Arkansans. Started in early 2002, ADH's *Stamp Out Smoking Campaign* has resulted in fewer Arkansans smoking in 2004 (24.8 percent) than in 2003 (26.3 percent). In 2003 and 2004, the Centers for Disease Control (CDC) awarded grants to Arkansas totaling almost $1.3 million to addresses cardiovascular disease; cardiovascular-related deaths declined from 383.6 to 379 per 100,000 between 2003 and 2004. This demonstrates that such efforts can have – and, in fact, are having – a real and positive effect.

In short, ADH is doing a good job of moving toward a 21st Century model of public health and accomplishing its mission of assuring a healthy quality of life for Arkansans. Nonetheless, the department could be doing a better job of delivering some of the Ten Essential Public Health Services that comprise this goal.

3.3 The Ten Essential Public Health Services

As the nation began to grapple with the changing public health threats outlined in the previous chapter, public health organizations nationwide developed a new framework to meet the challenges facing them. This effort was called the "Public Health Functions Project" and was led by the U.S. Surgeon General and the Assistant Secretary for Health from 1994 to 1999; its steering committee consisted of:

Agency for Health Care Policy and Research	American Public Health Association
Association of Schools of Public Health	Association of State and Territorial Health Officials
Centers for Disease Control and Prevention	Environmental Council of the States
Food and Drug Administration	Health Resources and Services Administration
Indian Health Service	National Association of County and City Health Officials
National Association of Local Boards of Health	National Association of State Alcohol and Drug Abuse Directors
National Association of State Mental Health Program Directors	National Institutes of Health
Office of Public Health and Science	Partnership for Prevention
Public Health Foundation	Public Health Service Regional Administrators

Source: Office of Disease Prevention and Health Promotion, 2004

The Public Health Functions Project was launched to help clarify the nation's public health challenges and to develop strategies and tools to address weaknesses in the nation's public health system. The Project also was intended to provide state and local health departments with a framework to address their unique public health challenges. Special emphasis was

placed on marshalling consensus on the essential services of public health; developing guidelines for sound practices in public health; linking public health activities with data systems to monitor and track elements necessary for the delivery of public health services, including the relationship of those elements to personal health services information systems; and developing strategies for enhancing public and professional awareness of the nature and impact of public health activities.

In 1995, the Steering Committee adopted the following model for addressing the future of public health in the U.S. On the wheel depicted in **Exhibit 3.1** are the Ten Essential Public Health Services. These essential services form the foundation for a public health strategy, and offer all health agencies a framework for determining their structure, budget, and programmatic priorities. They are listed in **Exhibit 3.2**, below.

Exhibit 3.1. Model for Addressing the Future of Public Health

Source: Public Health Functions Steering Committee, Members (July 1995)

Exhibit 3.2 Ten Essential Public Health Services

Essential Public Health Services
1. **Monitor** health status to identify 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 to identify and 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 assure the provision of health care when otherwise unavailable.
8. **Assure** a competent public and personal health care workforce.
9. **Evaluate** effectiveness, accessibility and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.

Source: Institute of Medicine, 1998

3.4 ADH Functions and Programs

Arkansas state statute provides that ADH is to make all "reasonable and necessary" rules and regulations to protect the health and safety of the citizens of Arkansas. Codified in 1913, the Act goes on to specify that the department shall ameliorate "sanitary and hygienic conditions within the state; for the suppression and prevention of infectious, contagious, and communicable diseases." The law further states that ADH is charged with studying "the causes and prevention of infectious, contagious, and communicable diseases."[11,12]

More recently, however, the Arkansas Legislature has enacted legislation creating the Child Health Advisory Committee to promulgate rules ensuring "nutrition and physical activity standards are implemented to provide students with the skills, opportunities, and encouragement to adopt healthy lifestyles."[13] This law and others enacted in 2003 acknowledge the importance of lifestyle decisions in dictating Arkansans' current and future health status.

ADH itself has focused on what it has defined as its six core functions. They are:

1. Provide Personal Health Services
2. Provide Education and Enforce Laws and Regulations
3. Support Hometown Health Improvement
4. Promote and Encourage Healthy Behaviors (Healthy Arkansas)
5. Respond to Public Health Emergencies
6. Monitor and Investigate Public Health Problems

For the most part, ADH's six core functions cover the Ten Essential Public Health Services. **Exhibit 3.3** illustrates how ADH's functions align with the Ten Essential Public Health Services. An ADH function may relate to more than one essential public health service. Although ADH does not list "Assure a Competent Health Services Workforce" as a specific function, the Department does apply a systematic effort to health-related workforce issues. Also, ADH does not conduct any public health research per se, but works closely with the Arkansas School of Public Health, which does conduct public health research.

Exhibit 3.3 Crosswalk of Ten Essential Public Services and ADH Six Core Functions

CDC's Essential Public Health Services	Relevant ADH Functions
1. **Monitor** health status to identify community health problems.	Monitor and Investigate Public Health Problems
2. **Diagnose and investigate** health problems and health hazards in the community.	Monitor and Investigate Public Health Problems & Respond to Public Health Emergencies
3. **Inform, educate, and empower** people about health issues.	Provide Education and Enforce Laws and Regulations & Promote and Encourage Healthy Behaviors
4. **Mobilize** community partnerships to identify and solve health problems.	Support Hometown Health Improvement
5. **Develop policies and plans** that support individual and community health efforts.	Promote and Encourage Healthy Behaviors
6. **Enforce** laws and regulations that protect health and ensure safety.	Provide Education and Enforce Laws and Regulations
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.	Provide Personal Health Services (LHU's Clinical Services& In Home Services)
8. **Assure** a competent public and personal health care workforce.	Assure a Competent Health Services Workforce
9. **Evaluate** effectiveness, accessibility and quality of personal and population-based health services.	Support Hometown Health Improvement
10. **Research** for new insights and innovative solutions to health problems.	Research conducted by Arkansas School of Public Health

In sum, ADH is delivering all of the Ten Essential Public Health Services to some degree and in some fashion. As we describe further below, however, the Department is not providing all of these services fully or equally well. The services and examples used in the following discussion to show how ADH delivers each of the Ten Essential Public Health Services are in no way comprehensive, but serve as illustrations of how well, or not, ADH is delivering each service.

3.5 Essential Services ADH is Delivering Well

#1: Monitor Health Status To Identify Community Health Problems

This service includes:

- The identification of health threats and the determination of health service needs.
- Attention to the vital statistics and health status of specific groups that are at higher risk for health threats than the general population.
- Identification of community assets and resources, which promote health and improve quality of life.

- Utilization of technology and other methods to interpret and communicate health information to diverse audiences in different sectors.
- Collaboration in integrating and managing public health related information systems.

ADH delivers comprehensive monitoring and investigation of public health problems. Through ADH's Hometown Health Improvement (HHI) initiative, the department identifies health threats and health service needs. For example, ADH administered the Behavioral Risk Factor Surveillance Survey (BRFSS), at 31 HHI sites and the Youth Risk Behavior Survey (YRBS) at 22 HHI sites in 2003. The BRFSS and the YRBS are national efforts to collect data on a variety of health issues such as nutrition, physical activity and quality of life by asking respondents numerous questions on random telephone surveys. ADH collects and maintains vital statistics of specific groups that are at higher risks for health threats such as children, Arkansans living in poverty and minorities.

Through its BRFSS, the department found obesity and lack of exercise to be major health risk factors for Arkansans. In response, ADH developed countywide coalitions to encourage elementary aged students to walk and to promote workplace wellness among Arkansas workers by sponsoring "Walk the Walk to Wellness."

The Centers for Disease Control have recognized ADH's Vital Records and Center for Health Statistics units as being among the top in the U.S. in their field. In 2003, Vital Records worked collaboratively with medical professionals involved in vital statistics data by conducting 40 workshops for doctors, nurses, and coroners to improve the accuracy of cause-of-death reporting.

#2: Diagnose and Investigate Health Problems and Health Hazards in the Community

This service includes:

- Epidemiologic investigation of disease outbreaks and patterns of infectious and chronic diseases, injuries, and other adverse health conditions.
- Population-based screening, case finding, investigation, and the scientific analysis of health problems.
- Rapid screening, high volume testing, and active infectious disease epidemiologic investigations.

ADH offers a wide range of epidemiological surveillance, investigation, and reporting of disease. Webster's defines epidemiology as:

> "That branch of medicine which studies the incidence and distribution of disease in a population, and uses such information to find the causes, modes of transmission, and methods for control of disease."

ADH implemented a web-based registry to collect data related to tuberculosis case surveillance, contact investigation, case management, and targeted testing, and treatment. The agency also tests, counsels, and monitors AIDS cases.

Further ADH investigates potential outbreaks of disease, population-based screening, investigation and scientific analysis of health problems. For example, ADH coordinated school-based screening of all school-aged children in the state to assess levels of childhood obesity. ADH also received and analyzed 3,000 dead birds for West Nile Virus in 2003. When a possible case of SARS was identified ADH implemented its epidemic response to investigate the potential case of SARS and determined the case to be negative.

ADH responds to public health emergencies with its emergency and bioterrorism preparedness activities, which include the development of seven regional hospitals preparedness and response plans. Additionally the department has upgraded its Emergency Operations Center to be activated in the event of a public health emergency and for preparedness exercises and drills.

#3: Inform, Educate, and Empower People About Health Issues

This service includes:

- Health information, health education, and health promotion activities designed to reduce health risk and promote better health.
- Health communication plans and activities such as media advocacy and social marketing.
- Accessible health information and educational resources.
- Health education and promotion program partnerships with schools, faith communities, work sites, personal care providers, and others to implement and reinforce health promotion programs and messages.
- Education of persons and entities obligated to obey or to enforce laws and regulations designed to protect health and safety in order to encourage compliance.

ADH offers a wide range of health information through various media. It also sponsors and conducts numerous health education classes and workshops and health promotion activities. In particular, ADH launched its SOS (Stamp Out Smoking) Campaign and its Arkansas Healthy Aging effort to improve the health status of older Arkansans. ADH has maintained an ongoing effort to prevent unintentional childhood injury and to reduce injuries from fires. The Departments public and professional education efforts related to recognizing and addressing specific diseases, from arthritis to stroke, are too numerous to mention.

The Department's health education partners include the Governor's Council on Fitness, the CDC, the Arkansas Department of Human Services, the Arkansas Diabetes Association, the University of Arkansas, and the Arkansas SAFE Kids Coalition among others.

#4: Mobilize Community Partnerships To Identify And Solve Health Problems

This service includes:

- The organization and leadership to convene, facilitate, and collaborate with statewide partners (including those not typically considered to be health-related) to identify public health priorities and create effective solutions to solve state and local health problems.
- The building of a statewide partnership to collaborate in the performance of public health functions and essential services in an effort to utilize the full range of available human and material resources to improve the state's health status.
- Assistance to partners and communities to organize and undertake actions to improve the health of the state's communities.

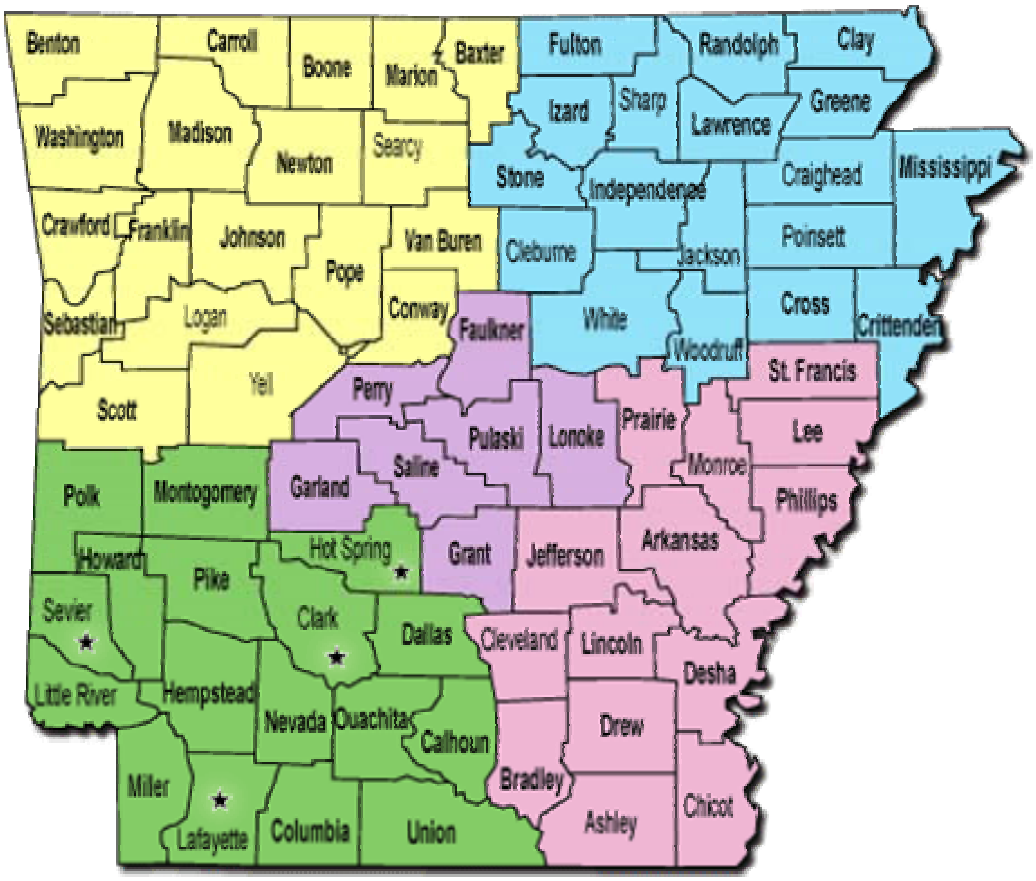
An outgrowth of ADH's 1996 strategic planning initiative, ADH launched its Hometown Health Initiative (HHI) in 1999 placing an emphasis on helping local communities assess and respond to their unique health needs. The object was to improve Arkansan's health status by creating "systems" at the local level that focus on promoting, maintaining and improving health rather than simply treating illness. The departments' role in this initiative is as follows:

- Data collection, interpretation, and use
- Coalition building
- Dissemination of information
- Brokering
- Training
- Evaluation

The HHI Leaders, formerly known as Local Health Unit (LHU) Administrators, provide leadership by convening and facilitating efforts to identify the community's health challenges and collaboratively develop solutions. The HHI Leader help communities create plans that promote healthy behaviors. In addition HHI Leaders are responsible for developing and maintaining state level partnerships, coordinating staff, program development and state and federal level reporting.

HHI brings together a wide range of people and organizations including consumers, business leaders, health care providers, elected officials, religious leaders, and educators to identify community health problems and develop and implement ways to solve them.

Fifty-five HHI initiatives currently exist. HHI initiatives may develop tobacco cessation programs for adolescents, household hazardous waste round-up, parenting support groups, local industry wellness programs, health fairs, and health resource guides. The map below shows the counties with an existing HHI initiative in **BOLD**; planned HHI initiatives are noted with a star.



Source: Arkansas Department of Health, November 2004

In addition to its HHI, ADH conducts internal evaluations of its health programs based on analyses of health data. These include evaluation of prevention and control activities conducted by the department. One example is the evaluation of programs designed to prevent and control Hepatitis C. ADH also offers materials and technical assistance to help local school districts win health related grant funding. An example of this is the Resource Guide for School–Based Tobacco Programs targeted toward tobacco prevention grants that ADH publishes.

#6: Enforce Laws and Regulations that Protect Health and Ensure Safety

This service includes:

- The review, evaluation, and revision of laws and regulations designed to protect health and safety to assure that they reflect current scientific knowledge and best practices for achieving compliance.
- Enforcement activities in areas of public health concern, including, but not limited to, the protection of drinking water; enforcement of clean air standards; regulation of care provided in health care facilities and programs; re-inspection of workplaces following safety violations; review of new drug, biological, and medical device applications; enforcement of

laws governing the sale of alcohol and tobacco to minors; seat belt and child safety seat usage; and childhood immunizations.

ADH's 2003 Annual Report cites 8 legislative initiatives successfully undertaken on public health topics as diverse as vision care to public health laboratory improvements to enhance West Nile virus detection.

The agency oversees a variety of public regulatory and environmental activities. ADH's Environmental Health Protection (EHP) program's responsibilities include:

- Inspecting food service establishments.
- Conducting milk plant and dairy inspections.
- Inspecting private sewage disposal systems.
- Conducting public swimming pool inspections.
- Investigating environmental and general sanitation complaints.
- Conducting consumer product safety investigations.
- Providing consultation services to subdivision developers.
- Conducting training programs for colleagues, customers, and industry.

#8: Assure a Competent Health Services Workforce

This service includes:

- Education, training, development, and assessment of health professionals- including partners, volunteers and other lay community health workers - to meet statewide needs for public and personal health services.
- Efficient processes for credentialing technical and professional health personnel.
- Adoption of continuous quality improvement and life-long learning programs.
- Partnerships with professional workforce development programs to assure relevant learning experiences for all participants.
- Continuing education in management, cultural competence, and leadership development programs.

Workforce Development is a centralized work unit housed within the department's Administrative Business Unit. The team is headed by a member of senior management who reports directly to the Director of Administration.

The team is divided into workforce development activities related to general public health training and Bioterrorism related training activities. Included in general public health training includes: orientation to the department, specific leadership training (Arkansas Academy for Public Health Leadership and South Central Leadership Institute, Certified Public Managers Training), and specific training courses that were developed in tandem with Business Units and other interested parties. The second area of responsibility in Workforce Development is

Focus Area "G" (Training and Education) in the Bioterrorism Grant. Activities in this area include: creation and maintenance of distance learning in the Department, specific bioterrorism related training, and readiness assessment of the health workforce for a bioterrorism event.

ADH has several partners in the workforce development arena including: the University of Alabama Birmingham School of Public Health, the Tulane University School of Public Health and Tropical Disease, Departments of Public Health in Louisiana, Mississippi and Alabama, University of Arkansas Medical Sciences College of Public Health (COPH), and Arkansas Public Administration Consortium. ADH provides distance learning courses, certain web-based certificate programs, and links to educational programs via their website to make public health-related education, training and certification programs more accessible.

ADH's overall strategy is to create a long-term career path for all "colleagues" (i.e. ADH employees). In the past three years, ADH requested and received legislative approval to increase starting salaries and those of existing staff, in order to improve retention of selected classes of employees better enabling the department to compete with other Arkansas health organizations, both public and private. The classes of employees eligible for salary increases include clinic nurses and epidemiologists.

Nursing received monetary assistance from the legislature through a special appropriation. Legislative funding help create a salary grid bringing the salary of most ADH clinic nurses to appropriate levels and giving ADH the ability to hire new nurses at a more competitive salary.

Home Health Nurses were not included in the grid because of restrictions related to the funding stream that pays for their salaries. However, ADH reviews home health nurses salaries regularly on a county-by-county basis. If a county has problems in hiring and retaining Home Health Nurses, then the department requests "a market rate of pay" from the Legislature. Currently, ADH has implemented a market rate of pay for nurses in 27 counties.

#10: Research for New Insights and Innovative Solutions to Health Problems

This service includes:

- A full continuum of research ranging from field-based efforts to foster improvements in public health practice to formal scientific research.
- Linkage with research institutions and other institutions of higher learning.
- Internal capacity to mount timely epidemiologic and economic analyses and conduct needed health services research.

ADH has launched a number of primary research initiatives, including one to measure childhood obesity by recording the body-mass-index, or BMI, of every school-aged child in Arkansas. The findings related to this research led to the passage of legislation to create state nutritional and fitness standards that will result in lower BMI and childhood obesity levels in Arkansas. The department also maintains several registries that enable academics and others more effectively to research various health conditions; in particular, these registries provide information on the types and prevalence of cancer in the state.

The agency maintains a close working relationship with the Arkansas School of Public Health and the other academic institutions that depend on health-related data ADH collects to analyze health trends and develop other findings.

ADH also conducts epidemiological research. For example, the department has conducted numerous studies to determine the causes of and opportunities for prevention related to Hepatitis C, a blood-borne infection that causes liver inflammation. Other epidemiologic efforts include TB, cancer, environmental screening and assessment, as well as *ad hoc* efforts based on public health events or emergencies.

3.6 Essential Services ADH is Not Delivering Well as It Could

#5: Develop policies and plans that support individual and community health efforts

This service includes:

- Development of legislation, codes, rules, regulations, ordinances, and other policies to enable performance of the Essential Public Health Services, supporting individual, community, and state health efforts.
- Systematic health planning that relies on appropriate data, develops and tracks measurable health objectives, and establishes strategies and actions to guide community health improvement at the state and local levels.
- The democratic process of dialogue and debate among groups affected by the proposed health plans and policies prior to adoption of such plans or policies.

ADH has done an admirable job of developing legislation, codes, rules, and regulations that support individual, community, and state health efforts. However, the department is not doing as well with regard to systematic planning , maintaining and tracking the data that allow the agency to establish measurable health objectives. Further, responses to our e-survey suggest that, at least with regard to ADH staff, there is a perception that the Department does not conduct a ”democratic process of dialogue and debate” prior to adoption of plans and policies affecting staff.

First, we will discuss the successes ADH has experienced in developing legislation and policies to improve Arkansans health. Then we will turn to the areas needing improvement.

ADH takes an active role in the development of legislation, codes, rules, regulation and other policies to enable it to perform the essential public health services. For instance, during the 2003 Regular Legislative Session, the Department supported or initiated several important pieces of health-related legislation. The range of health topics covered by this legislation included eye health, improved child health, septic system inspections, and funding for new public health laboratory facilities.

Act 1220 created the Child Health Advisory Committee to set nutrition and physical activity standards for Arkansas' children. To ensure that the standards would be data-driven, the Act also required schools to establish an initial body-mass-index (BMI) for all school-aged children and to add this measure to school health charts in the future. In addition, the law removed vending machines from elementary schools. All of these initiatives should have long-range positive impacts on the state's efforts to reduce the incidence of obesity in Arkansas, which in turn will result in lowered levels of heart and cardiovascular disease, and some types of cancer.

ADH has made addressing chronic disease and the behaviors that lead to them a top priority. Research suggests that the only effective method for affecting changes at the population level is to involve local communities in policies or actions that lead to community-wide change in behaviors. Its Public Health Improvement business unit includes the Department's "Hometown Health Initiative" (HHI), which empowers and educates communities to address their most pressing health needs.

ADH has strategic plans for specific programs including diabetes, cancer, and disease and injury prevention. These plans rely on appropriate data and track measurable health objectives as they relate to the management of the specific topics the plans address. The department also has helped HHI initiatives and local governments develop health-related strategic plans.

However, the most recent agency-wide strategic plan was completed in 1999. Subsequent strategic planning efforts have resulted in "updates", but have not given the department an opportunity to obtain a holistic view of its operations particularly in light of its changing responsibilities and functions. This may in part explain the e-survey responses we received to a series of questions asking ADH employees if they understood the direction in which the department was heading. (See the e-survey discussion below, Section 5-5.)

In addition, one of the greatest criticisms the Legislature has leveled at the Department has been its handling of reductions in personal health services available through LHUs. Specifically, the legislature has wanted to know why utilization of certain services has declined and how specific staffing level reductions and changes were decided. The DLA attempted on two separate occasions to determine the client demand for personal health care services at select LHUs, but incomplete and inaccurate data hampered their efforts, making it impossible for DLA to reach any conclusions. Our experience was much the same: We found that, while ADH is attempting to correct its data-related shortcomings, it still has a way to go.

Public Works also found substantial evidence of the agency's desire to create and maintain an environment where a democratic process of dialogue and debate exists – from referring to all staff as "colleagues" to maintaining a team-based leadership structure. However, the e-survey responses across the board, from all levels of the agency, suggest that the Department has not completely succeeded in this effort.

In extensive interviews with ADH leadership, we found that they may be confusing a more inclusive *process* with actual *dialogue*. For instance, the department recently implemented a system to track staff productivity at the LHU in order to help agency leadership better manage staffing levels at individual LHUs. A team met to develop the tracking tool, including representatives of staff who would be directly affected by the tool's use. However, the e-survey respondents repeatedly stated that the tool was burdensome and that they believed it

would be used against them to "facilitate lay-offs." ADH leadership acknowledged that they had not spent as much time in ensuring that staff knew how the tool would be used and why it was important, as they had in developing it and training staff to use it.

#7: Link People To Needed Personal Health Services And Assure The Provision Of Health Care When Otherwise Unavailable

This service includes:

- Assessment of access to and availability of quality personal health care services for the state's population.
- Assurances that access is available to a coordinated system of quality care which includes outreach services to link populations to preventive and curative care, medical services, case management, enabling social and mental health services, culturally and linguistically appropriate services, and health care quality review programs.
- Partnership with public, private, and voluntary sectors to provide populations with a coordinated system of health care.
- Development of a continuous improvement process to assure the equitable distribution of resources for those in greatest need.

ADH operates a Quality Improvement program that monitors and evaluates client services and regulatory activities. ADH has developed a substantial medical network with over 500 providers to deliver BreastCare screening, diagnostic, and treatment services. The department conducts vision and hearing training and provides technical assistance to school nurses and speech-language pathologists to facilitate school-based screenings.

ADH offers a variety of direct personal health services through its 89 Local Health Units (LHU). These services play a crucial role in the diagnosis, detection and prevention of disease. The ranges of services that may be offered at any given LHU are listed in **Exhibit 3.4**. The services available and the hours of operation vary from LHU to LHU. In addition, recent funding constraints and new public health responsibilities have affected staffing levels and staffs ability to offer the breadth of services that had been available in the past through at LHUs.

Exhibit 3.4 Personal Health Services Available Through ADH's Local Health Units

ADH's Personal Health Services		
Blood Lead	Breastfeeding	Cancer Screening and Follow-up
Community Based Case Management Services for the Elderly	Connect-Care	Communicable Disease
Governor's Council on Physical Fitness	Family Planning	Diabetes Control Program
HIV Screening	Health Education and Promotions	Fire Burn Prevention
Hometown Health Improvement (HHI)	Home Care	HIV Medical Care
Hearing Screening Training	Hospice	Home Health
MCH Health Line	Licensed Midwifery	Immunization
Newborn Screening	Mobile X-Ray	Maternity
Personal Care	Nursing Services	Mother/Infant Program
Public Health Social Work	Pregnancy Testing	Nutrition Services
Safety Seat	Sexually Transmitted Diseases	Presumptive Eligibility
Sudden Infant Death Syndrome	Tobacco Prevention and Cessation	Tuberculosis
Sterilization	Women, Infants and Children (WIC)	

Source: Arkansas Department of Health, December 2004

However, Public Works found little evidence that ADH takes an active role in the assessment of access to and availability of high-quality personal health care services. For instance, in 2000, Arkansas expanded its use of private sector providers to deliver Early Periodic Screening Diagnosis and Treatment (EPSDT) services. EPSDT is a Medicaid-funded program designed to screen Medicaid-enrolled children for illnesses or disability and link them with needed treatment. By increasing the number of private sector providers participating in EPSDT screenings, the state hoped to provide Medicaid children with a "medical home," that is, a single place to receive all their medical care. Prior to the private sector's involvement almost all EPSDT screenings had been provided by ADH's Local Health Units – which did not provide a full range of pediatric medical services.

The move away from the LHU's delivery of EPSDT screens coincided with the state's implementation of Medicaid managed care and the legislature's emphasis that ADH's personal health services pay for themselves. As the state's Medicaid managed care medical network grew, it began to make sense to have the private doctors complete the EPSDT screens that had previously been completed by LHUs to facilitate service continuity and treatment. An increase by the private sector in the delivery of this core children's Medicaid service also fit nicely with number seven of the Ten Essential Public Health Services which states that public health should "link" people to services and encourage capacity building in communities.

Opponents of this move argued that many children would not receive needed screening or diagnostic services because they would be unable to find care in the private sector. Some LHU staff believes that many children in need of EPSDT screens are not receiving them. Further, they express concern the loss of EPSDT represents a lost opportunity to

involve the child's family in other public health services such as the Women, Infant, and Children (WIC) nutritional program. By 2003, ADH was no longer providing EPSDT screens.

Exhibit 3.5 examines EPSDT utilization between 2000 and 2004. The table looks at the total number of screens completed and the number of those screens completed by LHUs. In addition, the exhibit includes the number of private providers who completed at least one EPSDT in a given year.

Exhibit 3.5 EPSDT Claims and Expenditures 2000 - 2004

Year	EPSDT Related Medicaid Expenditures	Unduplicated Count of Children Receiving EPSDT Screen	EPSDT Revenue Received by LHU	Number Screened by LHU	Number of Private Providers
2000	$5,215,754	60,605	$780,782	11,927	533
2001	$5,865,560	65,712	$586,355	9,365	531
2002	$6,587,080	72,893	$37,312	727	557
2003	$7,370,975	86,513	$0	0	632
2004	$7,678,203	87,617	$0	0	587

Source: Arkansas Department of Human Services

Contrary to the perception that many have, both the number of children receiving EPSDT screens and the providers participating have increased since 2000. What these numbers do not tell us is how many children *should* have been screened or whether there are children in need of EPSDT screenings who did not receive them. Although, ARKids covers children whose family have an income of up to 200 percent of poverty -- about $37,699 a year for a family of four -- up to 10 percent of Arkansas' children live in families without insurance. These families may be unable to access needed services. Some locations may lack an adequate number of providers to ensure access, particularly in rural areas of the state.

In addition, in recent years ADH has reported a decline in the use of its personal health services, including maternal and child health (MCH), immunization, and other services. DLA has tried to verify the decline in service utilization and ascertain the cause of the reported decline, but has been unable to do so because DLA found that the data ADH provided was inaccurate. As a result DLA remained unable to discern whether service demand had declined.

Specifically, ADH acknowledged inadequate data systems to adequately and accurately track services utilizations in the LHUs. Public Works also found instances where the department lacked sufficient data to allow us to draw any conclusion. For example, given some of the concerns staff shared in response to our employee survey, we requested employee turnover data to assess morale among other things. ADH was unable to provide the requested information.

#9: Evaluate effectiveness, accessibility and quality of personal and population-based health services

This service includes:

- Evaluation and critical review of health programs, based on analyses of health status and service utilization data, are conducted to determine program effectiveness and to provide information necessary for allocating resources and reshaping programs for improved efficiency, effectiveness, and quality.
- Assessment of and quality improvement in the State Public Health System's performance and capacity.

Again, this is an area where the department hits the mark on some, but not all, criteria:

It does evaluate its health-promotion and disease-prevention efforts. For example, ADH conducted evidence-based research to determine whether programs to promote smoking cessation and abstinence were effective.

However, as we discussed immediately above under Essential Service #7, ADH does not possess or maintain the utilization data necessary to determine program effectiveness or the information necessary for allocating resources. In particular, the Department does not know who is "falling through the cracks" with regard to the delivery of personal health care services and therefore cannot determine whether an adequate supply of services is being delivered in the LHUs or if additional capacity in the community is required to ensure the delivery of needed services.

Chapter IV
E-Survey

4.1 Background

The DLA Special Report on ADH's Local Health Units interviewed 77 employees throughout the state who worked at local health units. The results of these interviews raised a number of questions as to communications, organization and resource decisions of the agency, discussed in the preceding Chapter's overview of the Department's performance.

Public Works therefore proposed, and was charged by the Legislature, to explore these issues further and to tap the insights of a broader sampling of ADH employees. The ADH administration itself was also very interested in reaching a larger sample in order accurately to assess employee opinion. Public Works designed an electronic survey ("e-survey") provided to *all* employees of the agency.

4.2 Methodology

To construct the e-survey questionnaire, Public Works first reviewed the questions asked of employees for the DLA Special Report, and conducted interviews with ADH management in the Department's central office as well as a meeting with legislative leaders in the Speaker's Office. We then constructed a 16-question e-survey to tap 35 separate pieces of information from respondents. Five of the questions were designed to solicit open-ended text responses while the others forced choices into a Likert continuum ranging from Strongly Agree to Strongly Disagree.

Once the survey was constructed, the content of the e-survey was reviewed by a team from ADH and the Speaker's Office. It was also pre-tested by a representative group of ADH employees for technical and content improvements. Based upon the results of these reviews, minor refinements were made and the e-survey was activated. (See Appendix A for the complete survey questionnaire).

A total of 2,766 direct, personal e-mails were sent from Dr. Boozman to each ADH employee during a three-week period that began on November 10, 2004. We received 993 completed e-surveys and 132 partially completed surveys. We only report and calculate the completed survey responses, however, and for ease of reading refer to the number of respondents throughout as 1,000.

These completed surveys represent a sample of 36 percent of the agency, which is a very respectable and sizable response. Though the survey was completely anonymous, we did ask respondents to identify what business unit they work for within the agency; this allowed us to cross-tabulate responses and gain further insight into how these responses reflect unique perspectives of particular business units. However, 15 percent of respondents opted not to identify which business units they represent. We suspect, based on the tone of some text responses, that these individuals did not trust that the survey was absolutely confidential and believed that we would be able to track the

responses back to their email address or identify the individual by the business unit and length of employment.

In fact, the e-survey system we used was not capable of performing this function, since the emails asking employees to take the survey were sent from an entirely different portal (the state government e-mail system). When employees received the email letter from Dr. Boozman, they were then asked to click onto a URL address that sent them to a secure, separate website hosting the survey. At that point, the traceable link was broken, so that we had no way (nor did we want) to track responses back to email addresses. Public Works utilized the services of Market Tools, Inc., to host, manage and calculate aggregate frequency scores with percentages for each question.

As noted earlier, five of the 16 questions allowed respondents to give text responses rather than forced-choice answers; for all five of these questions, a total 3,546 text responses were entered. Two individuals from Public Works' staff[14] separately reviewed all of these entries, identifying frequently cited "themes" for each question. A theme was identified as important when it was expressed by at least 15 percent of respondents. The two raters then compared their findings to confirm inter-rater reliability and found at least 95% agreement on identified themes; only the themes that reached this degree of compatibility are reported.

4.3 Survey Responses

Who Responded

Of the nearly 1,000 employees who responded to the survey:

- Thirty-nine percent have been with ADH for five years or fewer.
- Fifteen percent have been with ADH between six and ten years.
- Thirty-one percent have worked for ADH between ten and 20 years.
- Sixteen-percent have worked for ADH over 20 years.

In short, roughly half have worked less than ten years for the Department, and half more than ten years. When cross-tabulated with business units, the following profile, **Exhibit 4.1**, emerges:

Exhibit 4.1 Years of service among respondents who identified their unit

Business Unit	Up to 10 years	10 to 20 years	Over 20 years	Totals
Northeast Region	67	44	14	125
Northwest Region	93	40	24	157
Central Region	55	36	15	106
Southeast Region	48	45	12	105
Southwest Region	61	31	15	107
Shared Services	49	41	21	111
Statewide Services	28	21	9	58
Public Health Improvement	8	6	2	16
Public Health Preparedness	10	5	4	19
Director's Office/Administration	25	7	7	39
Totals	444	276	123	843[1]

As illustrated by this chart, 600 respondents (71 percent) who identified what business unit they worked for represent the Local Health Units, while the remaining 243 (29 percent) represent organizational sectors of ADH that are considered administrative. Proportionally, the administrative sectors (Shared Services, Statewide Services, Public Health Improvement, Public Health Preparedness and the Director's Office/Administration) are more senior in years than ADH personnel as a whole: On average, 17.4 percent of those among the administrative branches have over 20 years service at ADH, compared to 12.4 percent in the regions.

The Department provided a breakdown of the number of positions assigned to each business unit, which also included some vacancies. The following chart, **Exhibit 4.2**, identifies the survey response rate of each business unit among those who identified for which unit they work:

[1] The numbers of those who identified themselves by business unit is less than the total number of actual survey responders of 993 people.

Exhibit 4.2 Survey response rate among those who identified their unit

Business Unit	Number of positions	Percent responding who identified their unit	Totals
Northeast Region	411	30%	125
Northwest Region	506	31%	157
Central Region	276	38%	106
Southeast Region	339	31%	105
Southwest Region	328	33%	107
Shared Services	464	24%	111
Statewide Services	248	23%	58
Public Health Improvement	13	100%+	16[2]
Public Health Preparedness	41	46%	19
Director's Office/Administration	140	28%	39
Totals	2,766	30%	843[3]

Please note that 15 percent of respondents did **not** identify their unit, thus this particular data is under-reported. We suspect that under-reporting was more likely from business units whose response rates fell below the average (Shared Services, Statewide Services and the Director's Office/Administration). For whatever reason, these groups of employees were less likely to identify themselves.

Findings by Question

The survey findings are presented in this section by citing each question as it appeared in the survey (see Appendix A), accompanied by response percentages. An interpretive analysis of these findings is offered in section 5.5, integrating this survey data with results from interviews with the administration, a review of management materials and documents of ADH, utilization data along with research of best practices by other state health agencies to assess ADH's organizational performance.

Question One clearly evidences a strong sense of public service at the agency: Nearly all of ADH's employees (98 percent) believe that "*ADH can make a positive difference in people's lives.*"

Question Two reveals that nine out of ten ADH employees believe that "*Nationally, public health has undergone a great deal of change in the last five years."*

[2] More people claimed they were from PHI than the numbers we were given. Perhaps, this is due to human error or a few members taking the survey twice with the pilot test.

[3] The numbers of those who identified themselves via Business Unit is less than the total number of actual survey responders of 993 people as 15% of people opted not to identify where they worked.

Question Three was an opened-ended question asking respondents to complete the sentence, "*The greatest change I've seen in public health is*:"

Exhibit 4.3 shows the important themes that emerged from 755 text entries:

Exhibit 4.3 Text response themes: The greatest change I've seen in public health is…

Theme	Observations/Notes
Moving away from direct, clinical service provider role to "assurance" and "educator" role. Less services being provided.	For the most part this direction is not seen as positive. Respondents recognize that other groups (public and private sector) are providing screenings and health services (e.g. ARKids, EPSDT in private doctor's offices), but they are concerned that many children and families still fall through the cracks and no one is tracking them. They also believe that nurses at local health units provide more comprehensive care and follow-up than private sector doctor's offices.
New focus on bio-terrorism, homeland security, managing epidemics.	Seen as needed. No positive or negative comments about performance. Funded by federal government.
Less money and reduced services	Federal dollars are reported to have strings attached while state dollars that offer more flexibility have been cut, leading to less money & less service. Strong sentiment that too much money goes towards upper management that should be re-directed to LHUs for needed clinical services.
Focus on promoting healthy lifestyles to cut down incidence of chronic disease.	Smoking cessation, obesity, diabetes and healthy communities efforts seen as positive, however, rural Arkansas communities are having a difficult time accepting the healthy behavior model.
Change in management structure.	Largely and repeatedly seen as negative: inadequate decision-making structure or lack thereof, frequent quote of "To many chiefs, not enough Indians," not in touch with front-line needs. Disconnect between LHU and leadership. Leadership Team seen as too large, out of touch, holding too many meetings.
Increase in paperwork	Regulations, legal requirements, HIPAA and reporting requirements of ADH have led to what is seen as overburdening paperwork. Cut in PHT and clerical positions at LHUs have caused more paperwork for nurses which leads to nurses not being able to perform nursing functions.
Cut back in staff; non-competitive salaries	Cuts in staff at local levels and non-competitive salaries with the private sector are causing higher turnover and inability to recruit good talent.
Increase in non-English speaking people needing services. Language barrier causing services barrier.	LHUs (especially NW Region) report need to offer bi-lingual services and learn how to become culturally competent to work with minority populations; specifically mentioned are Hispanics and the Marshallese.

Question Four asked respondents to rate how they feel as to eleven statements that reflect "how ADH employees may feel about their work environment." **Exhibit 4.4** depicts their responses by percentages.

Exhibit 4.4 How ADH employees feel about their work environment

Employee Statement	1 Strongly Agree	2 Agree	3 No Opinion	4 Disagree	5 Strongly Disagree
1. I understand where ADH wants to be in five years.	6%	27%	28%	27%	11%
2. I understand how decisions are made.	5%	28%	19%	33%	15%
3. Decisions are made in a timely manner.	3%	19%	23%	38%	17%
4. I'm involved in decisions that affect me.	6%	25%	15%	31%	22%
5. Our chain of command is designed to solve problems.	7%	30%	20%	24%	20%
6. Decreases in funding have directly affected my job.	29%	32%	17%	17%	6%
7. Communication is two-way: from the top down and bottom up.	13%	26%	18%	23%	20%
8. I clearly understand who is my supervisor.	41%	41%	5%	7%	5%
9. My supervisor is a responsive manager.	34%	34%	15%	9%	8%
10. My supervisor can quickly resolve workplace issues.	24%	32%	17%	17%	10%
11. My work unit leader includes me in policy-making.	12%	23%	24%	23%	18%

Overall, sixty-percent of agency employees responding to the e-survey either do not understand where the Department is headed in the next five years (38 percent) or couldn't render an opinion on the subject (28 percent). Almost half (48 percent) do not understand how decisions are made, and more than half do not believe that decisions are made in a timely manner (55 percent) nor that they are involved in decisions that affect them (53 percent). Many (44 percent) do not believe the chain of command is designed to solve problems, nor do they believe that communication is two-way: from the top down and bottom up. This latter issue arises at lower levels of the agency, as well: Even though most (68 percent) believe that their immediate supervisor is a "responsive manager" and half believe that he/she can "quickly resolve workplace issues," only one in three say their work unit leader includes them in policymaking. Six out of ten employees report that decreases in funding have directly affected their job.

Cross-tabulations of several of these "Employee Work Environment" statements also reveal the following:

- **Direction of the agency:** Fewer than one-third of Local Health Unit employees say they "understand where ADH wants to be in five years" (41 percent do not know and another 28 percent have no opinion); the local health unit feeling most directionless is the Northwest LHU, where 75 percent do not know or couldn't render an opinion on the Department's direction. In contrast, three-quarters of employees in Public Health Preparedness and in the Director's Office/Administration believe they know where ADH is heading.

- **Two-way communications:** Nearly half of the local health units (46 percent) do **not** believe that communication is two-way (top-down and bottom-up) – while the opposite is true for the Director's Office/Administration, where more than half (61 percent) believe that communication is two-way. A similarly large percentage (56 percent) of Public Health Preparedness employees believe communication is two-way, although one-third disagreed, which can portend problems in a business unit charged with responding to public health emergencies. But only a plurality (44 percent) of employees in the other business sectors (Statewide Services, Shared Services, and Public Health Improvement) believe that communication is two-way (compared to 37 percent who do not).

- **Timely decision-making:** Over half (59 percent) of local health unit personnel do **not** believe that decisions are made in a timely manner. Even in the Director's Office/Administration, over one in four (28 percent) agreed that decisions are not made in a timely manner, while another 25 percent had no opinion.

- **Chain of command designed to solve problems:** Over two-thirds (68 percent) of staff in the Director's Office/Administration believe that the chain-of-command is designed for problem-solving, but nearly one-quarter (23 percent) do not. The business sector that most disagrees (60 percent) is the Northwest region. In Public Health Preparedness, perhaps the unit most dependent upon chain-of-command and prompt decision-making, a significant 35 percent do not believe the structure is designed to solve problems.

- **How decisions are made:** Only one out of three employees in the local health units claim to know how decisions are made, while half do **not**. Again, the Northwest region reports the highest degree of not understanding how decisions are made (60 percent). Again, in contrast, those in the Director's Office/Administration generally believe they understand how decisions are made (61 percent), although one out of four (23 percent) do **not**.

In **Question Five**, ADH employees were asked how they "receive information to help you get your job done." Six methods of receiving job-related information were listed allowing them to check all those that apply. Respondents could also enter methods not listed with a text entry. Just over 135 entries were made. **Exhibit 4.5** tabulates the responses:

Exhibit 4.5 How ADH employees receive information to do their jobs, by rank order:

Methods of receiving information	Response Rate
1. Emails	86%
2. My supervisor	74%
3. Meetings with colleagues	68%
4. Intranet site	35%
5. Agency publications	32%
6. Federal updates & publications	25%

Many of the text entries describing "other ways" of receiving information cited informal methods such as by word of mouth among co-workers, discussions at the "water cooler," the media (especially newspapers), phone calls, or meeting with people in the community. More formal methods cited included memoranda, networking at formal professional meetings, video conferences, faxes, technical publications and direct calls to specialists. Most people viewed reading about ADH in the newspapers, however, negatively – as it meant they were learning about their own agency after the fact.

As indicated by responses to **Question Six** – "How would you rate the level of communication between your unit and the ADH Administration?" – more than half (53 percent) believe that the level of communication is effective, whereas four out of ten employees think it is not, and one out of ten rendered No Opinion.

Question Seven asked ADH colleagues "How could communications be improved?" **Exhibit 4.6** shows how 597 people responded:

Exhibit 4.6 Text response themes: "How could communications be improved?"

Theme	Observation/Notes
Need for clear-cut authority and decision-making process.	Not clear as to how decisions are made or numerous complaints that the decision-making process is too circuitous. Positve response to having access to specialists, however, Environmental Health needs to be more centralized and with more manpower. Some regions are seen as too large (especially North West).
Need to allow communications to go up the ladder	The Leadership Team doesn't really "listen" and use what they learn from the field. The field's perspective is not represented – filtered by too many layers between District Managers, Regional Managers and whoever they have to relate to by the time it reaches the Leadership Team. "Listening" is just for show Too dependent on Team leader deciding what information to hand down – as a result different counties know different things. Good ideas on how to fix things don't go up the ladder. Front line not included in decisions that affect day-to-day operational changes. Have to change later or very ineffective.
Fewer meetings, yet more one-on-one interaction with supervisors	Reports made of closing clinics to make meetings. Group is so large when people meet, it's not effective. Plus, there are too many disciplines that come together resulting in people not being able to network or learn from each other.
Too many layers in the bureaucracy, too many channels to communicate	Constant theme of "Too many chiefs and not enough Indians." Respondents question the utility of District Managers. Frequent citing that a number of them are not prepared in public health and, as a result, are not able to effectively oversee Local Health Units. Working with teams of people with different disciplines makes for disjointed communication. Also leads to different answers from different people. There are frequent changes in answers or people are left "hanging." Too much emphasis on reaching consensus.

In **Question Eight**, ADH employees were presented what the Department considers its six core public health functions in Arkansas and were asked to rate them as to "how well you think ADH is performing" them. **Exhibit 4.7** depicts their responses:

Exhibit 4.7 How well is ADH performing core public health functions?

Core public health functions:	1 Extremely well	2 Well	3 No Opinion	4 Not very well	5 Not at all well
1. Provide personal health services	13%	53%	14%	17%	3%
2. Provide education and enforce laws and regulations	12%	50%	20%	13%	4%
3. Support Hometown Health Improvement	13%	46%	27%	11%	3%
4. Promote and encourage healthy behaviors	15%	56%	17%	10%	2%
5. Respond to public health emergencies	21%	53%	18%	6%	2%
6. Monitor and investigate public health problems	18%	51%	19%	9%	3%

Overall, the core functions considered the top three best-performing are: response to public health emergencies (74 percent), promoting and encouraging healthy behaviors (70 percent), and monitoring and investigating public health problems (69 percent). On average, ADH employees feel very positively about the performance of their agency in providing core public health functions.

One out of five respondents, however, did not feel that personal health services were being provided very well. Among this group, a cross-tabulation showed that the "not well" response was evenly distributed among the various business units at about 19 percent each; however, 24 percent of those in the North West region felt that personal health services were not being provided very well or not at all well.

Responses to **Question Nine** indicate that three out of four respondents agree that the role of public health in Arkansas is expanding to include *more* than clinical services.

Question Ten asked respondents to identify "what services have been eliminated over the last five years?" Nearly, 600 text answers were entered; the important themes that emerged are illustrated below in **Exhibit 4.8**. The sentiment expressed throughout many of these responses was one of regret that these services have been eliminated and that, as a result, the agency is veering away from its mission.

Exhibit 4.8 Text response themes: "What services have been eliminated over the past five years?"

Theme/Service	Observations/Notes
EPSDT	This is seen by respondents as the entry point to reach the entire family via the child and part of a continuum with MCH, WIC and Well Child Check-ups. Many felt it was more comprehensive than what is done in a doctor's office – a chance to find problems early and correct them. Has led to drop in clinical service demand overall. Many expressed that: • There are kids who are not Medicaid eligible that have fallen through the cracks. • There are ARKids waiting lists (NW). • Doctor's offices closing in some areas resulting in no service.
School screenings for kids & well child check-ups	Includes vision & hearing screening Well Child Check-ups, kindergarten physicals, child dental Nutrition Education Lack of liquid formula (WIC, just powder) Public Health Technician position cut was repeatedly brought up as a problem.
Adult screenings	Especially for elderly (BP, blood sugars for diabetes, B-12 shots) HIS cuts cause elderly to go to the doctor or hospital for frequent/separate services posing hardship for them. STD services
Environmental health services	Lead screening & monitoring, pesticides in milk, asbestos testing, medications for head lice Monitoring soft ice cream machines Car seat program Play ground safety
Maternity Clinics	Colposcopy for women with abnormal pap smears , Family Planning, MIP, Teen Pregnancy, Cryotherapy

Question Eleven raised the issue of the declining utilization rates at local health units over the past few years. Respondents were presented six possible reasons why "fewer people have been coming to local health units for services," and then rated their level of agreement with this explanation from strongly agree to strongly disagree. Results are shown below in **Exhibit 4.9**:

Exhibit 4.9 Why fewer people are coming to local health units

Reasons for fewer LHU visits	1 Strongly agree	2 Agree	3 No Opinion	4 Disagree	5 Strongly Disagree
1. People are now receiving services from Medicaid-type programs.	21%	48%	17%	11%	3%
2. The services we offer do not match today's needs.	7%	24%	24%	38%	8%
3. People are now receiving services from the private sector.	19%	46%	17%	13%	5%
4. Hours of service at health units are inconsistent.	8%	14%	22%	40%	15%
5. People are not aware of services.	14%	43%	14%	23%	5%
6. Budget cuts have deleted services.	36%	37%	19%	6%	2%

On these results, respondents believe that the top three reasons people are not utilizing local health units are: budget cuts (73 percent), people now receiving services from Medicaid-type programs (69 percent), and people receiving services from the private sector (65 percent). More than half (57 percent) believe that people are not aware of the services, and thus do not access them at the local health unit.

The majority (55 percent) do **not** believe that "hours of service at the health units are inconsistent," causing lower utilization rates, while only 31 percent believe that there is a mismatch between services and "today's needs."

Of all the reasons given, the service-to-needs match question rendered the most disparity, and one out of four respondents couldn't even form an opinion on the matter. A cross-tabulation of this response with where respondents work in the organization reveals a significant difference in perception:

- Half (51 percent) of those who work in regions do **not** believe that a service-need mismatch has led to less utilization in services. (The text responses indicate that they believe that the explanation is *fewer* services, not a mismatch: Prior to budget cuts, they believe, the services provided did match the needs of the public).

- In contrast, only 38 percent of those working in non-LHU posts (Shared Services, Statewide Services, Public Health Improvement, Public Health Preparedness and the Director's Office/Administration) share the Region's opinion.

In **Question Twelve**, respondents were given the opportunity to offer any other reason they felt that local health unit visits have declined. In general, respondents portray feeling caught in a downward spiral: cuts in services and cuts in staff have led to less customers rather than the other way around. There are 358 text responses, summarized in **Exhibit 4.10,** below.

Exhibit 4.10 Text response themes: Any other reason for lower LHU visits?

Theme	Observations/Notes
Long waiting lines	Staff cuts (clerical and PHTs) and reduced hours along with "same day scheduling" have contributed to long waits at the units causing customer dissatisfaction. (Not uncommon to read text entries of two to 2 ½ hour waits)
Loss of EPSDT as entry point to family & feeder to other services	Well Child Clinic, EPSDT, MCH, WIC, Immunizations are viewed as "one-stop" entry point for services but now are not being done. People being sent to doctor's offices instead but services are separated; causing people to make repeat appointments or none at all. Not reaching mom for family planning, parenting and nutrition education.
Low morale	Poor customer service reported among this group. Not a friendly atmosphere, waiting rooms and clinics are not very nice compared to private sector offices.
Poor image	The public views clinics for the "poor."
Public unaware of services	With cut backs and negative press coverage; people are not aware of what the LHU actually offers today.
ESL Barrier	Lack of translators and materials in Spanish.
High turnover rates; inability to recruit	Responders believe there doesn't appear to be opportunity for advancement. Some report no upgrades on job classification for over 15 years. Salaries non-competitive.

Question Thirteen asked respondents to identify "the top three problems in public health at the community level." There were 566 text entries, summarized in **Exhibit 4.11**.

Exhibit 4.11 Text response themes: Top three problems at community level

Theme	Observations/Notes
Unhealthy Lifestyles	Obesity, smoking, and lack of exercise were top three contenders with widespread agreement. Reports of difficulty in getting people to be accountable for themselves, or getting local communities involved.
Drug & Alcohol (Violence)	Problems continue to rise and are factors leading to violence, including domestic violence.
Reproductive health	Teen pregnancy, HIV/AIDS, and STD continue to be tough public health problems.
Access to care	Uninsured can not get access to care. There are now a lack of screenings for kids & elderly Belief that LHUs offer good screening programs that are no longer being offered (e.g. diabetes, hypertension, and STD).
Transportation	Repeatedly brought up as significant obstacle to accessing health services.
Chronic disease (Prevention, screening, treatment)	Major areas cited: Diabetes, Cancer and Heart disease.
Environmental health	Lack of staff, resources and centralized decision-making contributing towards surveillance of food borne illness, restaurant sanitation, water, septic systems, soft-ice cream production.
Lack of staff	Repeatedly brought up as a major problem cause public health problems at the local level.
Lack of awareness of ADH services, poor image	ADH could be better at creating positive public relations about services and social marketing of public health services at the local level.

Question Fourteen allowed respondents to suggest "the one most important resource" they "need to help . . . get your job done." This generated the second highest number of text responses – 660 entries – which are summarized below in **Exhibit 4.12**.

Exhibit 4.12 Text response themes: What one resource to get your job done?

Theme	Observation/Notes
Computers/ on the ground IT	Repeated need for new computers including lap tops, and information technology (e.g. software) for LHU operations including cell phones and laptops. Specialists need to be accessible.
Good data to plan from	Reliable data from which to plan, run LHU according to unique needs of it's community.
Clerical staff	More in numbers but also training in customer relations.
Reduce paperwork	Daily utilization tool seen as taking up too much time/useless.
Cut down on meetings	Less meetings would be needed if there were clearer lines of decision-making.
Competitive salaries	A fair and competitive salary structure would reduce turn-over rates.
Training	Need for: health education materials & training, Spanish literature, interpreters, management training (especially for supervisors), time management training. Need for policy & procedure manuals.
Clinical staff	Need for: more communicable disease nurses, Enforcement staff (medical waste monitoring) Re-instate Public Health Technician positions.
Supplies and equipment	Need for timely and consistent provision of supplies to run clinics (especially clerical).
Better clinic space	Not very customer-friendly. Need semi-private/private rooms.
Better communication	E-mail helpful, however, many report not having enough time to check them. Want "face time" with supervisors, people making decisions. (See text responses for Question Three).
Enforcement and supervisor support	Need for more support from supervisors when tough decisions have to be made on enforcement or local decisions.

Chapter V
Management and Structure

5.1 Overview

As is clear from the foregoing employee survey, as well as the DLA report, the Arkansas Department of Health faces a number of organizational development challenges. The Legislature asked Public Works to review the organizational structure of the Arkansas Department of Health, to determine its effectiveness in delivering public health services, and to compare it to other state health departments throughout the country.

Although, national experts know of no "right" organizational structure, what is known is that Arkansas' organization chart is one of the most unique in the nation. Most state agencies have clear lines of reporting authority that are often divided between agency operational functions (e.g. finances, personnel) and agency services (e.g. Bioterrorism, Maternal Child Health); many of these services are organized into bureaus that respond to a clear chain of command. This type of structure has been referred to as silos that have been found to foster a non-collaborative environment.

This chapter examines qualities identified in the research literature that contribute to organizational success and identifies best practices among public health organizations. We also explain how ADH arrived at its current organizational structure and describe the organization's functions and units. Finally, we summarize our findings and conclusions.

5.2 Structure and Organization of State Health Agencies Generally

Recent fiscal crises prompted as many as 20 states to initiate restructuring plans affecting their health agencies in 2003.[15] These efforts include internal restructuring, program consolidation or elimination, and policy or operational changes. Changes resulting from welfare reform in the late 1990s have also prompted changes, especially where health and human services are linked.

Since September 11, 2001, preparedness and bioterrorism also have come to the forefront, forcing state public health agencies to evaluate their response capabilities in these areas and to restructure where necessary, particularly regarding epidemiology/surveillance and laboratory functions. An infusion of federal dollars has also assisted in these infrastructure developments.

There is significant variation across the nation in how public health departments are structured. While almost all public health agencies undertake disease tracking and investigation, maintain vital statistics, and provide immunizations, laboratory, Maternal and Child Health, and WIC services, there is variability in the provision of mental health and substance abuse, environmental health services and health professional licensure and regulatory activities.[16]

In 1997, the National Governor's Association (NGA) issued a report that created a still-used framework for classifying state agency structures[17]:

- *Traditional Public Health Agency:* the traditional public health agency incorporates programs focused on improving the overall health status of the public, such as primary care programs, and may also focus on one other health-related program or function, such as alcohol and substance abuse programs or environmental health programs.

- *Super Public Health Agency:* a super public health agency structure includes public health, primary care, mental health, and substance abuse programs.

- *Super Health Agency*: a super health agency includes public health, primary care, and Medicaid programs.

- *Component of an Umbrella Agency:* An umbrella organizational structure includes public health, primary care, mental health, substance abuse, Medicaid, and social services or humans services programs.

The *Turning Point* initiative of The Robert Wood Johnson Foundation and the W.K. Kellogg Foundation,[18] has further refined the distinctions among public health agencies:

- *Superagency Systems*: Core public health functions are the responsibility of a single, comprehensive health department – the superagency – that has virtually complete authority to create and implement public health policies and programs. States that feature superagency systems (Tennessee) may allocate some public health-related functions (e.g., mental health programs) to agencies outside of the superagency's direct control, but an overwhelming majority of core public health functions are performed within the superagency.

- *Collaborative Systems*. Core public health functions are the responsibility of multiple divisions under the control of a larger health agency. Each division within the larger agency fulfills one or more of the defined core public health functions. The major distinction between the collaborative system (e.g., Virginia) and the superagency system lies in this subdivision of responsibilities within a collaborative agency.

- *Embedded systems*. Embedded public health systems differ from collaborative systems because they rely upon a single public health division within a larger health department for the fulfillment of most core public health functions. Core public health functions are embedded within a division of a larger department responsible for the state's health activities instead of being directly implemented y a department of health (e.g., North Carolina).

- *Freestanding systems*. Characterized by the fulfillment of nearly all core public health functions by a freestanding public health agency that is not under the direct control of a larger health department. A freestanding public health agency's responsibility is limited to the fulfillment of core public health functions (e.g., Alabama). ADH qualifies as a free-standing agency as shown in the table below.

Exhibit 5.1 States with a free standing health agency[19]	
Alabama	Montana
Arizona	Nebraska
Arkansas	New York
Colorado	North Dakota
Florida	Ohio
Illinois	Oklahoma
Indiana	Pennsylvania
Iowa	South Carolina
Kentucky	South Dakota
Michigan	Utah
Minnesota	Virginia
Mississippi	Wyoming

Exhibit 5.2 States in which Health Agency includes Medicaid responsibilities[20]	
California	New York
Idaho	North Carolina
Louisiana	Oregon
Maryland	South Carolina
Michigan	Utah
Montana	West Virginia
Nebraska	Wisconsin
New Hampshire	Wyoming
New Jersey	

We have included in Appendix B several organization charts of state health agencies that are independent and free-standing, as is Arkansas's Department of Health. All of these state agencies are part of the *Turning Point* program, and many are considered progressive, soundly functioning state agencies.

Key informant interviews with the NGA, the director of Turning Points, and the Association of State and Territorial Health Organizations (ASTHO), revealed that there are essentially no definitive studies that point to one or even two "best practice" organizational models for state health departments to follow. ASTHO does *not* have a policy recommendation on a preferred state health agency organizational structure, but rather "recognizes that varying state needs, available funding, political, and managerial preferences will result in widely varying organizational structures." In fact, there is no published research linking effectiveness to organization.[21] DLA reached this same conclusion when reviewing the Department's organizational chart.

5.3 Themes and Best Practices

Despite the variation in state health agency structure, there are certain themes that run through those state health agencies that have restructured or focused recently on becoming more responsive:

- Clearly defined mission statements and department-wide goals (ideally tied to the core functions of public health and the ten essential services).
- Clear lines of authority and accountability – who is responsible for what.
- State support of public health mission and functions
- Strong state/local and public/private partnerships

Wisconsin

The 1988 Institutes of Medicine report laid a foundation in Wisconsin for public health reform. Wisconsin underwent revisions to its public health statutes, became a grantee in the *Turning Point* Initiative, and developed *Healthiest Wisconsin 2010*, its current state health plan. In the fall of 2003, the governor formed a departmental staff team to develop recommendations to improve the public health delivery system, with an eye on streamlining government, eliminating redundancy in public health functions, increasing the resources available to communities for effective public health work, improving the state's capacity to carry out the public health mission, meet the goals and objectives of *Healthiest Wisconsin 2010*, and tap into new funding sources. The result was a restructuring report issued in January 2004 that contained wide-ranging recommendations on program delivery, shifting of state functions to local health departments, statutory changes, and the creation of a public health institute.

Minnesota

The Minnesota Department of Health (MDH) recently updated a set of strategic directions, originally established in 2000, to guide its activities. These include protecting the public from public health threats, eliminating disparities in health status, and building a healthy future. MDH has also focused on partnerships with non-governmental entities,

West Virginia

West Virginia is the second most rural state in the nation. In 1997, 34 of 49 local health departments were severely reducing services and workforce due to decreases in revenue and support from the state. Communicable disease was underreported, and there was a lack of joint planning processes between state and local government.

Since then, West Virginia has focused on improving the performance of and working relationship between state and local public health agencies. Specific initiatives include:

- A new accountability structure to measure performance and effectiveness of public health services throughout the state.

- Active partnerships among local health stakeholders to share resources and decision-making based on local priorities.
- Community partnerships for developing local policies and revising outdated public health codes.
- Joint working agreements and planning processes between local and state.
- Increased public health workforce capacity, achieved through standardized job descriptions, orientation and structured training tools.
- Improved ability to track emerging infections, due to performance standards, increased regional and state staff, strengthened laboratory capacity, and training.

North Carolina

North Carolina, through its *Turning Point* Initiative, is working toward enhancement of existing local/state partnerships, specifically through integrated community-based partnerships, community assessment and public health planning.

Missouri

Missouri fell from 26th healthiest in 1990, to 33rd in 2003, and then to 36th in 2004. The state saw a significant increase in heart disease, cancer and infectious disease. Shortage of government resources has devastated the public health system and capacity to respond. In response, Missouri has created the Missouri Institute for Community Health, an independent 501(c)(3) to facilitate planning and decision-making among local health care providers, the private sector, community colleges, universities, health and human service associations, and state and local government. This initiative achieved the following:

- Development and implementation of voluntary accreditation system for local public health.
- Countywide health assessment, planning and prioritization of community health problems.
- Development of ways to increase skills and capacity of public health workforce.
- Fostering use of standards of practice in performance of essential public health activities.

5.4 ADH's Organizational Structure

History of ADH's Current Organizational Structure

In 1999, ADH completed a two-phased, comprehensive Strategic Planning Process. Several developments emerged from that initiative. The most relevant for this report was the blue print for what is now the Department's organizational structure.

The entire initiative was called ASPIRE (Arkansas Strategic Planning Initiative for Results and Excellence). ADH issued an invitation to participate with the rallying cry, "We're Taking Public Health to New Heights."

The agency's leadership formed a number of teams including: the External Environmental Analysis Team, the Internal Environmental Assessment Team, the Mission, Vision, Goals Team, and the Implementation Team Volunteers for these teams were sought from among employees at every level of the Department. In addition, each team conducted interviews with outside stakeholders, including legislators, county officials, personnel at other agencies (e.g. the Department of Human Services), consumer and advocacy groups, higher education institutions, federal agencies, patients, doctors, health care providers and organizations, and civic groups.

After completing all of the various strategic processes and information gathering exercises, the Department conceived of an organization with four interrelated aspects:

1. Team management.
2. Decentralized decision-making.
3. Unity of Supervision.
4. Minimization of hierarchy.

The idea was to simplify two-way communication and make operational units function as teams that would support the agency's leadership and mission.

Another outgrowth of ASPIRE was what the textbook STRATEGIC MANAGEMENT OF HEALTH CARE ORGANIZATIONS[22] called the "Litmus Test for Organizational Structure." This "Litmus Test," which the Department developed, required that ADH's organizational structure possess the following qualities to ensure success:

Centers around the customer	Supportive of data-based decisions
Promotes open, direct, two-way communication between colleagues	Sets clear direction and accountability
Encourage innovation	Flat – the fewer levels the better
Facilitates quality	Team based
Facilitates mission	Promotes colleague development
Financial resource management at appropriate level	Promotes core public health functions
Single line of supervision	

Description of How ADH Operates

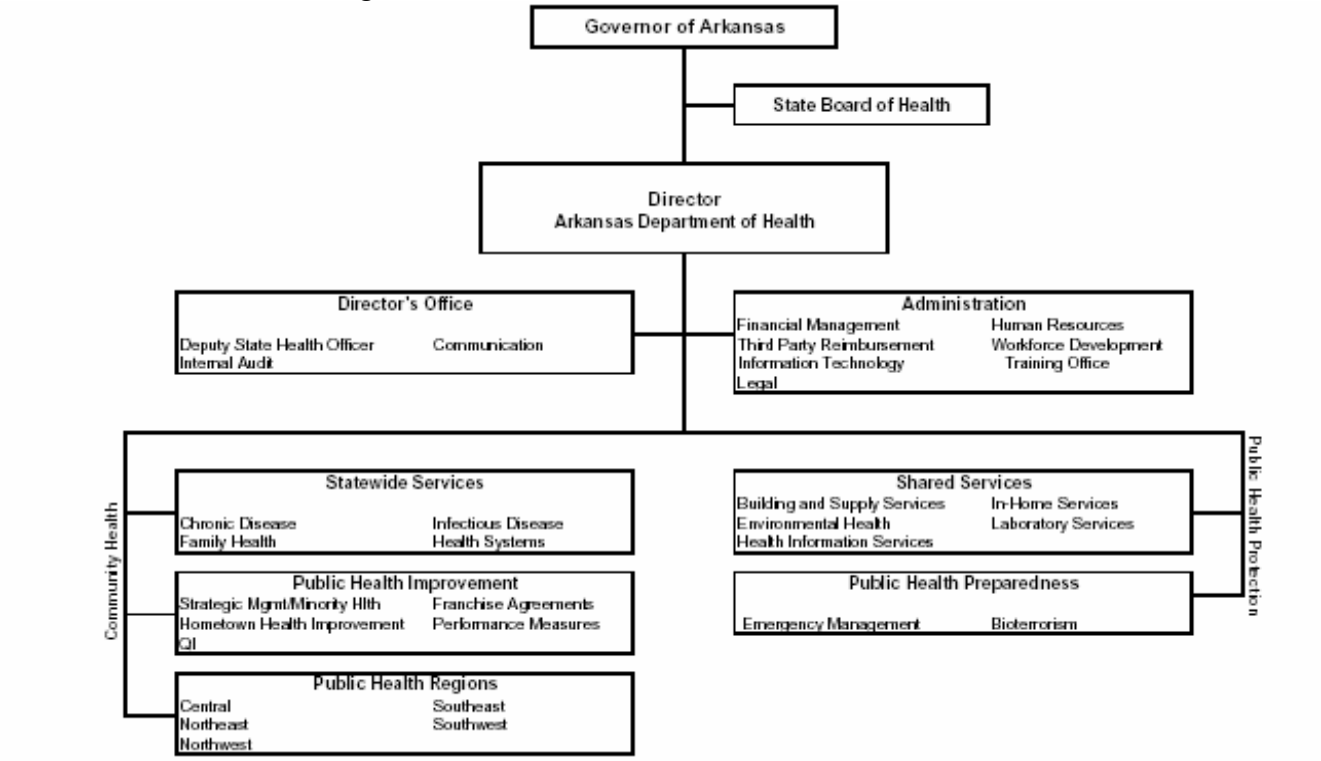
ADH states that its mission is "To promote public health policies and practices that assure a healthy quality of life for Arkansans." Its vision statement reads, "To be the recognized leaders in public health, working with communities to build a healthy future." In addition to its mission and vision statements, the Department adheres to the following guiding principles:

- Dedication to the Public
- Responsiveness
- Appreciation of Colleagues (i.e. ADH employees)
- Open Communication
- Integrity
- Quality
- Accountability
- Innovation
- Leadership in Public Health

Exhibit 5.3 shows the current organizational structure of the Department. ADH consists of seven "business units"

- The Director's Office
- Administration
- Shared Services
- Statewide Services
- Public Health Improvement
- Public Health Preparedness
- Public Health Regions

Exhibit 5.3 ADH Organizational Chart



The directors of each of the business units, plus the Deputy State Health Officer and Director of Communications, form ADH's Leadership Team, which reports directly to the Director. They set the Department's strategic direction, provide agency-wide oversight and have fiduciary responsibility for the program areas they oversee.

Statewide Services supports the work of the ADH Leadership Team through interactions with the federal government related to specific grants and programs, grant coordination, and state level program coordination. This unit develops programmatic technical expertise through benchmarking, participating in the development of performance measures, and promulgating rules and regulations.

Shared Services supports the work of the Public Health Regions. This unit also provides services in the "field" when special expertise is needed or as required by economy-of-scale, and includes engineering, environmental protection related activities, and epidemiology. **Exhibit 5.4** provides a detailed listing of the functions and programs housed within the Shared Services, Statewide Services and Director's/Administrative business units.

Exhibit 5.4 Functions and Programs within ADH's Shared Services, Statewide Services, and Directors/Administrative Business Units

Shared Services	Statewide Services	Administration/ Director's Office/Public Health Improvement
Alcohol Testing	AIDS/STD	Director
Birth & Death Certificates	BreastCare	Communications
Central Supply	Breastfeeding and Nutrition	Financial Management
ConnectCare	Child Health	General Counsel
Engineering	Chronic Disease	Hometown Health Improvement
Environmental Health Protection	Infectious Disease	Human Resources
Epidemiology	Emergency Medical Services	Information Systems
Health Statistics		Job Hunt Line
Community Based Case Management	Governor's Council On Physical Fitness	Minority Health
Home Health/Home Care	Health Facility Services	Training Office
Hospice	Primary Care/Rural Health	Workforce Development
Personal Care	Immunizations	
Mother Infant Program	Oral Health	
Laboratory Services	Pharmacy Services and Drug Control	
Protective Health Codes	Tobacco Prevention	
	Tuberculosis	
	Women's Health	
	WIC	

Source: Arkansas Department of Health, December 2004

There are five Public Health Regions, each responsible for a different geographic region of the state. The state's 89 local health units (LHU) are part of the Public Health Regions business unit. **Exhibit 3.4** (above) illustrates the range of personal health services that may be offered by a local health unit. The Regions have broad authority and flexibility for public health activities to meet the needs of "customers" in the region. All Arkansans qualify as ADH "customers."

The diagram on the next page, **Exhibit 5.5,** follows the chain-of-command from a Hometown Health Leader to the Leadership Team and ADH Director. Between the LHU Administrator and the department's leadership are four layers of management – the District Manager, the Regional Administrative Leader, the Regional Director and finally, the Regional Liaison.

Ratio of Management to LHU Staff

DLA also examine the ratio of administration to staff at local health units using data from AASIS (Arkansas Administrative Statewide Information System). DLA found that 13.0% of staff serves in administrative capacity. Public Works was asked as part of our charge to determine an appropriate distribution of administrators to staff.

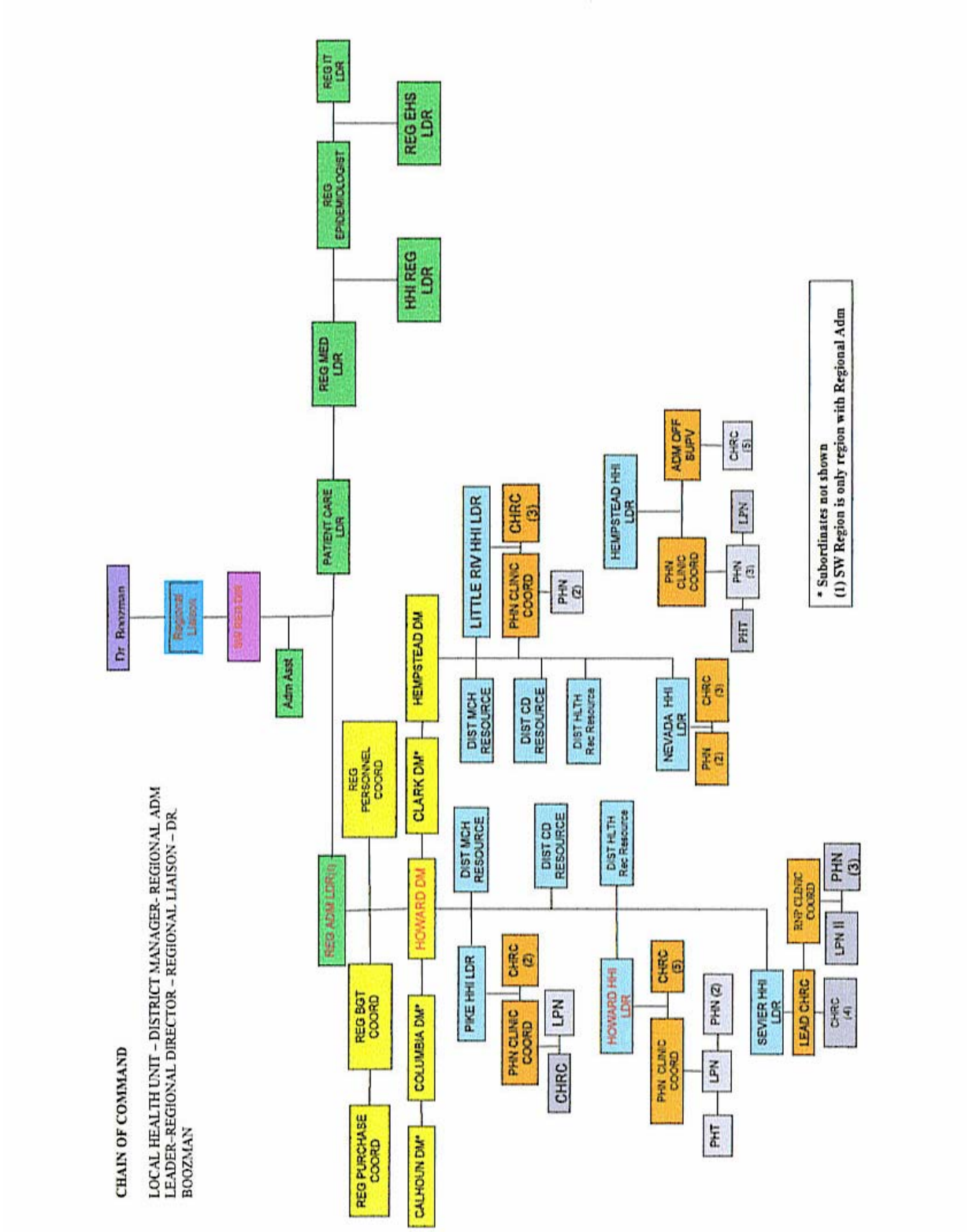
To answer the question regarding whether the appropriate number of administrators were in place, the consulting team requested a comprehensive listing of ADH employees by name, title, and assignment. The department provided organizational tables that provided the name, title, assignment, and reporting relationship of every employee in the agency. We took each organizational table and linked to every table with a supervisory or reporting relationship so that we could the number of "direct reports" for anyone in a supervisory role.

We found that often, particularly in the LHUs, the number "direct reports" to supervisors was low. This is not surprising, however, because many of the LHUs are small, some with as few as three staff. Most of the nurses have both a direct service provision role and a supervisory role – that is, a nurse may be a PHN (Public Health Nurse) Coordinator meaning she oversees other nursing staff and clerical staff as well as seeing patients and providing personal health services. As a result the ratio of supervisory staff to "direct" line staff may seem excessive on paper, but the reality is each local public health unit needs someone in charge

For example the Faulkner County Health Unit employs 19 staff including: a Hometown Health Leader (HHL) who is responsible for the LHU and has three direct reports (the Administrative Office Supervisor, a Public Health Nurse (PHN) II, and an Environmental Specialist II). These staff have the following roles as "administrators":

- The Administrative Office Supervisor supervises six clerical staff.
- A Public Health Nurse II oversees six clinical staff.
- An Environmental Specialist II supervises three environmental specialists.

Exhibit 5.5


CHAIN OF COMMAND
LOCAL HEALTH UNIT – DISTRICT MANAGER- REGIONAL ADM
LEADER–REGIONAL DIRECTOR – REGIONAL LIAISON – DR.
BOOZMAN
Dr Boozman
Regional Liaison
SW Region Dir
Adm Asst
PATIENT CARE LDR
REG MED LDR
REG EPIDEMIOLOGIST
REG IT LDR
REG EHS LDR
HHI REG LDR
REG ADM LDR (1)
REG PERSONNEL COORD
REG BGT COORD
REG PURCHASE COORD
CLARK DM*
HEMPSTEAD DM
LITTLE RIV HHI LDR
CHRC (3)
PHN CLINIC COORD
PHN (2)
DIST MCH RESOURCE
DIST CD RESOURCE
DIST HLTH Rec Resource
NEVADA HHI LDR
CHRC (3)
PHN (2)
PHT
PHN (3)
LPN
ADM OFF SUPV
CHRC (5)
HEMPSTEAD HHI LDR
HOWARD DM
COLUMBIA DM*
CALHOUN DM*
PIKE HHI LDR
CHRC (2)
PHN CLINIC COORD
LPN
CHRC
DIST MCH RESOURCE
DIST CD RESOURCE
DIST HLTH Rec Resource
HOWARD HHI LDR
CHRC (5)
PHN CLINIC COORD
PHN (2)
LPN
PHT
SEVIER HHI LDR
RNP CLINIC COORD
LEAD CHRC
LPN II
PHN (3)
CHRC (4)
* Subordinates not shown
(1) SW Region is only region with Regional Adm

In Perry County the entire LHU staff consists of the Hometown Health Leader, a Community Health Resource Clerk (CHRC), and a Public Health Technician (PHT) who both report directly to the HHL

In the regions, a similar phenomenon occurs. The Central Region Office employs 60 staff. However, a number of staff has no supervisory responsibilities although they can be counted as "administrators." For example, the Central Region retains an Environmental Health Leader who provides special expertise to the LHUs within the district; this individual oversees no staff and adds no additional administrative layers to the organization, although his title implies an "administrative role."

A Regional Director can expect to have as many as 12 direct reports. A District Manager oversees four LHUs and has one to three other direct reports, for a total of seven direct reports. Both of these ratios suggest a relatively flat organization, with an appropriate number of supervisors to "direct reports."

5.5 Assessment of DHA Structure and Operations

Our analysis and its presentation are based upon ADH's own "Litmus Test framework for assessing organizational success, allowing both the Department and the Legislature easily to assess the Department's progress nearly five years later, and in the future. We have simplified and condensed the thirteen original "Litmus Tests for Organizational Structure" into ten required benchmarks that ADH's organizational structure should reflect to ensure success, and then grouped these under five broader headings – Mission and Core Functions, Public Health Informatics (the application of IT to public health for analysis and decision-making), Structure and Communications, Customer Focus, and Continuous Investment in Improvement – that both reflect the concerns raised throughout this report and the recommendations that come at its end. Our analysis identifies a number of exemplary practices at ADH – and a number of problems directly traceable to its organizational structure:

Mission and Core Functions

Promotes core public health functions

In this report, we equate "core" public health functions with the nationally accepted standards of the "Ten Essential Public Health Services." For the most part, ADH does a good job of promoting and providing these services. Specifically, the Department does a sound job of monitoring and investigating public health problems, as well as diagnosing and responding to public health emergencies.

ADH undertakes a wide range of public health education activities with multiple audiences, including community organizations, regulated entities and individuals, and public health professionals. The Department has been particularly successful with its *Hometown Health Initiative* and Smoking Cessation campaign, which has resulted in a measurable decline in the past year in smoking and heart disease.

The strong majority (at least six out of ten) of the near 1,000 respondents to our e-survey believe that their agency is providing core public health functions quite well. "Providing education and enforcing laws," "supporting Hometown Health Improvement," "encouraging healthy behaviors," "responding to public emergencies." and "investigating public health problems" were all specifically cited as above-average-performing functions of the Department. The provision of personal health services – provided by local health units – was also given high marks, with 66% responding that the agency performed the service either "extremely well" or "well."

When it came to the public health core functions of providing personal health services, education, and enforcement of laws and regulations, however, one out of five employees disagreed and responded that the service was ***not*** being delivered very well. Upon further review of the text responses, these negative ratings are explained by employee concerns over lack of resources (as basic as office and medical supplies), lack of staff (especially clerical and Public Health Technicians), significant cuts in services, and customers being unaware of services. Too much paperwork was also frequently cited as a barrier preventing ADH staff from delivering core health functions.

Facilitates the organization's mission

ADH works very hard to implement its mission, "To promote public health policies and practices that assure a healthy quality of life for Arkansans." The agency understands that promoting "practices that assure a healthy quality of life" requires education and awareness to encourage Arkansans to change unhealthy behaviors for their personal benefit. In particular, the Department has successfully focused on raising awareness of and promoting healthy behaviors at the local level through its *Hometown Health Initiative*.

Nearly everyone at ADH believes that "ADH can make a positive difference in people's lives" and they realize that "public health has undergone a great deal of change in the last five years." Three out of four believe that "the role of public health in Arkansas is expanding to include *more* than providing clinical services." And three out of four believe that overall, ADH is doing a good job in delivering core public health functions.

Still, 68 percent of employees responding to the e-survey claim that they either do not know where ADH is headed in five years, or have no opinion.

Public Health Informatics

Relies on data and evidenced-based decisions

As discussed extensively above under Essential Public Health Service #7, Section 3.6 of our report, DLA found that "summary data provided by ADH reflecting client demand for calendar years 2000 through 2003 is not verifiable and therefore, can not be relied upon for determining if client demand decreased during our period of review."[23] ADH itself has acknowledged that its previous "batch system" of gathering this data was inadequate. In July 2004, the agency implemented a new, online clinical visit reporting system that should address this particular problem. However, there are still system-wide data needs that must be addressed.

Structure and Communications

Team-based management

In 1999, when the agency developed its new organizational structure, its entire management structure was based upon the concept of team management. The agency formed a leadership team consisting of the directors of each of its business units plus a few additional senior staff. This team reviews issues related to operational and service delivery aspects of the agency and makes decisions, wherever possible, through consensus. The regions, as well, were directed by "regional leadership teams" and District Managers acted "as facilitators" rather than supervisors or "bosses."

The ADH leadership within the Director's Office strongly espouses and practices a team-based philosophy. For example, during the recent flu vaccine crisis, the Department faced Solomon-like choices as to who among the vulnerable would receive the vaccine and who would not; to better inform the decision, Director Boozman immediately created an interdisciplinary team cutting across different units throughout the organization. However, the Director's philosophy does not appear to be as widely practiced at the District Manager level.

Provides single line of supervision

Although well intended, this over-dependence on a "team" concept, driven by consensus decision-making, has resulted in confusion or delays in arriving at decisions for policies affecting the local levels.

The top of the organizational structure is structured to essentially to make the ADH Director directly supervise all seven administrative units (Director's Office, Administration, Statewide Services, Public Health Preparedness, Public Health Regions, Shared Services and Public Health Improvement). The heads of all these units are members of the "Leadership Team" that assists the Director in resolving administrative and policymaking decisions. Given the heavy and varied demands of cabinet-level positions in state government, this flat structure – with all major units of the health department being "supervised" *de facto* by the Director – intended to bring all units and employees closer to the decision, can produce the unintended consequence of *less* supervision and *less* singular lines of accountability.

Underneath this structure are five Regional Managers who oversee 22 District Managers, who in turn oversee an assigned number of the 89 local health units. It is within this organizational layer of the agency that at least twenty percent of the 1,257 e-survey text entries responding to what resources are needed to improve job performance and how communications could be improved commented that they needed more clear-cut lines of authority for decision-making.

In response to such concerns, ADH redesigned the District Manager role into a supervisory one, empowering them to make decisions regarding the operations of the local health units assigned to them. This alteration in District Manager's roles, however, did not affect a nurse's ability to obtain required decisions or guidance on a clinical or health-related matter from the appropriate expert or specialist within ADH (e.g. Shared or Statewide Services).

Nonetheless, District Managers, in general, survey respondents indicated, practice a top-down management style, while at the same time they are too dependent upon the ADH Leadership Team to make decisions.

As a result, the Local Health Units, despite the flattened organizational structure on paper, experience in practice too many layers of decision-making, which follows a rather circuitous route. This is illustrated by the diagram in **Exhibit 5.5**, above. The following text entry encapsulates the tone of what employees frequently expressed:

> "The ADH leadership team makes a decision, then they tell their designated regional representative; then the regional representative tells the health district managers, then the health district managers tell the hometown health administrators and then the home town health administrators tell the local health unit staff, then if it doesn't work, or if there are problems, we have to start with the home town health administrators and climb back up the 4 or 5 rung ladder to the agency leadership team, it's just a vicious cycle."

Sets clear direction and accountability

ADH's collegial, team-based, participative management style avoids the problems of the traditional bureaucratic "silo" structures of many state health departments.

Responses from the nearly 1,000 employees answering the e-survey indicate, however, that this decision-making process – however well intentioned to be more inclusive, flatten the lines of authority, and improve reporting – has caused unintended consequences. Half of the respondents – including staff from all levels in the agency – indicated that:

- They do not know how decisions are made.
- Decisions are not made in a timely manner.
- They are not involved in decisions that affect them.

Another 44% do not believe that the chain of command is designed to solve problems. Most feel that the organization's structure does not offer clear-cut lines of authority, which, they believe, is a major contributing factor to the communications "disconnect" covered under the next heading.

Promotes open, direct, two-way communications among colleagues

Though the leadership of ADH strongly believes in a philosophy of two-way communication and practices a participatory management style with the Leadership Team, there appears to be a communications "disconnect" within the agency.

Nearly half (46%) of survey respondents working in local health units did not believe that "communication is two-way: from the top down and bottom up." Many of the text-entry e-survey answers from staff indicate that, despite the many meetings they attend, they don't believe that management "listens" to them. More than half the staff says that they are not involved in decisions that affect them.

Much of this feeling was directed at the District Manager level, but it was also seen as a Department-wide problem.

Customer Focus

Centers around the customer

The mission of the agency, as well as its services, indeed center around the customer, whether viewed as "the public" that benefits from ADH's population-based health initiatives or as the individuals who receive direct health services largely through their local health units and home health program. This is reflected in the fact that nearly *all* of the almost 1,000 ADH employees who responded to the e-survey stated that they believe their work does "make a positive difference in people's lives."

However, low morale and staff cuts at local health units (especially in clerical Public Health Technician (PHT) positions) have reportedly led to a less-than-favorable customer-service environment, evidenced by:

- reported customer dissatisfaction with same-day-service appointments.
- cut-backs in clinic hours.
- cuts in services.
- a physical clinic environment that does not meet today's standards of the average physician's office.

Continuous Investment in Improvement

Facilitates quality and encourages innovation

ADH has programs and processes in place that facilitate quality and support innovation.

The Quality Improvement Unit is charged with improving the quality of the services and programs offered by the department on a continuous basis. The agency has instituted a series of regular consumer satisfaction surveys of personal health services clients and other LHU consumers to identify ways in which to improve its service delivery.

In addition, the Department publishes rules and regulations to assist entities it regulates – such as birthing centers and hospitals – in improving the quality of health services that they provide.

As a member of the Arkansas Wellness Coalition, ADH was recognized in 2003 by the Centers for Disease Control and Prevention for its work in implementing cardiovascular disease (CVD) guidelines for physicians and patients to improve health outcomes related to CVD.

The Department also encourages innovation, particularly within its Hometown Health Initiative, wherein a broad range of community organizations band together with guidance from ADH to find novel, collaborative ways to address each community's unique public health needs. ADH recently received five recognition awards at the National Public Health

Information Coalition (NPHIC) Conference for outstanding communication efforts in health education, especially those focused on smoking cessation.

The agency, however, is faced with recruitment and retention problems because of non-competitive salaries with the private sector that directly affect quality. In response, ADH recently sought and received legislative approval for salary increases to improve employee recruitment and retention. These increases were targeted to nurses, epidemiologist and other key professionals in the agency.

Promotes colleague development through education and training

Workforce Development is central to ADH's mission, and as a result, the agency has numerous partners in workforce development, including the University of Alabama Birmingham School of Public Health, the Tulane University School of Public Health and Tropical Disease, Departments of Public Health in Louisiana, Mississippi and Alabama, University of Arkansas Medical Sciences College of Public Health (COPH), and Arkansas Public Administration Consortium to provide. One prime example of these educational efforts is the Arkansas Public Health Nursing Leadership Institute with the UAMS College of Nursing. The Internet-based courses are designed for public health nurses to enhance their leadership skills in the public health arena.

There is also a Leadership Institute that was designed to re-train District Managers from their facilitator role to a supervisory one. Numerous programs were held to explain the new management structure.

ADH has also created a long-term career path for all employees.

Chapter VI
Current and Anticipated Funding Pressures

6.1 Overview of ADH Funding Constraints

To this point, our Report has addressed problems with ADH with which the Legislature has expressed concern. One final issue should be raised that greatly affects ADH operations – but this one concerns *the Legislature's* approach to ADH, specifically its funding.

Overall, ADH has experienced a 2.4 percent reduction or $ 7.2 million loss in funding between 2002 and 2004. While this amount may not seem like a major decrease the source of the funding cuts had significant consequences for the department's operations. Most of the cuts came from reductions in state general funding, unfunded statewide requirements such as for an employee cost of living adjustment (COLA), and falling revenues from fees.

General revenues accounted for as much as 44 percent of the Department's funding in 1981. Today, they account for slightly less than 17 percent.

Exhibit 6.1 shows that state general revenue funding shrank from about $53.3 million in 2001 to $48 million in 2004. General Revenue funds support functions and services that federal funds don't cover including core public health needs such as communicable disease surveillance and environmental services and departmental infrastructure. However, in recent years, even some appropriated General Revenue funds have been designated for specific purposes, including funds for Breast Care and salary enhancements for nurses and other difficult to recruit or retain staff.

Exhibit 6.1. ADH General Revenue Appropriations 2002-2004

	2001	2002	2003	2004
General Revenue	$53,278,932	$51,342,602	$48,685,333	$48,049,183

Source: Arkansas Department of Health, November 2004

At least 65 percent of the agency's funding comes from federal funds. The vast majority of these funds are categorical, meaning their use is limited to specific purposes as defined in federal law or rules and regulations. Examples include funds for the Women, Infant and Children (WIC) program, which provides nutritional counseling and vouchers for certain foods, Bioterrorism, and Cardiovascular Health.

In addition to federal funds, ADH received about $17 million – or about 6 percent of its budget – from tobacco settlement funds. These funds were awarded to states when the country's major tobacco manufacturers were sued by the federal government for withholding evidence linking smoking to cancer and other health-related risks. States have a great deal of latitude regarding the use of these funds. Arkansas' Legislature has chosen to invest these moneys in health related activities, including smoking cessation campaigns; this is a wise investment for Arkansas, given the state's level of smoking-related morbidity and its recent success in reducing the number of smokers in the state.

Compounding the Department's lack of flexibility, the Legislature has mandated that revenues generated from fees such as licensure or inspections be reinvested in the programs that generate the fees. About eight percent of the Department's revenues come from fees. State law specifically states that fees collected in excess of the cost of providing a service – for example, septic tank inspections – are to be re-appropriated for use in future septic tank inspections.

Finally, the legislature also has required certain programs, including many of ADH's clinical services programs such as family planning, to pay for themselves. That is, the fees or reimbursements collected must cover the cost of offering the service including salaries and related overhead. As a result, when revenues fall below a certain level, the Department can no longer afford to provide that service. Smaller, rural LHUs may be disproportionately affected by this because they are likely to generate fewer revenues to begin with than are larger LHUs.

ADH programs, services, and functions by funding source are shown in **Exhibit 6.2** through **6.4** below. **Exhibit 6.2** provides details regarding ADH programs funded with federal funds, **Exhibit 6.3** details programs funded with all other types of funds and **Exhibit 6.4** summarizes ADH appropriations by source of funds.

Exhibit 6.2 Federally Funded ADH Programs and Functions 2002 - 2004

Program	2002	2003	2004
Abstinence related	$660,004	$718,891	$1,407,118
AIDS Related	$6,581,656	$4,661,333	$8,078,036
Alcohol and Substance Abuse Related	$14,679,139	$14,330,246	$0
Child Care	$116,661	$139,175	$0
Bioterrorism	$655,887	$2,400,679	$15,203,667
Cancer Related	$2,606,522	$492,026	$0
Diseases (Arthritis, Cardiovascular, Diabetes, TB, STD)	$3,302,897	$3,053,608	$2,926,972
Disability Prevention	$603,443	$0	$0
Early Hearing Detection (from CDC)	$113,678	$113,594	$200,511
Emergency Medical Services related	$51,065	$52,325	$77,108
Epidemiology	$54,009	$0	$0
Family Planning	$3,105,928	$2,858,190	$3,276,038
Fees	$482,217	$480,066	$1,235,144
Fire Injury Related	$0	$0	$303,675
Immunizations	$2,303,639	$2,636,403	$2,802,258
Maternal and Child Health (MCH) Block	$5,043,839	$5,165,450	$5,587,680
Medicaid Reimbursement & Contracts	$20,275,140	$19,250,051	$18,876,386
Hospital Regulation related	$2,231,684	$2,445,680	$1,320,937
Oral Disease	$203,514	$200,382	$190,708
Preventive Health Services Block	$1,490,485	$1,015,945	$1,287,928
Primary Care (system development)	$0	$175,043	$178,046
Rural Health related	$0	$1,130,469	$1,540,038
State Insurance Planning Grant	$1,393,357	$1,358,322	$1,358,322
Tobacco	$1,396,380	$1,294,997	$1,149,940
Treatment Services	$532,598	$623,413	$0
Injury related	$284,192	$281,329	$209,201
Universal Newborn Hearing Screening (from HRSA)	$0	$148,514	$209,947
Violence Against Women	$0	$0	$54,717
WIC Program	$73,473,537	$63,751,624	$64,918,948
Federal Other (Indirect overhead, PH Lab, West Nile Virus Investigation, etc)	$7,821,998	$11,609,870	$11,731,146
Totals Federal	$149,463,469	$140,387,623	$144,124,471

Source: Arkansas Department of Health, December 2004

Exhibit 6.3. ADH Programs, Functions by Source of Funds (Other Funds), 2002 -2004

Program	Source of Funds	2002	2003	2004
Breast Cancer Control	Federal funds, General Revenue, Tobacco Settlement	$5,349,220	$7,263,301	$5,490,439
Milk Inspection	Fees	$530,616	$451,866	$448,505
EMS Trauma	Fees	$475,000	$475,000	$301,800
Plumber's Licensing	Fees	$759,563	$775,428	$786,636
Individual Sewage Disposal System	Fees	$136,307	$90,000	$92,000
HVACR	Fees	$1,083,273	$1,016,954	$1,048,021
Radiation Control & Emergency	Fees	$214,213	$214,266	$265,199
Health Facility Services	Fees	$398,687	$457,650	$380,450
Community Alcohol Safety	Fees (DUI Fines)	$1,684,020	$1,744,015	
Pharmacy Services	Fees (Regulatory, investigations)	$71,260	$77,753	$104,548
Unwed Teen Birth/Teen Pregnancy	General Revenue (Discontinued)	$988,665	$0	$0
Capital Improvement	General Revenue (One time)	$1,450,000	$2,342,736	$764,736
Info Tech Initiative	General Revenue (Computer and technology upgrades)	$500,000	$259,520	$252,875
Rural Health Services	General Revenue (place MDs in rural areas)	$800,000	$0	$0
Gov. Council on Fitness	General Revenue (One time)	$27,500	$0	$0
Alcohol and Drug Abuse	General Revenue (One time)	$385,000	$0	$0
State Operations*	General Revenues, Re-appropriated Fees	$64,171,441	$64,682,630	$61,132,728
Nuclear Plan & Response	Private funds	$885,924	$918,140	$973,001
In Home Services	Medicare, Medicaid, Health Ins., Fees	$64,387,391	$58,060,139	$60,483,724
Cervical Cancer	Tobacco Settlement funds	$6,981,799	$21,266,762	$16,901,317
Tobacco Prevention & Cessation	Tobacco Settlement funds	$150,000	$150,000	$150,000
Total Other Funds*		151,429,879	160,246,160	149,575,979

Source: Arkansas Department of Health, December 2004

***Note**: Other funds may include some federal funds such Medicaid, Medicare or grants that could not be separated from other funding sources. For example home health is reimbursed with a combination of federal funds, health insurance and fees.

Exhibit 6.4 Summary of ADH Funding by Source of Funds, 2002 - 2004

Source of Funds	2002	2003	2004
Federal Funds	149463469	$140,387,623	$144,124,471
Fees and Miscellaneous	27,370,032	24,820,625	18,501,316
General Revenue	51,342,602	48,685,333	48,049,183
Medicaid/Medicaid Fees/ Revenues	64,387,391	58,060,139	60,483,724
Private Funds	885,924	918,140	973,001
Tobacco Settlement Funds*	$7,443,930	$27,761,923	$21,568,755
Total Funds	300,893,348	300,633,783	293,700,450

Source: PW Consulting, Inc. December 2004
Note: Tobacco Funds include miscellaneous funds from Breast Cancer Control and Tobacco Prevention and Cessation

Between restrictions placed on the use of federal funds, re-appropriated fees, and designated usage of tobacco settlement funds, ADH has little flexibility to fund services that fall outside a specific program mandates. For example, if personal health services must pay for themselves, this leaves the Department with little discretion to serve people who are uninsured and do not meet the state's Medicaid eligibility criteria further reducing the Department's ability to staff clinical services.

This problem can also be seen in the re-distribution of staff noted in the DLA report: Staff who had been involved with the delivery of personal health services like child health care were moved to programs with secure federal funding streams like bioterrorism.

6.2 Impact in the Future

If general revenue funds continue to contract, ADH will have less and less discretion with its funding to address populations and public health issues that fall outside federal priorities. For instance, it will be difficult for the department to provide an array of fee-based or revenue-driven clinical services in sparsely populated regions because of the limited revenues less populace areas will generate.

It is therefore important in assessing ADH performance and funding levels for the Legislature to examine not just aggregate funding figures for the Department, but also the earmarking or restriction of large portions of that funding to specific purposes and, therefore, what funding remains available to the Department to use in pursuing other objectives desired by the Legislature or necessary to maintaining public health.

Chapter VII
Recommendations

Core Public Health Functions

RECOMMENDATIONS	*IMPLEMENTATION*
1. ***Stay the course with Hometown Health Improvement.*** Given Arkansas' national rankings above in diseases caused by smoking and obesity along with lifestyle-related diseases of heart, diabetes and stroke – the most effective remedy is to empower local communities and educate the public, themselves, on the benefits of healthy lifestyles, how to make them and the consequences of poor lifestyle choices.	Ongoing. Report to the Legislature Annually.
2. ***Create a Paperwork Reduction Work Group to assess the adequacy and usefulness of forms and reports used by the local health units*.** This group should include the end-users of forms and reports, experts in Information Technology, data analysts and policymakers to better design information tools that provide both the leadership and the people using and filling-out the forms with data that help both do their jobs.	Complete in 1st Quarter 2005.
3. ***Explore the feasibility of using North Carolina's Social Marketing web-based course*.** That state's Division of Health received funding from the Robert Wood Johnson Foundation's *Turning Point* program to create a web-based course in public health marketing at the University of North Carolina's School of Public Health to reach their customers more effectively and to encourage healthy behavior. This may serve as a resource for ADH's Hometown Health Improvement program	Investigate in 1st Quarter 2005. Report to Legislature feasibility of North Carolina model. If feasible develop plan for implementation.

Public Health Informatics

4. ***Improve data collection and use overall.*** Leaders and policymakers must rely on comprehensive, integrated, timely and accurate data.in order to make sound and informed decisions regarding the use of ADH's scare resources. Currently, ADH does not produce the data needed to enable the agency to plan strategically. The strategic planning documents we reviewed do not reflect specific benchmarks and outcome measures. As a result, ADH is not able to evaluate whether or not a certain public health intervention has, indeed, corrected a public health problem or whether it should change course. ADH would also benefit from integrating census data with other health care utilization data down to the county level, so that local health units could better target their resources and programs.	Ongoing. Report to Legislature in 90's day with a plan for improvement.

Example

If a community is aware that it has a higher than average asthma rate among ARKids children (evidenced by DHS data) and local hospitals report unusually high emergency room visits among children (hospital utilization data and DHS data) due to asthma related complications (diagnostic and treatment code data), and census data predicts population growth among this cohort (census data) then the Hometown Health Improvement group acting on all of these pieces of data, may decide to launch an educational campaign to mothers of all children diagnosed with asthma.

5. ***Upgrade the Department's data maintenance software.*** We recommend that ADH review public health software models, e.g. the Kansas state data warehouse that integrates local health department client and outcomes data, rather than engage in the costly enterprise of creating its own.

   Ongoing.
   Report to Legislature in 90's day with a plan for improvement.

6. ***Form a Health Data Work Group involving cross-agency representatives who collect health and socio-demographic data, epidemiologists, along with public and private health care providers to identify data sources that could be analyzed in an integrated fashion at the state and county levels to better inform the strategic choices of ADH and the LHUs.*** The work group should also include an expert on HIPAA (the federal Health Insurance Portability and Accountability Act) law and regulations, a faculty member of the School of Public Health, and the agency's own IT expert.

   Create workgroup within 45 days. Report to the Legislature within 120 days following the creation of the work group, they should have a completed document to help inform ongoing data collection efforts within timeframe.

7. ***Provide local health coalitions with evidenced based, integrated and outcome data that provide comprehensive profiles of each local community*****.** This recommendation adds a special emphasis on providing local communities with understandable data from which they can make informed, localized decisions as to where to place their resources and energies. An example of how one state has done this is the Pennsylvania Department of Health's State Health Improvement Plan (SHIP) program.

   Ongoing.
   Work to be based on implementation of recommendations 4-6.

   The SHIP program brings together census, socio-economic, health provider and outcome data, down to the county level. SHIP program shares the same scope and purpose of Arkansas', Hometown Healthy Improvement program. Both emphasize the prevention of disease and disability, the coordination of resources, interagency collaboration, and improved government responsiveness to community health planning.

The Pennsylvania project provides local groups statistics and incidence data down to the sub-county and ZIP Code levels. Other data include the Behavioral Risk Factor Surveillance Survey (BRFSS) linked with their Survey of Local Health Partnerships. To better understand the health care worker shortage in the state, the Department of Health collaborates with the Department of State, which tracks and monitors professions, to distribute surveys to members of various licensed health professions during the license renewal process. These reports are shared with local coalitions and inform a new Healthcare Workforce Cluster studying innovative ways to support and create a health care workforce infrastructure in the state through the Department of Labor's Workforce Investment Act division. More information can be found at www.dsf.health.state.pa.us.

8. ***Pursue a partnership between ADH and the School of Public Health to bring together cross state agency data and resources to conduct the studies outlined above.*** Currently, ADH is wisely in the process of forging a partnership with the School of Public Health through a joint appointment. We would suggest that one of the efforts of this partnership should be to consider how other states have tackled integrating cross agency data to outcome data at the local level. States that have done this through Turning Point funding are: Minnesota, Arizona, Kansas and Virginia. (see *Turning Point* reports on state initiatives at www.turningpointprogram.org)

Ongoing.

9. ***Pursue a grant proposal to the National Institute of Health and/or philanthropies such as the Robert Wood Johnson Foundation to create an Informatics Fellowship to assist with data development efforts.***[24] We understand that RWJF will be moving towards funding projects that will assist states in developing evidenced-based data systems and informatics as the Turning Point project ceases. This may be an avenue the Department could pursue, possibly, with some in-kind help from the School of Public Health. Informatics is the integration of information technology and public health data.

Research application dates and submit proposal for next grant award cycle.

Communications

10. Re-institute the Director's "Dear Collegue" Letter. A number of text-entry e-survey responses cited the "Director's Letter" from Dr. Boozman as very helpful, but it has not been published as of late. This used to be a way for everyone at every level to keep up-to-date with the current issues facing the Department, and receive an update on programs and services. Many employees lamented in their text responses that all too often they learn about major initiatives or policy decisions in the newspaper. They also report that what actually is communicated through departmental channels is highly dependent upon the discretion of the District Manager: Some counties are well aware of ADH activities while others feel left in the dark. Staff in the latter counties feel that the Director's Letter partially ameliorates this situation.	Implement by 2nd Quarter.
11. Continue Dr. Boozman's meetings with local health units and HHI coalitions throughout the state to share the mission of the agency and the changing state of public health. We understand that Dr. Boozman has created a PowerPoint presentation, *The Perfect Storm*,that addresses these two issues. Perhaps, a talking points presentation could also be given to all District Managers in a train-the-trainers type model to spread the message even further. The presentation should clearly and simply state the department's strategic goals and objectives for the next five years.	Ongoing. Develop a train-the-trainers model for District Managers by 3rd quarter so that they can deliver "Perfect Storm" message in the regions.
12. Institute a regular "Job Shadow" program among ADH leadership. Most organizations, public and private, encounter a disconnect between management and their colleagues working in the field. Workers frequently feel that management is "out of touch" making decisions that affect their day-to-day operations in a vacuum. This phenomenon is no different for ADH, in fact, it was probably one of the most resounding observations made by employees: that the ADH leadership team was "out of touch" and that there are "Too many Chiefs and not enough Indians." In response, CEOs of private companies such as Home Depot, and government leaders such as Senator and former-Governor Bob Graham of Florida perform actual jobs of front-line workers to better understand the realities of their work and how management policies affect them. Most CEOs find the experience enlightening and bring a fresh approach to their policy-making. It also boosts the morale among direct care workers to see their leaders "walk in their shoes." For example, if Dr. Boozman and members of the ADH Leadership team were to work as PHTs for a day, it would help foster morale and make the mission more "down-to-earth." This might also be a model for legislative leaders to follow providing them with a better understanding of what both the field and policymakers must grapple with in meeting federal and state mandates, growing consumer demand and fewer resources.	Initiate "Job Shadow" program by February 2005.

13.	***Reassess the frequency, nature, and purpose of meetings.*** Nearly 30 percent of text responses to the e-survey voiced the opinion that there are far "too many meetings" that do not yield the results warranted by the cost of time and travel. This issue was also raised by the DLA audit.	Ongoing.
14.	***Continue to promote teleconferencing.*** To cut down on the amount of travel and resulting costs, ADH is now instituting monthly teleconferences and quarterly regional meetings.	Ongoing.
15.	***Use e-mail as a complement to personal communications*****.** The Local Health Units report a heavy reliance on e-mail as the means of communication from management to them. In fact, the highest reported medium that employees receive information to "get their job done" is via e-mail. Though email is a very effective means to transact business, a significant number of text responses from Local Health Units report that there are days when they do not have the time to read or respond to a long list of emails, see patients and fill out paperwork including the new "Weekly Nursing Utilization Tool." This e-mailing phenomenon as a core means of communicating is certainly not unique to ADH. In response to this electronic over dependence, some companies are now forcing their employees to talk to each other and promote "face" time by making Fridays a "No E-Mail Day." Though we're not recommending this particular strategy, we are suggesting that ADH encourage its colleagues, especially among management, to directly interact with those under their guidance whenever possible.	Ongoing.
16.	***Offer opportunities at regional meetings for networking within each profession.*** Survey respondents also recommended that breakout sessions by profession and/or position be offered at regional meetings so that attendees can network among each other and share best practices. ADH could also explore the feasibility of using free access cable television or satellite to implement something similar to New York State Department of Health's monthly broadcasts to local public health and community coalitions known as "Third Thursday Breakfast Broadcasts" (T2B2).	Ongoing quarterly via teleconferencing, satellite conferencing, etc. With annual opportunities for face-to-face interaction.
17.	***Provide laptops and cell phones to specialists who need to be accessible for timely decisions and guidance.*** One group that would especially benefit from electronic access is those responsible for environmental health. Funding was made available to ADH for such purchases through West Nile Virus funding from the federal government.	By February 1, 2005 determine needs and costs for technology in field. Implement by 2nd Quarter based on cost and need information.

Strategic Planning

18. *Engage in a rigorous process to produce a five-year strategic plan*. The last such plan was developed five years ago. Given the dramatic shifts in public health services and delivery, it is now outdated. A new strategic plan also would help to address the current lack of understanding among all staff of the agency's direction. The ADH Director should form a broad-based *Strategic Planning Work Group* of health care leaders and providers, members of the legislature, consumers, advocates and a cross representation of public health colleagues from all levels of the organization. In order to conduct such a comprehensive plan that engages the wide array of health care providers and stakeholders affected by public health, the Department will need to seek outside funding for such an undertaking. It would be extremely helpful if the Legislature also offered a modest amount of seed money to attract foundation and non-profit sector support for developing the plan. The Arkansas School of Public Health could be asked to help provide the research support necessary for such an informed strategic plan.

Establish work group within 60 days. Concurrently identify funding to support effort. Develop draft budget and identify all needed resources.

Strategic Plan should be completed by January 15, 2006.

19. *Require that all objectives in the strategic plan include quantifiable performance and outcome measures.* All objectives in the strategic plan should follow this type of quantifiable performance measure and outcome format:

Not Applicable.

Objective
During January 2005 through June 2005, 100 women with asthmatic children who have visited the emergency room at least once for an asthma-related incident will receive 2 hours of training on "Helping Your Child Live with Asthma."
Outcome
By December 2005, there will be a 50% reduction rate of hospital emergency room visits among ARKids asthmatic children whose mother's went through the *Helping Your Child Live with Asthma* training program.

Organizational Structure

20. ***Engage in a robust discussion on revising ADH's organization chart and structure.*** Given the short time period we were given to review and analyze the Department, and the complex study required in any reorganization of a government agency, we are not in a position definitively to recommend a new organizational structure for ADH. However, we do believe that the agency would benefit from clearer lines of authority to improve accountability and the rapid resolution of problems.

Review consultant's chart and revise and recommend redesign within 60 days.

Once design has been selected. Report recommendation to Legislature.

ADH should launch campaign to inform staff of new design, its purpose and implementation schedule within 45 days following selection of design, but at least 60 days BEFORE implementation.

To initiate the discussion, we are proposing a hypothetical organization chart that blends the current management practice of interdisciplinary team leadership with a structure that would vertically integrate related operational and service components of the agency. This would:

- Maintain the seven functional sectors of the agency as it is now organized.
- Realign these seven sectors into three areas: Operations, Services, and Field.
- Create two new deputy director positions to increase accountability: one to oversee Operations and one to oversee Services. We believe that the agency would be able to identify and re-assign two individuals from among the current seven sectors to assume these new positions or, if needed, reassess other management positions throughout the agency in order to fill these positions within existing resources and complements.
- Two of the deputy positions currently exist though they do not operate in the capacity proposed by the hypothetical organization chart:: the Deputy State Health Officer, who essentially acts as the Chief of Staff, and the Public Health Regions Director, who in this scenario would become the Deputy for Field.

Under this proposed realignment, the Director, along with his Deputy State Health Officer, will have the benefit of overseeing three individuals directly accountable for vertically integrating the functions, services and duties under their supervision. These clearer lines of authority would streamline decision-making, and create economies of scale, skills and knowledge that could be applied vertically and throughout the organization.

Very few program re-assignments are proposed in this hypothetical chart:

- All of Administration Services would be placed under the Deputy for Administrative Operations, except for Legal Services, which would be assigned to the Director's Office.

- Three separate groups would be formed among the current Administration services sector: Finance, Informatics, and Human Resources. Health Information Services, currently under "Shared Services," would move to Informatics, as would Performance Measures currently under Public Health Improvement. Information Technology would also be placed under Informatics. We believe that this would better position the agency to develop a more rigorous evidenced-based data system to inform their strategic decision-making.

- The same four sectors that now exist – Shared Services, Statewide Services, Public Health Improvement, and Public Health Preparedness – would simply be aligned under the leadership of a Deputy for Services.

The Director would continue his team management style as well utilizing the Leadership Team forum to foster integrated approaches to problem solving and strategic decision-making. Those coming to the table in this hypothetical scenario, however, would also bring with them clear-cut authority and accountability for the functions entrusted them under this structure.

There are, of course, other ways to realign the business sectors. For example, since many of the services upon which Public Health Improvement focuses serve the regions; this sector could be grouped with the Deputy for Field.

Although it may appear that a new organizational layer would be added to ADH with creation of the three new deputy positions, the Leadership Team currently acts as a *de factor* deputy "layer." What we propose is that, rather than a group functioning as "deputies" without direct authority or accountability for specific programs and services, this layer be re-aligned by function (Administrative Operations, Services, and Field) with a specific individual assigned to head up each. These deputies would be responsible for the business units assigned to them and would be directly accountable for their performance and delivery.

Our for-discussion-only organization chart is presented in Appendix C. See Appendix B for five sample organization charts of other states that use a deputy/function system.

21. ***Consider redefining the District Manager role to encompass more of a "product line manager" role.*** It may be helpful if District Managers function as product line managers who view local health units as their "customers" with the purpose of serving their needs by getting answers, resolving problems and delivering resources to their product line -- the Local Health Unit. They would navigate the bureaucracy within ADH and, when appropriate, among other state agencies to facilitate a fast and direct response. This will be easier for them to do if there are clear lines of authority at the top of the hierarchy as illustrated in the For-Discussion-Only organization chart.	Review role of District Managers within 1st Quarter.
22. ***Conduct a cost/benefit/time study analysis of the numbers of District Managers and Regional Managers.*** Many of the text responses view the numbers of District and Regional managers as too high. Given the limits of this study, we are unclear as to what constitutes an appropriate number of district managers and if a structural re-alignment of the agency's reporting structure, would result in needing fewer managers. The ADH Director reports a need for more staff to fill positions in environmental health (also validated in text responses) and field positions to cope with the ever-growing demands in the North West region. If more funds aren't available to fill these service positions, this layer of the bureaucracy may offer a redistribution of personnel resources.	Complete within 1st Quarter. NOTE: Recommendations 22 and 23 will inform ADH's redesign effort.
23. ***Provide communications and management training to District Managers and Local Health Unit Directors*****.** We understand that ADH has provided training to these managers but given that 41 percent of the survey respondents assert that their unit leaders do *not* include them in policy making, and that many feel management does not "listen," ADH would do well to offer these managers continuous and focused training in communications and team-management skills.	Develop training by 2nd Quarter and implement in 3rd Quarter.

Customer Service

24. Provide customer service training for "first contact" staff and other staff likely to come into contact with the public at Local Health Units. A significant number of employee responses on the e-survey's open-ended questions indicated that partially due to low morale and lack of resources, some local health units' personal services clinics are not as "customer friendly" as they could be.	Ongoing. Develop and implement training by end of 2nd Quarter.

25. ***Review the "same day service" scheduling policy and determine if another scheduling system can be implemented that meets both customer and clinic needs*****.** Because of historically high no-show rates for scheduled appointments, local health units instituted a process by which people are given same day appointments or seen when they come to the clinic. This is similar to an airline's "overbooking" policy, whereby an airline may sell more tickets than it has seats in anticipation of some people failing to show up. However, ADH's policy has resulted in complaints of long lines, the inability of the customer to schedule an appointment around other obligations, and customers coming to the clinic and discovering that the nurse is not there (sometimes due to meetings or other obligations). The local health units and ADH management should explore other alternatives to scheduling, such as use of scheduling software and automated phone reminders for appointment confirmations, or perhaps development of a local Volunteer Auxiliary of retirees to assist with reminder calls.	Within 60 days complete initial review of "same day service" and other scheduling and wait time problems. By 3rd Quarter report to Legislature with recommendations to address scheduling-related issues.
26. ***Ask the Building and Supplies staff to conduct on-premises assessments of physical property for affordable upgrades*****.** Survey respondents frequently cited the need to upgrade the physical premises of local health units to better reflect the standards of a basic, professional doctor's office.	Complete assessment by end of 2nd Quarter. Report to Leadership with recommendations in 3rd Quarter.
27. ***Explore possible private and non-profit partners to share space at the local health units.*** This could serve possibly to generate revenue from partners who could pay for shared space and potentially create a "one-stop" for customers to access other health and human services. (This model is being widely used nationally for career-link partners for one-stop Workforce Investment Act (WIA),	Investigate feasibility and report to Legislature by end of 3rd Quarter.
28. ***Accelerate efforts to address the needs of the changing minority customer base.*** Currently, "Minority Health" is a function housed under the Public Health Improvement unit, which has initiated a series of programs to address the growing Hispanic and Marshallese communities. This minority health office coordinates its efforts with the Minority Health Commission, has held workshops and summits, and developed a cultural competency curriculum. But, given the growing needs of the Hispanic population and the complex cultural needs of those who have emigrated from the Marshall Islands, most of whom reside in the Northwest Region (Springdale), a new Office of Health Disparity may be warranted. Two best practice examples of health disparity initiatives are the State of Colorado's new minority surveillance system and Kansas' training module for community leaders on how to focus on and interpret minority health data.	Ongoing.

29. *Provide cultural competency training to staff at all levels*. This recommendation is especially relevant for those who directly plan for and interact with a growing minority population. Respondents to the survey report a need for Spanish-speaking materials and interpreters at the local health unit level. The cultural competency training program offered by the Arizona Academy Without Walls program. (www.aztpp.com) may be of further benefit.	Develop and implement in 2nd Quarter. Review public health materials and need for interpreters concurrently.

Continuous Investment in Improvement

30. *Pursue public private partnerships and funding at the leadership level to assist the department in areas of strategic planning, and evidenced-based data and outcome measures.* Several states have created *Public Health Institutes* with private, non-profit funding that aid their state agencies in meeting planning needs by bringing together a broad-based coalition of business, academic, advocates, legislative and providers to share resources, skills and knowledge to innovatively address the public health needs of their state.	Ongoing.
31. *Continue to monitor and, when needed, increase salaries for competitive recruitment and retention of high-quality staff.* Both the department and the legislature deserve commendation for investing in the public health infrastructure by recently upgrading salaries among key professional positions directly related to public health service. The next area that should be explored is tackling the need for professionally prepared experts in environmental health.	Ongoing.
32. *Wherever possible, tap existing public health educational programs to continuously educate the workforce and the HHI Coalitions.* State health departments throughout the country all face the challenge of educating their workforce to deal with the ever-changing and evolving needs of public health. One program funded by the Robert Wood Johnson Foundation that may be of interest to ADH is *Arizona Academy Without Walls* that offers competence based curricula in public health with a unique program on cultural competency. (www.aztpp.com).	Ongoing.

33. ***Ask staff throughout the organization what they want to learn and what training they would like to receive to better perform their jobs.*** Public Works LLC would offer to conduct an e-survey specifically on this topic for free. It will be vital for morale, however, that ADH be in a position to respond to these training requests, otherwise, expectations will be raised without results being delivered. The ADH Director is very committed to educating and preparing the workforce, especially, given the fact that many top tier, senior policymakers and leaders are nearing retirement. This type of education will require funding which may necessitate public and private partnerships beyond state government funding to meet the demands of this much needed investment.	Completion e-survey for training needs by February 1, 2005.

Funding

34. ***The Legislature should review and consider the Department's current funding mix prior to making further cuts in the agency's appropriated general revenue.*** It is therefore important in assessing ADH performance and funding levels for the Legislature to examine not just aggregate funding figures for the Department, but also the earmarking or restriction of large portions of that funding to specific purposes and, therefore, what funding remains available to the Department to use in pursuing other objectives desired by the Legislature or necessary to maintaining public health.	Not Applicable.

Appendix A
E-Survey Questionnaire

Arkansas Department of Health Survey

1

Overall, I believe that ADH can make a positive difference in people's lives.

YES NO

2

Nationally, public health has undergone a great deal of change in the last 5 years. (Please choose one)

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

3

The greatest change I've seen in public health is:

4

The following statements reflect how ADH employees may feel about their work environment. Please rate each statement as to how you feel:

1	2	3	4	5
Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

I understand where ADH wants to be in five years.

1 2 3 4 5

I understand how decisions are made.

1 2 3 4 5

Decisions are made in a timely manner.

1 2 3 4 5

I'm involved in decisions that affect me.

1 2 3 4 5

Our chain of command is designed to solve problems.

1 2 3 4 5

Decreases in funding have directly affected my job.

1 2 3 4 5

Communication is two-way: from the top down and bottom up.

1 2 3 4 5

I clearly understand who is my supervisor.

1 2 3 4 5

My supervisor is a responsive manager.

1 2 3 4 5

My supervisor can quickly resolve workplace issues.

1 2 3 4 5

My work unit leader includes me in policy-making.

1 2 3 4 5

5

How do you receive information to help you get your job done? (check those that apply):

- E-mails

- Agency publications
- Meetings with colleagues
- My supervisor
- Intranet site
- Federal agency updates & publications
- Other, Please Specify:

6

How would you rate the level of communication between your unit and the ADH Administration?

- Very effective
- Somewhat effective
- Not very effective
- Not effective at all
- No opinion

7

How could communications be improved?

8

The following are the six functions that are core to public health in Arkansas. Please rate them as to how well you think ADH is performing them.

1	2	3	4	5
Extremely well	Well	No Opinion	Not very well	Not at all well

Provide personal health services

1 2 3 4 5

Provide education and enforce laws and regulations

1 2 3 4 5

Support Hometown Health Improvement

1 2 3 4 5

Promote and encourage healthy behaviors

1 2 3 4 5

Respond to public health emergencies

1 2 3 4 5

Monitor and investigate public health problems

1 2 3 4 5

9

The role of public health in Arkansas is expanding to include more than providing clinical services.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- No opinion

10

What services have been eliminated over the last 5 years?

11

Over the past several years fewer people have been coming to local health units for services. The following reasons have been given. What do you think?

1	2	3	4	5
Strongly agree	Agree	No Opinion	Disagree	Strongly Disagree

People are now receiving services from Medicaid-type programs.

1 2 3 4 5

The services we offer do not match today's needs.

1 2 3 4 5

People are now receiving services from the private sector.

1 2 3 4 5

Hours of service at health units are inconsistent.

1 2 3 4 5

People are not aware of services.

1 2 3 4 5

Budget cuts have deleted services.

1 2 3 4 5

12

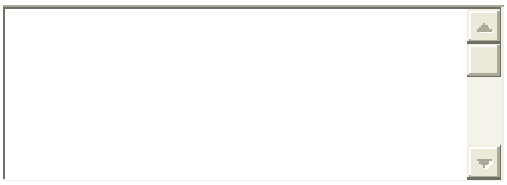
Did we miss a reason? Please tell us:

13

What are the top three problems in public health at the community level?

14

What is the one most important resource you need to help you get your job done?



15

This survey is completely ANONYMOUS but to better understand the information you have given us, it would be very helpful if you would tell us how long you have been an ADH employee:

- Less than one year
- 1-5 years
- 6-10 years
- 10-15 years
- 16-20 years
- Over 20 years

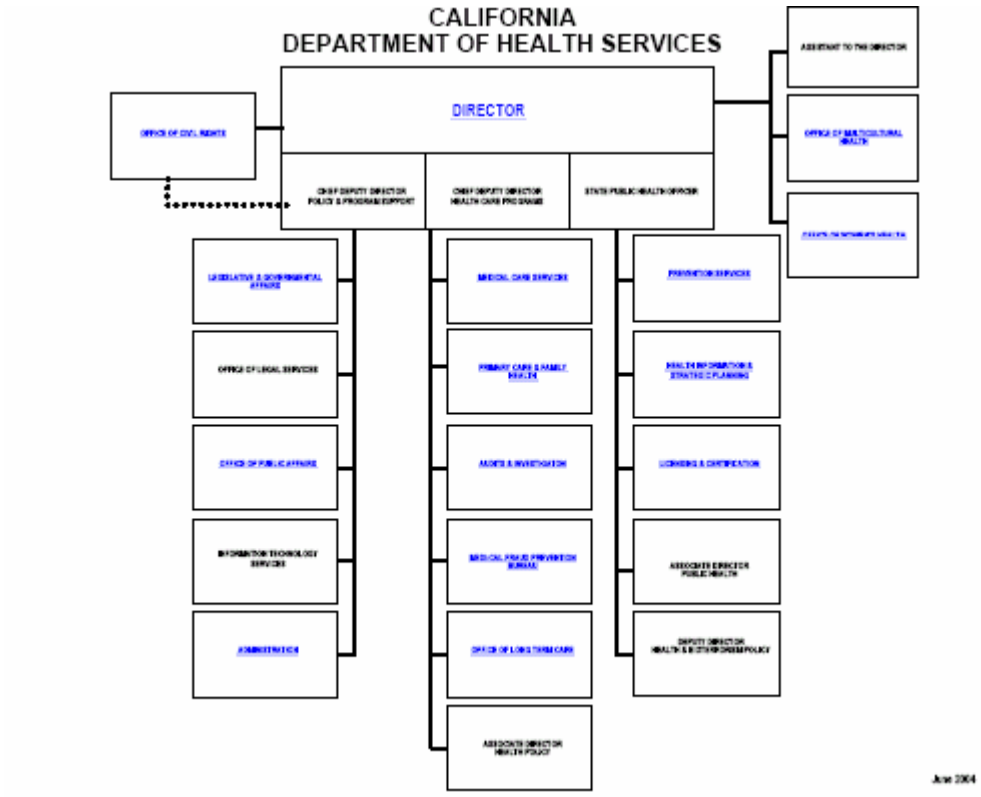
16

I work for the following business unit of ADH:

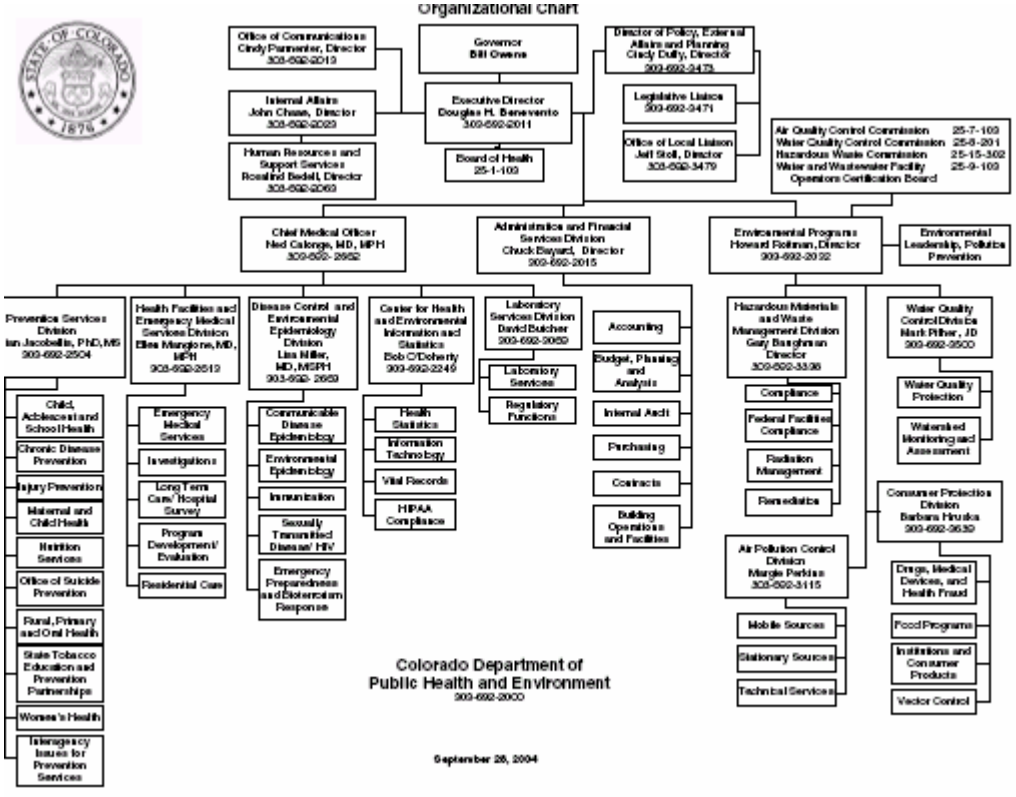
Thank you for your opinions and taking the time to better accomplish our mission of "Keeping Your Hometown Healthy."

Appendix B
Selected State Health Agency Organizational Charts

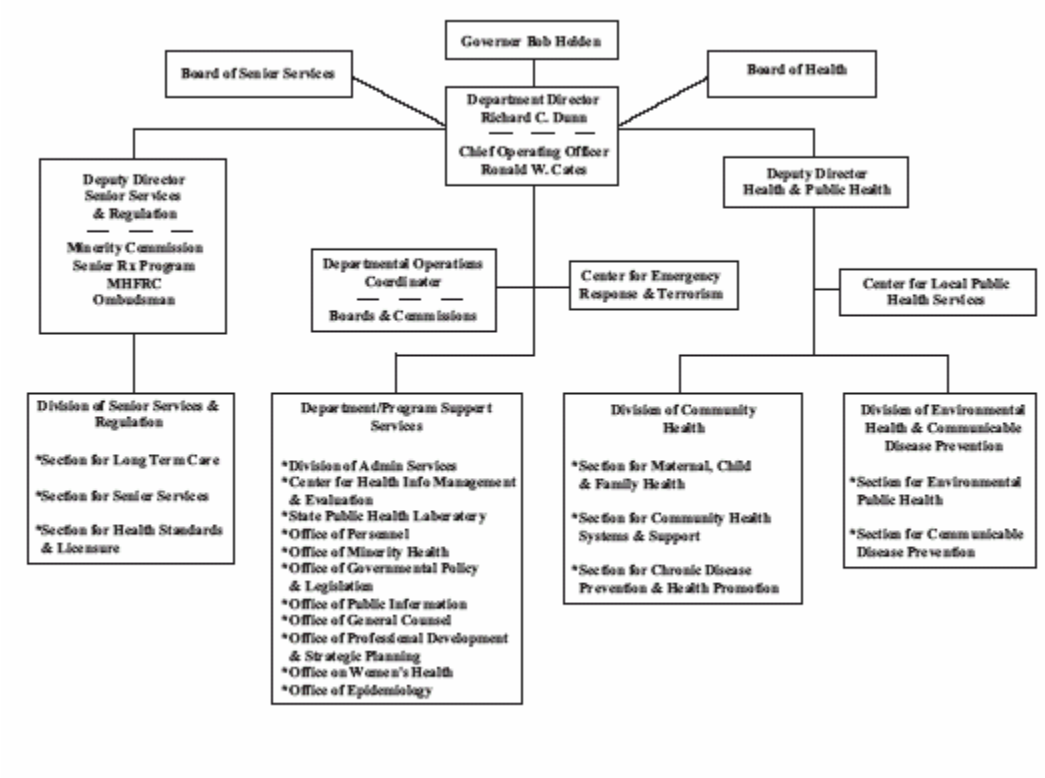
California



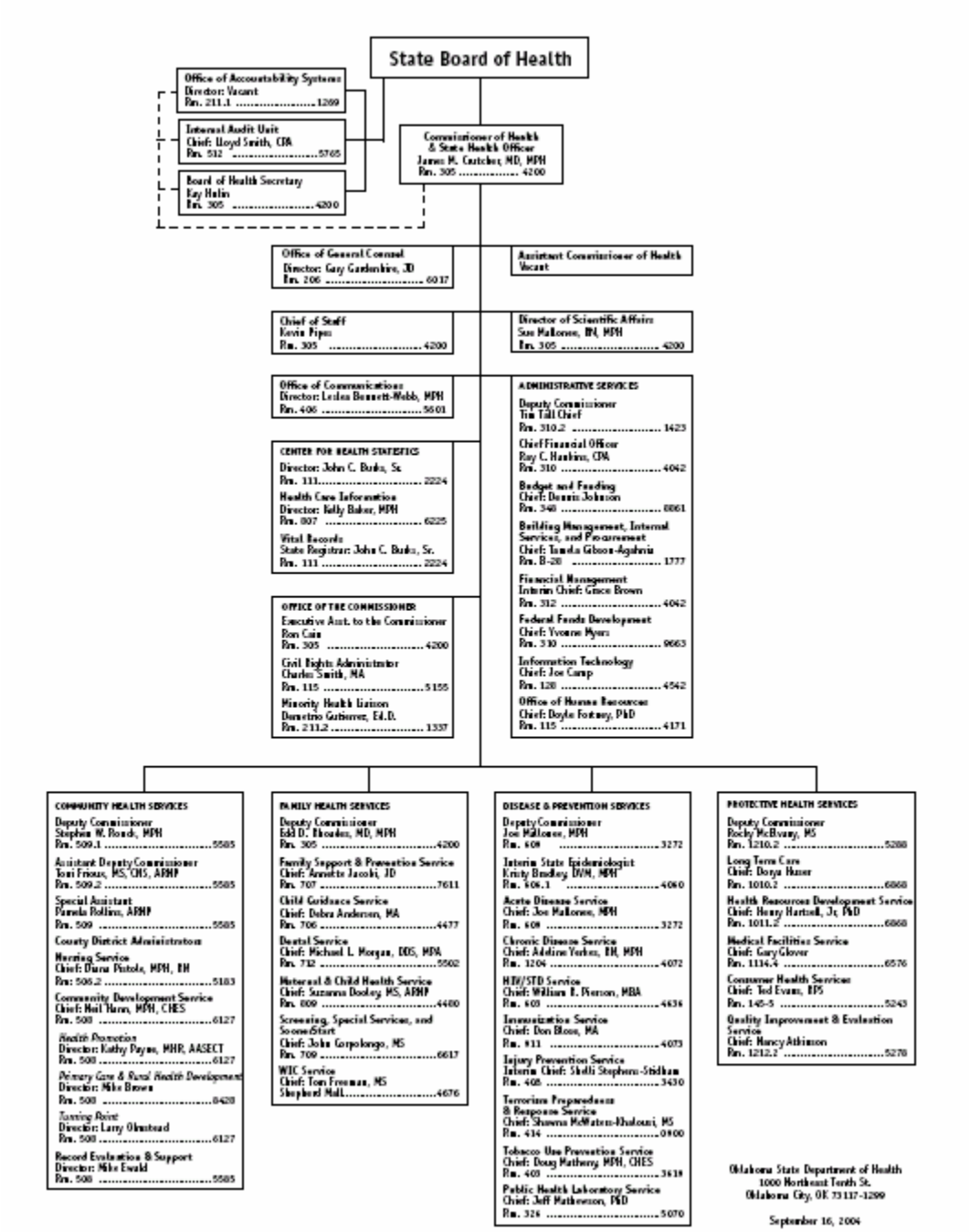
Colorado


Organizational Chart
Office of Communications
Cindy Parmenter, Director
303-692-2013
Governor
Bill Owens
Director of Policy, External Affairs and Planning
Cindy Duffy, Director
303-692-2473
Internal Affairs
John Chase, Director
303-692-2029
Executive Director
Douglas H. Benevento
303-692-2011
Legislative Liaison
303-692-2471
Human Resources and Support Services
Rosalind Bedell, Director
303-692-2069
Board of Health
25-1-103
Office of Local Liaison
Jeff Stoll, Director
303-692-3479
Air Quality Control Commission 25-7-103
Water Quality Control Commission 25-8-201
Hazardous Waste Commission 25-15-302
Water and Wastewater Facility Operators Certification Board 25-9-103
Chief Medical Officer
Ned Calonge, MD, MPH
303-692- 2652
Administrative and Financial Services Division
Chuck Hayward, Director
303-692-2015
Environmental Programs
Howard Roitman, Director
303-692-2032
Environmental Leadership, Pollution Prevention
Prevention Services Division
Ian Jacobellis, PhD,MS
303-692-2504
Health Facilities and Emergency Medical Services Division
Ellen Mangione, MD, MPH
303-692-2512
Disease Control and Environmental Epidemiology Division
Lisa Miller, MD, MSPH
303-692- 2650
Center for Health and Environmental Information and Statistics
Bob O'Doherty
303-692-2249
Laboratory Services Division
David Butcher
303-692-3060
Accounting
Budget, Planning and Analysis
Internal Audit
Purchasing
Contracts
Building Operations and Facilities
Hazardous Materials and Waste Management Division
Gary Baughman Director
303-692-3306
Water Quality Control Division
Mark Pifher, JD
303-692-3500
Child, Adolescent and School Health
Chronic Disease Prevention
Injury Prevention
Maternal and Child Health
Nutrition Services
Office of Suicide Prevention
Rural, Primary and Oral Health
State Tobacco Education and Prevention Partnerships
Women's Health
Interagency Issues for Prevention Services
Emergency Medical Services
Investigations
Long Term Care/ Hospital Survey
Program Development/ Evaluation
Residential Care
Communicable Disease Epidemiology
Environmental Epidemiology
Immunization
Sexually Transmitted Diseases/ HIV
Emergency Preparedness and Bioterrorism Response
Health Statistics
Information Technology
Vital Records
HIPAA Compliance
Laboratory Services
Regulatory Functions
Compliance
Federal Facilities Compliance
Radiation Management
Remediation
Air Pollution Control Division
Margie Perkins
303-692-3115
Mobile Sources
Stationary Sources
Technical Services
Water Quality Protection
Watershed Monitoring and Assessment
Consumer Protection Division
Barbara Hruska
303-692-3539
Drugs, Medical Devices, and Health Fraud
Food Programs
Institutions and Consumer Products
Vector Control
Colorado Department of Public Health and Environment
303-692-2000
September 28, 2004

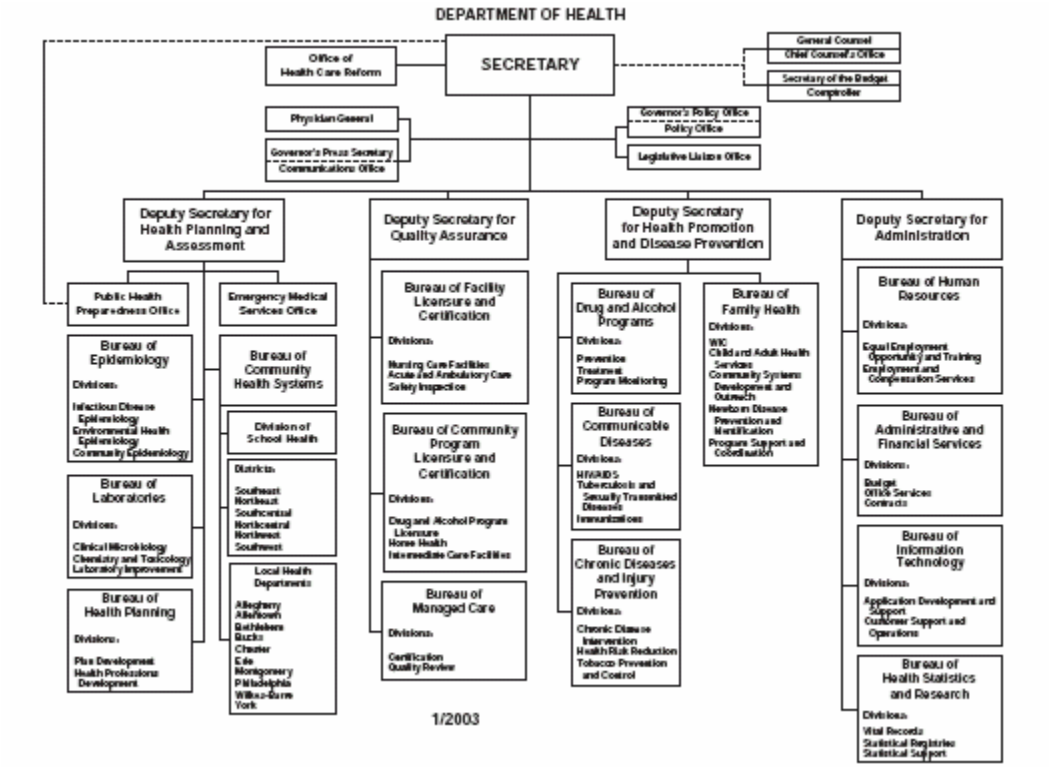
Missouri


Governor Bob Holden
Board of Senior Services
Board of Health
Department Director
Richard C. Dunn
Chief Operating Officer
Ronald W. Cates
Deputy Director
Senior Services
& Regulation
Minority Commission
Senior Rx Program
MHFRC
Ombudsman
Deputy Director
Health & Public Health
Departmental Operations
Coordinator
Boards & Commissions
Center for Emergency
Response & Terrorism
Center for Local Public
Health Services
Division of Senior Services &
Regulation
*Section for Long Term Care
*Section for Senior Services
*Section for Health Standards
& Licensure
Department/Program Support
Services
*Division of Admin Services
*Center for Health Info Management
& Evaluation
*State Public Health Laboratory
*Office of Personnel
*Office of Minority Health
*Office of Governmental Policy
& Legislation
*Office of Public Information
*Office of General Counsel
*Office of Professional Development
& Strategic Planning
*Office on Women's Health
*Office of Epidemiology
Division of Community
Health
*Section for Maternal, Child
& Family Health
*Section for Community Health
Systems & Support
*Section for Chronic Disease
Prevention & Health Promotion
Division of Environmental
Health & Communicable
Disease Prevention
*Section for Environmental
Public Health
*Section for Communicable
Disease Prevention

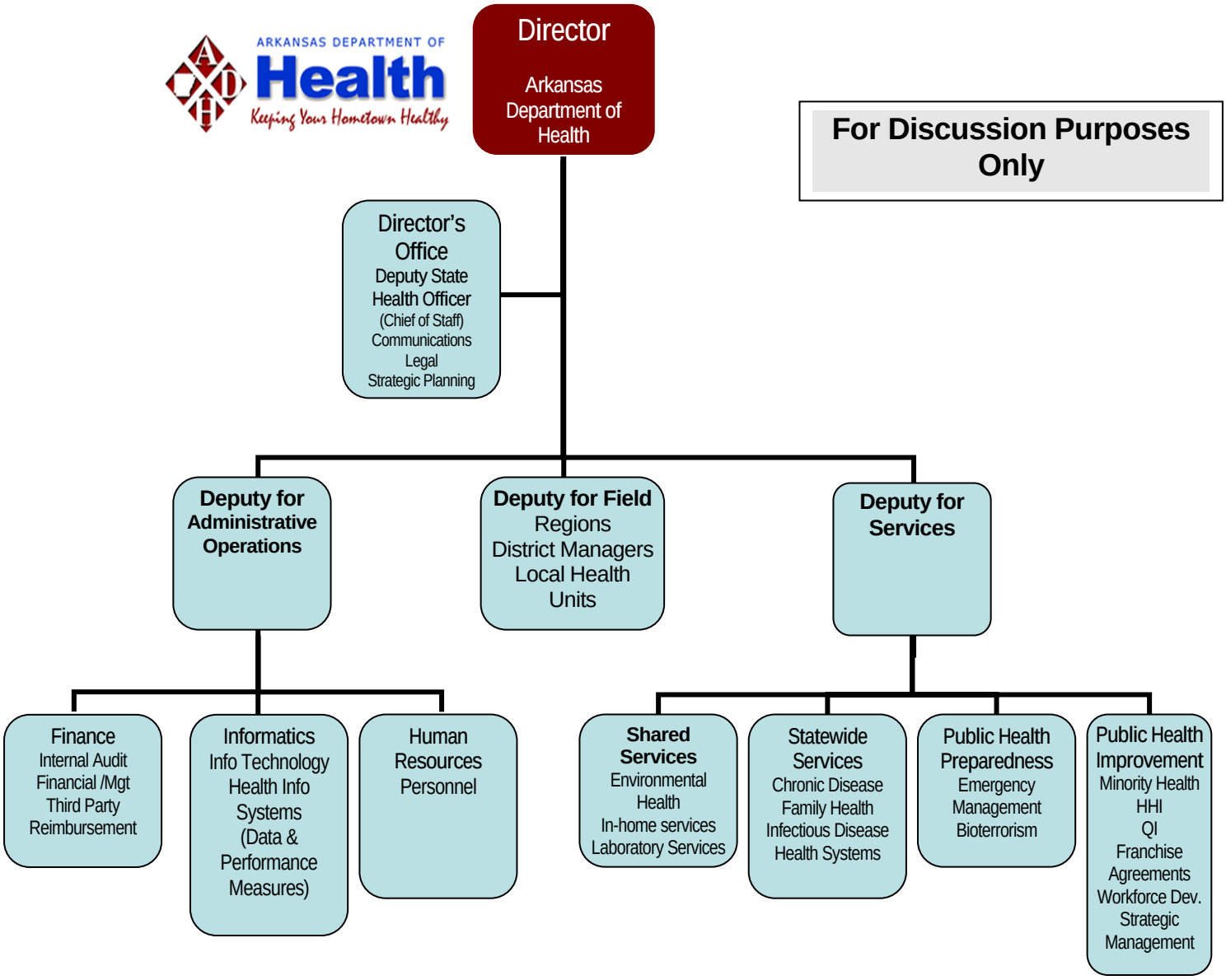
Oklahoma



Pennsylvania



Appendix C
Discussion-Only Organizational Chart for Arkansas



Public Works

Public Works offers public policy research and analysis to government agencies and officials, non-profits and "think tanks" across the country. Public Works has provided policy development, long-term planning and management consulting to governors' offices, state treasurers, state auditors, attorneys general, a secretary of state, and numerous state cabinet agencies, as well as state legislatures, Members of Congress, and municipal officials.

Public Works has helped create new solutions to problems for state and local governments all over the country. The difference starts with a philosophy reflected in our name: We believe wholeheartedly in the value of the public sector. Our senior personnel have all spent their careers in public service, and it is what drives our activities in private consulting. We are dedicated to ensuring that the *public* sector *works* as well as possible, and to making good ideas work for the better.

Public Works staff who contributed to this report: are:

Robin Herskowitz, Project Manager, has almost 20 years experience in health and human services policy development, and public and private sector research, analysis, and project management. Her current consulting work and her previous work with the Texas Comptroller's office and the Texas Legislature give her an in-depth understanding of federal, state and local governments and health-related statutes, regulations and policies. Ms. Herskowitz' specializes in the development of concrete recommendations to enhance state agency efficiency and effectiveness. She frequently provides written and verbal testimony before Legislative committees and makes presentations to advocacy and state agency organizations. Ms. Herskowitz graduated with honors with a Bachelor of Arts in Clinical Psychology from the University of Texas.

Dr. Linda Rhodes, former Pennsylvania Secretary of Aging, oversaw the nation's largest third-party prescription benefit program for the elderly, introduced the first third-party Therapeutic Drug Utilization Review program in the nation, and worked successfully with the U.S. Congress to improve the job-testing process nationally for nurse aides. Her Family Caregiving Support Program is now a nationally recognized model. She was chosen by President Bill Clinton to serve as chief operating officer of the U.S. Social Security Administration, the nation's largest domestic agency. Her study, *The Quiet Dismantling of Pennsylvania's Public Health* (Keystone Research Center) identified the effects of low public health staff ratios on key populations. Dr. Rhodes holds a doctorate in education from Teachers College of Columbia University.

Edward J. Powers has forty years of experience in public health. He started his career as field staff in the Pennsylvania Department of Health's venereal disease control program, and then became a field supervisor of New Jersey's venereal disease program. He then moved to the New York City Department of Health as an epidemiological specialist and assistant program director, returning to Pennsylvania to serve for 23 years as State Program Director of the sexually transmitted disease program. For 34 years, he also served as a public health advisor to the Centers for Disease Control. He holds a bachelor's in sociology from Kings College.

Jennifer Kolker is an assistant professor of health management and policy at the Drexel University School of Public Health and a consultant with Public Works LLC, a public policy consulting firm advising governments and non-profits around the country. Ms. Kolker is currently working in several areas related to early childhood education, including developing system-wide approaches to increasing licensure of child care and after school programs in Philadelphia, and management of child-centered research initiatives in Philadelphia. A former assistant director for policy & planning for the Philadelphia Department of Public Health, Ms. Kolker graduated with honors from Rutgers University, and received a master's degree in public health from the University of Michigan.

Christie R. Gross has extensive experience in cost allocation analyses, program evaluations, strategic planning exercises, epidemiological research, and data collection. Ms. Gross has worked on administrative and operating procedures for public health and social service agencies in several states. Prior to joining Public Works, Ms. Gross worked for the Institute of Public Administration at the University of Delaware, where she participated on a variety of projects, including the revision of Delaware's senior center Grant-In-Aid funding formula. Ms. Gross graduated with honors from the University of Delaware where she holds a Masters in Public Administration, as well as a Bachelor of Arts in English and Political Science.

Eric B. Schnurer is founder and president of Public Works. Mr. Schnurer previously worked for numerous governors, Senators, Members of Congress, and presidential candidates, in positions ranging from speechwriter to chief-of-staff. He received a bachelor's degree in political science from Brown University, a master's from Harvard's John F. Kennedy School of Government, where he was a founder and editor-in-chief of the student public policy journal, and a law degree from Columbia Law School, where he was a James Kent Scholar and member of the law review.

ENDNOTES

[1] Association of Schools of Public Health, http://www.asph.org/document.cfm?page=300.

[2] Garrett, Laurie, *Betrayal of Trust: The collapse of global public health*, Nea York: Hyperion, 2000.

[3] Schoenbach, Victor J, . *Historical Perspective*. 2002. and Vickers, George, *History of Public Health*, 2003

[4] Ibid

[5] http://www.unmc.edu/Community/ruralmeded/model/history_of_public_health.htm

[6] http://www.who.int/vaccines-diseases/history/history.shtml

[7] Calandrillo, Steve P., Vanishing Vaccinations: Why Are So Many Americans Opting Out Of Vaccinating Their Children?

[8] Source: http://www.healthyarkansas.com/news/pr_phweek_history_text.html

[9] United Health Foundation,

[10] Arkansas Department of Health "*Hometown News*" , October 2004

[11] *Arkansas Code, Title 20. Public Health and Welfare, Subtitle 2. Health and Safety, Chapter 7. State Board of Health - Department of Health. Subchapter 1. General Provisions.20-7-109*

[12] *Arkansas Code, Title 20. Public Health and Welfare, Subtitle 2. Health and Safety, Chapter 7. State Board of Health - Department of Health. Subchapter 1. General Provisions.20-7-110*

[13] *Arkansas Code, Title 20. Public Health and Welfare, Subtitle 2. Health and Safety, Chapter 7. State Board of Health - Department of Health. Subchapter 1. General Provisions.20-7-133*

[14] Both individuals have public health backgrounds; one, a doctorate in education, and the other, a retired CDC employee assigned to state health departments.

[15] Association of State and Territorial Health Officials, "Issue Brief: Resources for States Considering Health Agency Reorganization," January 2004.

[16] Ibid

[17] National Governors Association, *Transforming State Health Agencies to Meet Current and Future Challenges*., Washington, DC. 1997

[18] Begun in 1997, *Turning Point* is intended to transform and strengthen the public health system in the United States by making it more community-based and collaborative. The initial idea for *Turning Point* came from these Foundations' concerns about the capacity of the public health system to respond to emerging challenges in public health, specifically the system's capacity to work with people from many sectors to improve the health status of all people in a community. Twenty-three state health agencies are currently participating in *Turning Point*; those agencies have been at the forefront in recent years in taking bold initiatives to improve the health in their state. http://www.turningpointprogram.org.

[19] StatePublicHealth.org

[20] ASTHO 2002 State Health Official Salary Survey.

[21] Ibid.

[22] *Strategic Management of Health Care Organizations (4th Edition)* by Peter M. Ginter, Linda E. Swayne, and W. Jack Duncan. Massachusetts: Blackwell Publishing, 2002

[23] Arkansas Division of Legislative Audit, ADH: Review of local health units: Test of client visit data, Special Report Update, December 14, 2004.

[24] Contact person for Informatics Fellowship grants is Charles Friedman Ph.D. (Project Director) 301-402-2951.