10 TOP TEN Public Health Achievements in the First Decade of the 21st Century

Public health is the science and practice of protecting and improving the health of a community by preventive medicine, health education, control of communicable diseases, application of sanitary measures and monitoring of environmental hazards.* We at the Arkansas Department of Health (ADH) consider that all Arkansans are our clients all of the time. We want those who are healthy to stay healthy and those with illness to have access to quality health care. From scientific research to health education, the field of public health changes the social conditions and systems that affect everyone within a given community. Because of public health we understand that unclean water can carry bacteria that cause disease, that second-hand smoke can be deadly and that seatbelts can save lives. Public health monitors and identifies the social, cultural and economic factors that affect the overall health of entire communities. Public health practitioners advocate policies, promote behavioral change and change practices to ensure that we all stay healthy. Over the last 100 years, there have been immeasurable public health improvements in areas that protect and improve our quality of life. We are proud to share what we consider to be the top 10 public health achievements in Arkansas for the first decade of the 21st century.

* Public Health Institute, Public Health 101

Coalition for a Healthier Arkansas Today (CHART) Plan: The Tobacco Master Settlement Agreement

High rates of smoking and related diseases and conditions in Arkansas lead to rising and unaffordable health care costs. In 1998, 46 state attorneys general settled a lawsuit over states' smoking-related health care costs with five major tobacco corporations during the next 25 years. Arkansas received its first portion of the master settlement agreement (MSA) dollars, totaling $62 million in November 1998, with approximately $50-60 million expected per year thereafter. A working group – the Coalition for a Healthier Arkansas Today (CHART) – was formed to assess the state's needs and formulate a plan to spend the MSA funds to most directly improve the health of Arkansans. The major principles stated that all funds should be used to improve and optimize the health of Arkansans; funds should be spent on long-term investments that improve the health of Arkansans; future tobacco-related illness and health care costs in Arkansas should be minimized through this opportunity; and funds should be invested in solutions that work effectively and efficiently in Arkansas. A great deal has been accomplished over this past decade. Arkansas continues to direct all MSA dollars toward seven health-related programs, and the interest generated each year supports the Arkansas Tobacco Settlement Commission. The ADH Tobacco Prevention and Control Program (TPCP) includes community prevention programs, school education and prevention programs, enforcement of youth tobacco control laws, tobacco cessation programs, public awareness and health promotion campaigns, statewide tobacco control programs, tobacco-related disease prevention programs, minority initiatives and monitoring and evaluation. Four of the programs target the short-term health-related needs of disadvantaged Arkansans: Delta Area Health Education Center at Helena-West Helena, the Arkansas Aging Initiative, the Minority Health Initiative and Medicaid Expansion Programs. Two programs expand public health education and the state infrastructure of public health research: Fay W. Boozman College of Public Health and Arkansas Biosciences Institute.

Reduction of Adult and Youth Tobacco Use

In 2000, Arkansas had the third highest proportion of adults in the nation who smoked cigarettes, more than 64 percent of the state's youth were using tobacco and lung cancer exceeded all other causes of cancer deaths combined. The burden of health care costs was growing every year. In 2000, a new framework was established to use the tobacco master settlement agreement dollars to fund projects that included health programs to curb youth smoking and prevent diseases associated with tobacco use. Using the Centers for Disease Control and Prevention (CDC) Best Practices for Tobacco Control as a guide, over the last decade, the ADH TPCP has helped to reduce disease, disability and death related to tobacco by preventing the initial use of tobacco by young people, promoting quitting, eliminating exposure to secondhand smoke and educating the population about the effects of tobacco use. The youth smoking rate in 2010 was 23.5 percent, and the adults were smoking less, too. The per capita consumption of packs of cigarettes has decreased, and today 105,000 fewer adult Arkansans smoke as compared to the number in 2002. Since 2000, about 17,000 fewer Arkansas high school students smoke. During the past decade, Arkansans have saved more than $1 billion dollars in lifetime health care savings.

Passage of the Clean Indoor Air Act

At the beginning of this century, smoking was a fact of life in almost all public buildings, including hospitals, despite the fact that heart disease, stroke and cancer had all been linked to secondhand smoke. Advocates for change, including local coalitions, organized around the proposal to write new state laws that would ban smoking in all workplaces, including restaurants, with some exemptions that allowed smoking only by adults. The Clean Indoor Air Act took effect on July 21, 2006, and made Arkansas one of 18 states in the nation to prohibit smoking in indoor workplaces and public areas and helped eliminate the public's exposure to secondhand smoke. The ADH has worked to educate the public on the merits of the new policy and has undertaken enforcement of the law. The changes in public policy have helped increase the number of people who quit smoking. The health benefits associated with clean indoor air laws are attributed to reduced exposure to the toxins contained in tobacco smoke. The overwhelming weight of research available supports the belief that health care costs and worker productivity will both be affected positively in the future.

Hometown Health Improvement

Arkansas has historically had some of the worst health status measurements in the country. To effectively address community health problems, the solutions must come directly from the hometowns. These activities are happening daily in every county in the state through 73 Hometown Health Improvement (HHI) coalitions. The HHI model, first piloted in 1998, is rooted in the idea that the way for everyone to have better health is to improve, maintain and promote health, rather than treat illness. HHI harnesses community energy, promotes local control, provides data for evidence-based decision making, works with local and state partnerships and follows through to produce impressive homegrown results. To successfully address community health problems, county health units provide leadership and an organized system for the community to identify health challenges and to develop solutions. Over the past decade, people in communities across Arkansas have reaped many benefits such as reduced preventable illnesses and injuries, better coordination of community health services and improved health and quality of life for citizens.

2009 Influenza Immunization Program

As kids returned to school in August 2009, administrators were seeing something very uncommon for that time of year – the flu. Rather than seasonal flu, the illness was the new H1N1 influenza A virus, commonly known as "swine flu." Plans were announced in early August 2009 that local school districts statewide would offer the seasonal flu shot to all school children in grades K-12 in school-located clinics. As part of Governor Mike Beebe's health initiative funded by the tobacco tax passed during the 2009 legislative session and with federal monies, the ADH, Department of Education and many community partners worked together to develop

seasonal vaccination clinics for the schools. As the number and severity of cases of H1N1 flu escalated and deaths began to be reported, plans for the clinics were adjusted to allow kids to receive seasonal and H1N1 vaccine. The school-located clinics required extensive coordination among ADH, school administrators and many school nurses that supported the clinics. As the 2009 influenza A (H1N1) virus spread across the United States, Arkansas undertook one of the most ambitious vaccination efforts in the state's history. Eventually everyone who wanted seasonal or H1N1 flu shots was vaccinated. Arkansas was the only state to vaccinate children in all public school districts and charter schools for seasonal flu and H1N1 flu. A total of 447,853 seasonal doses and 343,292 H1N1 doses for a total of 791,145 flu doses were reported to the ADH immunization registry by both public and private providers. Of those, 345,008 (153,927 H1N1 and 191,161 seasonal) were given to students at 1,093 school/daycare clinics, including 77 private schools.

Expansion of the Newborn Screening Program

A number of newborn babies are born each year with rare conditions that can be harmful or even fatal if not treated promptly. Federal guidelines recommend that all states screen for 29 core conditions. On July 1, 2008, as a result of collaborative efforts among the ADH, UAMS, Arkansas Children's Hospital, Arkansas March of Dimes, the Arkansas Hospital Association and others, Arkansas expanded its screening of newborn babies from seven to 29 conditions detectable by efficient and reliable screening tests. Results of screening in Arkansas matched expectations based on national figures and from other large state screening programs. Each year, our state public health laboratory performs more than 300,000 screenings on approximately 40,000 newborns. A few additional years of screening may be required before it is possible to fully evaluate the impact of the expansion. For those families whose children have been helped, the program is literally a life saver.

Act 1220 of 2003 to Combat Childhood Obesity

Obesity rates among Arkansas children and adults have increased steadily over the last decade. Our state regularly exceeds the national obesity rate average and obesity is recognized as one of the most pressing health threats to families and children. To combat these dramatic increases the Arkansas legislature passed Act 1220 of 2003 to combat obesity. The law required that school districts establish wellness committees, limited vending and a la carte items in schools and established a statewide Child Health Advisory Committee that made recommendations that were adopted as regulations in 2007. These regulations established standards and policy recommendations for healthier foods and physical activity in all public schools. One section of the act requires each school district to measure body mass index (BMI) for every public school student and send it to parents in a confidential report to increase awareness of health problems associated with childhood obesity. This new law included the most ambitious school reforms in the nation at that time and is supported from funding (not to exceed five percent) from the ADH TPCP. Today, nearly 38 percent of Arkansas children remain overweight or at risk for overweight, which means there is still much work for us to do. However, since the implementation of Act 1220, we are continuing to hold the line on the progression of this epidemic.*

*ACHI, Assessment of Childhood and Adolescent Obesity in Arkansas: Online State Report (Year 5)

Arkansas Public Health Laboratory

America's health is increasingly at risk from emerging infectious diseases, food-borne illnesses, environmental exposure and the potential for chemical and biological terrorism. To respond effectively to these risks, every state needs a state-of-the art, fully certified public health laboratory. In order to replace the aging and increasingly problematic public health lab built in 1969, legislation was passed to create a modern, high-tech laboratory located next door to the ADH central office. Construction was funded with a bond issue that was financed by increasing the fees charged by the ADH for birth and death certificates. Construction of the new lab began in September 2004 and the building was dedicated in October 2006. The laboratory cost $24.6 million and provides approximately 80,000 square feet with a 5,000-square-foot level 3 bio-safety lab for handling dangerous, highly infectious disease agents. Each year the lab performs more than 800,000 tests on about 500,000 specimens.

Public Health Preparedness

Emergencies can cause widespread illness and death, disrupt economic and government activities, create fear and cost billions of dollars. The nation's ability to prepare for and respond to an infectious disease, bioterrorist attack or other emergency rests largely in states' public health systems.* After September 11, 2001, the ADH received federal funding to establish a Public Health Preparedness and Emergency Response Branch. The ADH is the lead agency in Arkansas for the State Emergency Support Function #8 which coordinates the health and medical response to emergencies in the state. Over the last decade, the Strategic National Stockpile (SNS) was established, which can supply a cache of medical supplies and pharmaceuticals to affected states within a 12-hour timeframe. SNS resources were used during the 2009 H1N1 flu pandemic when Arkansas implemented a plan for mass dispensing of medications throughout the state. Other accomplishments include the implementation of the Health Alert Network, an electronic database and health alert messaging system that can instantly send alerts to the medical community and other partners. A new, fully functional Emergency Operations Center at the ADH central office opened April 4, 2007. It can be operational in minutes and provides a central location to determine current situational status, coordinate operational actions and make critical decisions during emergency and disaster situations. The ADH preparedness plan is now integrated with those of various state and federal partners and has guided response to disasters such as hurricanes, pandemic influenza, West Nile virus, the 2009 ice storm, H1N1 flu, tornadoes and the Albert Pike Campground flood.

*Issue Brief, July 5, 2005, The Commonwealth Fund/John F. Kennedy School of Government

Statewide Trauma System: A System Saving Lives

Arkansans die due to traumatic injuries at a rate that is twice the national average, and there was no statewide trauma system to coordinate care among emergency responders and hospitals. Further, Arkansas had no primary seatbelt law and fewer requirements for the intermediate-level driver, as compared to other states. Although enabling legislation was passed in 1993 that established a Trauma Advisory Council, there were no major developments until 2008 when a new statewide computer-based network was implemented. During the 2009 legislative session, legislation was approved with funding through the tobacco tax initiative to establish a statewide trauma system. The trauma system will include trauma centers designated at four levels of resources and care standards. In September 2010, three designated trauma centers were announced as part of the new system. The three centers, the first of 73 that have indicated that they will be a part of the new system, are the University of Arkansas for Medical Sciences (UAMS) in Little Rock and the Regional Medical Center at Memphis (The MED), both designated as Level I centers, and Jefferson Regional Medical Center in Pine Bluff, which will be a Level II center. By the end of 2010, Arkansas Children's Hospital also received a Level I designation. Arkansas has successfully put several key pieces of a comprehensive injury prevention and control system in place. Part of the injury prevention initiative includes a new primary seatbelt law and a graduated driver's license law, also passed during the 2009 session to help reduce the number of serious motor vehicle injuries and fatalities. Primary seatbelt laws allow law enforcement officers to stop and ticket a driver for not wearing a seatbelt. A graduated driver's license has stricter requirements for teenage drivers who obtain learner's permits and intermediate licenses. Other trauma system components, such as the Trauma Registry, will begin operation in early 2011. It is estimated that the trauma system alone will save about 168 lives and register gross savings of $193 million each year. When combined with our primary seatbelt law and graduated driver's license law, 206 lives and $237 million annually will be saved.