Testimony of

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on

"Pandemic Influenza: State and Local Efforts to Prepare"

Opening

Good morning. I am Dr. Paul Halverson, Director of the Arkansas Department of Health (ADH). I would like to thank Senators Pryor and Sununu, and other members of the subcommittee for the opportunity to testify today and discuss how the federal government can help facilitate state and local preparedness for pandemic flu.

As a member of Governor Mike Beebe's cabinet, I report directly to the Governor and am responsible on his behalf for the health of Arkansans. The Arkansas Department of Health is a centralized public health agency with over 2,800 employees and approximately 2,000 contract employees. We have 95 local health units in Arkansas' 75 counties. In addition, we have centralized laboratory, epidemiology, chronic disease, communicable disease, pharmacy, emergency preparedness and environmental health branches, among others, housed in five major Centers. We provide services ranging from vaccinations for seasonal flu and childhood illnesses to restaurant inspections and the provision of safe drinking water.

The Arkansas Department of Emergency Management has primary responsibility for emergency response in Arkansas including situational awareness, guidance to local jurisdictions, and coordinating the deployment of federal and other resources when state and local assets cannot meet the need. However, in health and medical preparedness and response activities such as pandemic influenza, the Governor has designated the Department of Health as the lead agency.

Background and Challenges

Before I begin addressing pandemic preparations in Arkansas, first let me briefly introduce you to our great, small state and some of the challenges and opportunities for emergency response. As Senator Pryor is well aware, according to July 1, 2006, census figures, we have approximately 2,800,000 persons residing in Arkansas. The largest city--our capital, Little Rock--has roughly 184,000 Arkansans. We have only five other major metropolitan areas with populations over 55,000. The remainder of our state is a collection of rural small towns and villages.

We are home to many people that I would call the typical Arkansan. This American is endowed with a "can-do" spirit as was demonstrated in our Katrina and Rita hurricane response. As a result of long hours of care on the part of thousands of dedicated volunteers, we housed, fed and provided medical treatment to roughly 75,000 displaced persons in a very short time period with a minimum of difficulty, and many of those efforts are still ongoing.

We are home to a growing number of Hispanic Americans. The percent of Arkansas' population that was Hispanic in 2005 was 4.7%. This is a 48% increase since 2000. The

percent of Arkansas' population that was Hispanic in 2006 was 5.0%, which is a 60.9% increase since 2000.

We are home to an Asian population. Fort Chaffee in the northwest corner of our state was a major receiving station for Vietnamese and other Asian evacuees during the Vietnam War, and those persons have settled in our area and prospered.

We are home to the largest population of Marshallese on the North American continent. The Marshallese manifest a heavy disease burden and are plagued with a high incidence of tuberculosis and other communicable diseases. Additionally, language barriers must be overcome with regard to interventions and treatment for this community.

The cost of living in Arkansas is very affordable, comparatively speaking. We are blessed with abundant natural resources and spectacularly beautiful countryside. As such, we are home to an ever-growing retirement community. The Bentonville/Bella Vista area in northwest Arkansas is one of the top ten growth areas in the country for senior Americans. This population shares many of the challenges facing all retirees—access to care and issues regarding easy navigation of the healthcare system.

These diverse groups bring with them unique communication, cultural and healthcare challenges—challenges that would be magnified tremendously were we to experience pandemic influenza.

Although we are home to Walmart--the largest retail manufacturer in the country—approximately one-third of our workforce is employed by companies with less than 500 employees. These small businesses cannot withstand the impact of lost work days due to infectious disease outbreaks such as pandemic influenza. Many workers, especially blue collar personnel, depend on schools and daycare centers to house their children while they are employed. Many do not have the luxury of taking leave without pay because they live on such a meager existence. Our telecommunications infrastructure cannot support a large number of people working from home.

We have 84 hospitals that have participated in the Hospital Preparedness Program since its inception in 2002. Many counties in our state have one facility serving all of the needs of that area. Because of the rural nature of Arkansas, access to care is a critical issue. If we were to experience pandemic influenza, and assuming a 35% attack rate, approximately 500,233 of the state's 2,800,000 citizens would become clinically ill, 11,167 would be hospitalized and 3538 would die. We have 10,897 hospital beds and 2,000 physicians in active practice. This rate of illness would be extremely detrimental to the state's ability to survive.

One of the biggest challenges facing our state is our ability to sustain basic needs such as electricity, food, water and other services during emergency events because our smaller communities potentially lack the resources from a manpower perspective to support these services.

This is a very brief snapshot of life in the Natural State and some of the issues facing the public's health in the event of an emergency like a pandemic.

Federal funding and guidelines provided by the Department of Health and Human Services and the Centers for Disease Control and Prevention have enabled Arkansas to make extensive progress in dealing with these challenges.

The Arkansas Pandemic Influenza Response Operations Plan

Arkansas took an early, proactive position in regard to pandemic preparedness, enacting planning strategies designed to protect Arkansans from any threats to the public health, whether from terrorist attack or natural disaster—an all-hazards approach. We have only to remember the success we had in providing over 75,000 Katrina and Rita hurricane evacuees with the health and human services they needed immediately after the event and for months after. It was our emergency response plans that were already in place that allowed us to respond efficiently and effectively.

Specifically, Arkansas considers preparedness and containment as key elements in pandemic response.

1. Preparation will lessen the direct medical and economic effects of a pandemic by ensuring that adequate measures will be taken and implemented before the pandemic reaches Arkansas.
2. Preparing now will provide long-term benefits. Improving our public health infrastructures will have immediate and lasting benefits, such as reducing the effect of other infectious disease epidemics and being better prepared for other public health emergencies.

The Arkansas response encompasses, as follows:

1. Early detection is our best weapon and first line of defense against pandemic influenza. Arkansas maintains constant vigilance in influenza surveillance on both the state and global levels utilizing reports from the WHO and CDC as well as local reports of influenza-like illness from sentinel physicians, school reports, and Medicaid claims data.
2. The Arkansas Public Health Laboratory provides testing for circulating and new subtypes of influenza.
3. Pandemic Planning Guidance and technical assistance is provided to county health units as they collaborate with community leaders on local plans.
4. Statewide allocation and dispensing of vaccines and antiviral medications.
5. Mass vaccination clinics that continually benefit from full-scale exercises.
6. Development of educational information is distributed to individuals and families, businesses, communities, and local and state government.

Because a pandemic is a global event with local impact, all levels of government must have a clear understanding of their resources and how to mobilize a response with pre-

established partners who are prepared to act according to their response plans. Arkansas's plan utilizes resources including local, state, federal, and the private sectors.

We recognize the importance of collaboration on the part of all agencies in the state and other partners in health-related fields. Although the Arkansas Department of Health will take the leading role in a pandemic flu event, many other partners are crucial to a coordinated response.

1. Arkansas utilizes the Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP), an electronic volunteer recruitment program to address the issue of medical surge. This system allows the state to tap into its reserves of retired and student professionals as well as address issues of credentialing that proved to be critical during the Rita and Katrina hurricanes.
2. The University of Arkansas for Medical Sciences (UAMS) has addressed the issue of the medical workforce through the development of the Medical Reserve Corps. These trained professional volunteers agree to respond to state emergencies and disasters at our call. Their services are critical during pandemic influenza when hospitals are overwhelmed and care must be given at alternative sites or at home by these medical professionals.
3. Utilizing CDC estimates of the virulence of the disease, we could experience 3,538 to 11,790 deaths. The issue of mass fatality is being addressed by a collaborative effort with state coroners and an international disaster management organization with demonstrated capacity to address mass fatalities.
4. The Arkansas Department of Health has worked closely with the Arkansas Hospital Association, hospital preparedness regions, and community health centers in many Arkansas communities to develop plans to ensure a coordinated community response during a disaster. These groups meet regionally on a regular basis in the state to address issues identified in local hazardous vulnerability assessments. These groups have worked with local emergency management, local public health and other preparedness partners to develop drills and exercises related to these issues. They help identify gaps in the medical system so that resources can be directed to these areas. Currently, these groups are working to develop alternate care sites in the states and develop plans to equip and staff them to increase medical surge capacity.

Our Successes

The Arkansas Department of Health is actively taking steps to deal with the potential of an influenza pandemic. Some of these include:

1. The creation of an internal working group charged with leading pandemic preparedness response as well as a multi-agency organization which includes leaders from hospitals, physician organizations, law enforcement agencies (local, state and federal) to advise our pandemic efforts.
2. We anticipate that vaccine may not be available. Because of this, the 85th General Assembly appropriated $6 million dollars for procuring antivirals. We purchased

the maximum amount allowed by federal contract--286,000 treatment courses. With these funds, we have also purchased and stored personal protective equipment which will be used during a pandemic to protect personnel from contracting the illness.

3. Parallel with the purchase, we convened an expert panel to provide recommendations for the use of antivirals with regard to priority groups. Ethical considerations were foremost in our mind, and input was needed prior to a pandemic. Discussions such as these, we feel, are most important as these kinds of ethical issues will certainly arise during a pandemic.
4. Because our hospital capacity would quickly reach maximum capability in a pandemic, we are supporting the expansion of a Medical Reserve Corps (MRC) for statewide surge capacity. Our MRC performed admirably at Fort Chaffee evaluating thousands of evacuees from Louisiana.
5. We have constructed an emergency operations center to coordinate Department of Health response during a crisis. This is one improvement in overall communications. With the assistance of federal funding our communication ability has significantly improved allowing the Department of Health to communicate with our local health departments and communities not only about pandemics but other potential health concerns (tornadoes, floods).
6. Our new state of the art public health lab has the capacity to identify new strains of influenza. This lab has been has been designated by the CDC as a testing laboratory for avian flu.
7. Surveillance is critical to detect new flu strains entering the state and we are increasing capacity for early identification of pandemic flu. Arkansas maintains constant vigilance in influenza surveillance on both the state and global levels utilizing reports from the WHO and CDC as well as local reports of influenza-like illness from sentinel physicians, school reports, and Medicaid claims data.
8. We believe that plans must be tested. Should a vaccine for pandemic flu be available, our Health Department is prepared to immunize most of the population of Arkansas within a 2-week time period. We have tested our plans and on November 3, 2004, we immunized approximately 58,000 high-risk citizens against influenza in one day. No other state accomplished such a task at that time. This exercise provided an opportunity for the state to collect, analyze, store, and report vaccine data in a non-traditional mass dispensing setting. The clinics dispensed an average of 161 doses per hour utilizing walk-in and drive through clinics. Mobile technology, such as hand held radios, was utilized by ADH staff to coordinate the logistics of this event.
9. Pandemic influenza communications encompasses many areas including multiple and redundant channels of two way communications, responsibility for development and dissemination of materials, and plans for media spokespersons. Because the state annually responds to disasters such as tornadoes, floods, and earthquakes which negate the use of telephones and cell phones, the state has assured redundancy in communications through other means.
10. The Health Alert Network (HAN), the Radio Amateur Communications Emergency System (RACES), the Emergency Communications Center (ECC) and the Emergency Operations Center (EOC) work to assure open, clear, and

continuous lines of communication. Training has been provided to ADH and hospital personnel on these various systems.

11. The Arkansas Wireless Information Network (AWINS) uses 800 MHz, handheld radios to maintain communication among hospitals, state and local emergency management, fire services, public health agencies, and the Emergency Operations Center (EOC).
12. Within the EOC, a joint information center is established to disseminate information to the public to assure efficiency and accuracy.
13. During the planning phase, educational efforts have informed the public of non-pharmacologic infection control methods to mitigate transmission of influenza.
14. Arkansas Blue Cross and Blue Shield, a business partner in our planning process, has produced a consumer pamphlet, which was mailed to each of its members.
15. ADH conducted a Non-Medical Containment Pandemic Influenza Functional Exercise in conjunction with the Centers for Disease Control and Protection and the Arkansas Department of Emergency Management. The exercise targeted the northwest portion of the state which houses the University of Arkansas and the headquarters of some of the largest businesses in the state. The premise of the exercise was that an individual flew into the state carrying the virus and had multiple contacts on the airplane. The ADH EOC was activated with intelligence received from state and federal sources. The intelligence was reviewed by ADH physicians and appropriate actions were determined. This simulation involved contacting and treating exposed parties along with containment practices such as cancellation of major events. Communications interoperability was exercised to assure the ability of public safety agencies (e.g. police, fire, emergency medical services (EMS)) and service agencies (e.g. public works, transportation, hospitals) to communicate under these conditions.
16. The Department has created a Speakers Bureau, with presentations given to community-based organizations, faith-based organizations, schools, and volunteer organizations.
17. We have also focused on special populations with physical disabilities and have partnered with Governors Commission on People with Disabilities and the Arkansas Association of the Deaf. We are developing a listserve for our deaf population, 60-80% of whom use blackberries and cellular telephones for communication.
18. We have purchased pandemic influenza educational materials to be disseminated within the five health department regions, the Central Office, and the National Guard. These educational materials are to be used at large community gatherings such as county fairs, health fairs, community festivals, and other community functions. We have developed a pandemic "Shelf Kit" with media materials for the general public as well as the Spanish, Vietnamese, and Marshallese communities.

Our Challenges

Despite the progress our state has made recently, there are a number of questions with which we continue to grapple. These issues include but are not limited to hospital surge

capacity, ethical considerations, sustainability of the business community and continued funding.

Manpower Issues/Hospital Issues. Our hospitals in Arkansas have worked carefully with the Department of Health to address pandemic flu; however, I remain concerned about the ability of the hospitals to operate beyond their current surge capacity. Although we are beginning to take more seriously the issue of alternative sites, we remain concerned about the practical issues of viability given inadequate funding for facilities, equipment and staff. Storage for additional equipment to be used during a pandemic remains a problem.

Staffing during a pandemic will be difficult as some staff will most likely be sick and inpatient beds filled. In urban areas, hospitals depend upon a nursing pool that provides staffing to many different hospitals with individuals who frequently work in multiple facilities. Also, there are physicians, nurses and others who routinely work in hospitals and are members of the National Guard; these individuals are subject to deployment. We need to reconcile primary roles.

Although we are performing an inventory of ventilators and are attempting to provide additional ventilator capacity, we remain concerned about the shortage of physicians, critical care nurses, respiratory therapists and others necessary to care for additional ventilator-dependent patients.

Funding. We need sufficient funding to build on previous investments in preparedness in rural states like Arkansas. We need to build on the federal capacity already given, but not at the expense of local resources. With these thoughts in mind, it is critical that states receive final grant guidance PRIOR to the start of the grant funding period.

The Arkansas Department of Health coordinates with federal, state, and local agencies to implement Pandemic Influenza planning along with legislative bodies, schools, faith-based organizations, and community-based organizations. These entities have different fiscal years and different fiscal policies. Also, county and local agencies tend to be more dependent upon the electoral process; therefore, funding allocations are delayed until elected officials are in place. It has been a challenge to coordinate funding for these agencies within the grant year because it is extremely difficult to work across these boundaries within a one-year funding period.

We need to continue to fund Arkansas' specific needs for pandemic and other all-hazards emergencies.

Anti-Viral Shelf Life. Anti-viral medications that were purchased in 2006 have a five-year shelf life. Two major issues with this purchase are:

1. We are not allowed to use the medications in non-pandemic situations. At the end of five years, the state will have several million dollars invested in out-of-date

medications for pandemic flu. There is no alternative offered to us for rotation of this stockpile.
2. The effectiveness of these anti-virals on the actual pandemic flu strain is unknown at this time.

Communications. We need to effectively coordinate communication among federal, state and local agencies.

1. It is critical that there is coordination between the Department of Homeland Security and the Department of Health and Human Services that needs to occur with partners like ASTHO and NACCHO but in a timely fashion so as to not impede the award process.
2. The most effective delivery of media messages will take place via state-endorsed efforts. States need funding to utilize proven mass media campaigns developed at the federal level by DHHS, CDC and other federal agencies.
3. Currently, Arkansas has no agreements with bordering states with regard to dissemination of medications. We need guidance and conformity around these issues so that citizens living near border areas don't cross borders seeking medications.

Businesses. The anticipated impact on the economy has proven problematic in addressing business concerns. We are experiencing difficulty in convincing the business community to take pandemic influenza and its accompanying issues seriously. It has not been determined how we will address business continuity when we are asking citizens to stay home when they are sick. We haven't adequately addressed the issue of teaching employees when not to come to work. For many Arkansans, the issue becomes an economic one of whether to pay bills or go to work to insure their ability to buy food or medications. We are deeply concerned about business sustainability.

Ethical Issues. In the event of quarantine, we are obligated to provide services to the individuals and/or families who voluntarily quarantine themselves after exposure to disease. They must be assured food, protection, and basic medical services. We must rely on partner organizations for these tasks. We are prepared to provide our responders with personal protective equipment such as gloves and masks as there may be no vaccine to protect them from influenza. In addition, we have a limited supply of existing antiviral doses with diminishing shelf lives. Because we have a limited supply of antiviral medication, we have the added responsibility of determining who should or should not receive these medications. Another important and often overlooked issue is pet care during a pandemic. There is little guidance in this area.

In closing, this is a brief report on the Natural State, the challenges we face and the progress we have made in addressing issues related to pandemic influenza. I would like to thank Congress for Pandemic Flu Preparedness Funding that has allowed the state to address critical infrastructure issues that are unique to rural settings and small states with minimal resources; however, our work is not over. We are a fiercely independent state and sometimes suspect of government intervention. We need to strengthen our

partnerships at all levels. It is my hope that the federal government will take these issues into consideration when determining funding levels for preparedness activities. We need sustainable, level funding now more than ever.

Again, I would like to thank the subcommittee for this opportunity to speak and look forward to working with you in the future.