## U.S. HOUSE OF REPRESENTATIVES

## COMMITTEE ON SCIENCE

SUITE 2320 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6301 (202) 225-6371

TTY: (202) 226-4410

http://www.house.gov/science/welcome.htm

December 8, 2005

The Honorable Michael O. Leavitt Secretary of Health and Human Services 200 Independence Avenue S.W. Washington, D.C. 20201

Dear Mr. Secretary:

My staff and I have carefully reviewed the National Strategy for Pandemic Influenza and the HHS Pandemic Influenza Plan. While we commend this Administration for a well-thought out agenda to finally move the biological aspects of pandemic preparedness forward in a rapid fashion (vaccine development, antivirals, and surveillance), the plan does not substantively address important social science issues involving the behavior and cooperation of the American people in preparedness for and response to this type of disaster. Specifically, I was most concerned by the incompleteness of the plan in the areas of risk communications, social distancing, and analysis of collective behavior in times of crisis.

Experts agree that should a highly lethal form of human influenza, such as H5N1, present itself in the next several years, vaccines and antivirals will fall short. Social distancing, effective communication, and other public health measures will be our only realistic line of defense. This is the realm of social scientists. Yet, neither the National Strategy nor the HHS plan makes effective use of current human behavioral and social science research.

The HHS plan recognizes the importance of addressing the social dimensions of a pandemic but does nothing more than list them as considerations and needs. There is no indication of how HHS intends to address these issues; there is no indication that they expect anything more than for the states and localities to magically know how to address the items listed. Agreed, many of the social issues are the providence of the state and local government. However, the states and local governments look to the Federal government for guidance and best practices. Such guidance is lacking in the current Pandemic Plan.

Moreover, I am concerned that the social science research that is generally being utilized for disaster planning is 50 years old – apparently the Department of Homeland Security still relies on a civil defense model of risk communication and response. The Civil Defense model (e.g. "duck and cover" - hide under your desk should a nuclear bomb be dropped) has long been discredited by social scientists but, as we understand it, that is the science on which the failed "duct tape" for anthrax/bioterrorism campaign was based.

Many view pandemic influenza as a biological problem; thus, they narrowly believe that the solution will come from the biological sciences. But should a pandemic occur, social science will be our first line of defense including preparing and managing the population in a time of acute stress. Despite this reality, the National Science Foundation which funds approximately 50% of the social sciences would receive zero funding dollars in the President's plan while NIH would receive \$6.7 billion, \$6.4 billion of that sum going toward stockpiling vaccines and antiviral medications and accelerating the development of new vaccine technologies.

Not only does the current plan give little attention to investment in critical social science research, it also ignores advances in the social sciences in such fields as risk communications, collective behavior in times of crises, and social distancing. Advances in behavioral and anticipatory psychosocial science have largely gone unnoticed. For example recent publications on how people react under biological attack situations found that contrary to conventional wisdom, people's reluctance to follow instructions is not due to ignorance, recalcitrance, or panic. Quite the contrary, most people have solid, common-sense reasons for their behavior. We have to find a way to incorporate individual decision-making and prioritization into our plan if we truly hope to direct human behavior in socially positive ways.

Unfortunately, the fields of biology and social science do not often overlap and the pandemic plan clearly reflects authorship by the former and not the latter. While I applaud the biological sciences in the HHS plan, the lack of use of, or expertise in, the social sciences or any concrete plan for research or utilization of available research is distressing and must be remedied immediately.

We need a national dialog on the role of the public as a partner in disaster preparedness and response. This dialog should include discussions of social distancing, quarantine policy, effective communications, restrictions on travel and trade, resilience networks, mental health needs and hindrances to compliance. We need a dialog on whether the planning is behaviorally realistic. These are all serious concerns that must be widely understood and prepared for well before a pandemic hits. Whether H5N1 or another

Lasker, RD. Redefining Readiness: Terrorism Planning Through the Eyes of the Public. 2004 http://www.nyam.org/initiatives/ph-pub.shtml

infectious agent appears a prepared public will minimize the impacts of such a grave event. We need guidance or advice on best practices under pre-pandemic or pandemic conditions.

Specifically, I find failings in three areas:

1) Ensuring planning is behaviorally realistic

Scientists know a great deal about evacuation behavior, stress and organizational response to disasters but none of this is currently being modeled for pandemic flu by DHS, CDC, or HHS. I was unable to find where this research was being utilized in the plan to direct human behavior in the event of a crisis. I also was unsure of the methods being utilized to determine the quality of the judgment made, *e.g.* to determine where the plan is overconfident or does not measure up against experience in the field.

2) Social Distancing.

Dr. Giovanni of the Defense Threat Reduction Agency studied quarantine measures and their effectiveness in limiting the spread of SARS in Toronto. He identified numerous obstacles to compliance that varied with individuals. Research such as this should be the underpinnings of determining how social distancing and isolation techniques would be tolerated and adhered to by the public. Widespread understanding and engagement by the public through a transparent process will be critical to ensuring tolerance and cooperation.

3) Communication

Communications is a very thought out science that is not being fully utilized. While the CDC has been a leader in the field and invested substantially in risk communications and training for state and local officials, none of that investment is apparent in the plan. The plan is stuck in the hand out pamphlets mode. Social science says to instead design templates that allow for input of situational awareness and choice so that information outflow can be customized to a very localized level. A thorough social science based risk communication strategy and plan are critical to an effective pandemic response and demands adequate investment.

## We also need to know:

- a) what is the current model being used for communication planning?
- b) what will be communicated by whom and how?
- c) what is the scientific basis for the current model?

We call on the HHS to do more than just note that social science should be taken into account by the states. We expect that just as they have laid out a detailed plan for how to distribute limited vaccine, they should give a detailed plan for how to use social science research in the most advantageous way to curtail the widespread affects of an influenza pandemic.

Sincerely.

Dert 1

BART GORDON
Ranking Member

cc: John Marburger, Director Office of Science and Technology Policy

cc: Julie Gerberding, Director Centers for Disease Control and Prevention