Homeland Defense
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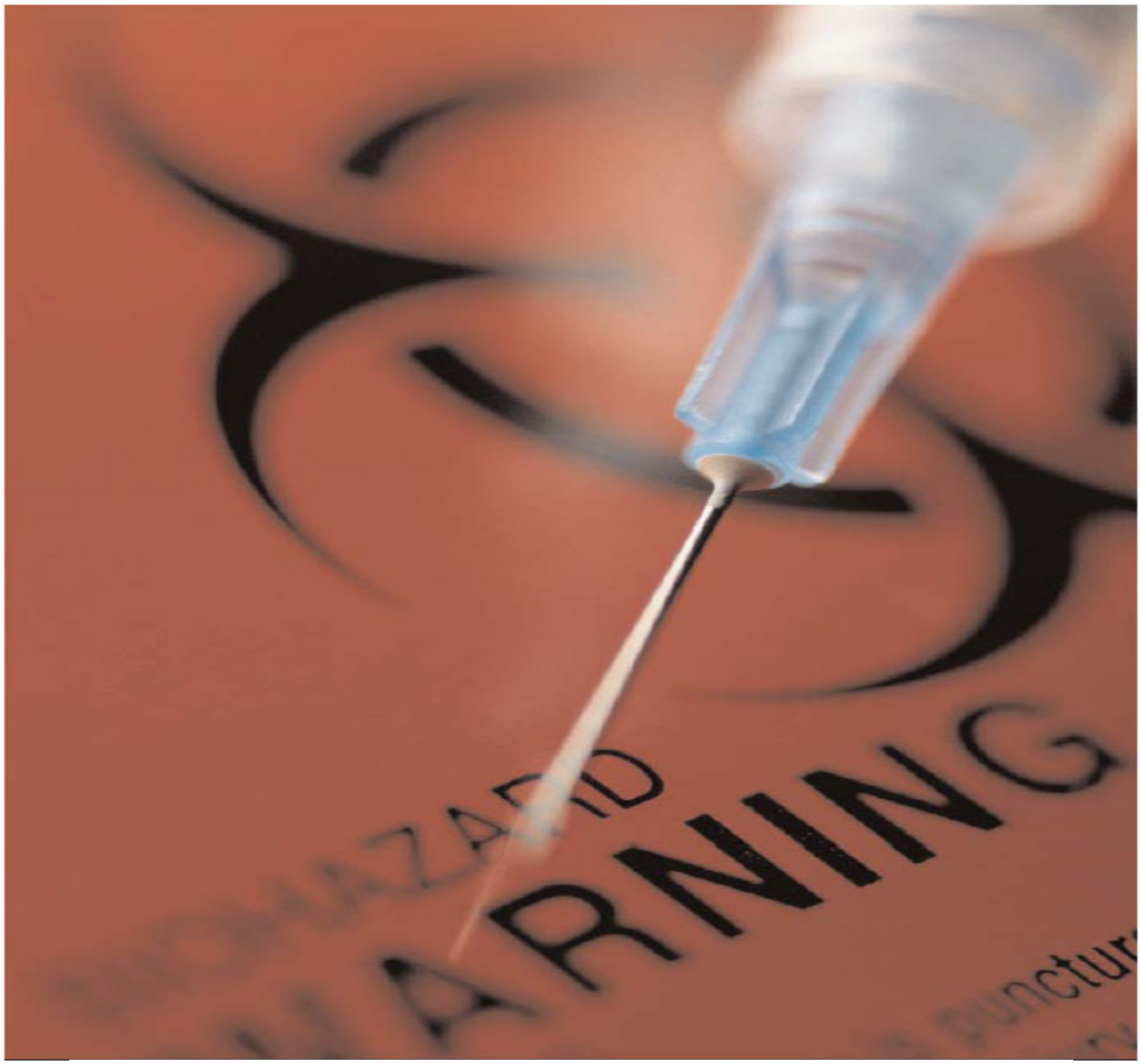


H5N1 Avian Flu and Pandemic
Special Report

H5N1 Avian Flu and Pandemic Special Report

An open letter to the Federal, State, Local, DoD and Corporate Emergency Response Planning Community:

Bringing Pandemic and Bio Threat Response to our Readers

We first covered pandemic in June of 2005 – over 2 years ago.

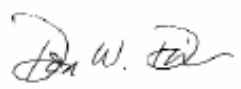
Since then we have run 33 feature articles written by 22 seasoned reporters/writers. Included in this list are several articles by Pete Marghella, former Chief Medical Planner for the Office of the Secretary of Defense. (Pete is on our staff as our Medical Editor and a regular contributor to our conferences, training and workshops as well as to Homeland Defense Journal.)

As a result of our coverage, we identified the fact that insufficient quantities of syringes are available from our just-in-time medical supplies system and that they are manufactured in Asia and Eastern Europe. At the first signs of a pandemic, borders will likely close from those regions. As a result of this reporting, many cities and counties included critical supplies and logistics such as syringes in their medical response planning. Also over the past two years we have conducted four training workshops across the U.S. that instruct state and local planners on how to build their area or regional response plans. We have produced seven medical related training conferences on pandemic, mass casualty planning, mass casualty planning for people with special needs, and chem-bio response.

The last pandemic conference we held in October of 2006 sold out weeks before the conference kick-off with over 300 attendees. We have another conference planned for this fall where we will examine the steps taken by state and regional planners to define their pandemic response.

In 2006, we contacted every state office of emergency planning and conducted interviews to determine readiness, plan status and expectations as they relate to the strategic national stockpile. Results of these interviews were reported in one of our Special Reports – still available from our homepage.

It is unfortunate that we have to deal with these topics. But, we must. We appreciate the telephone calls and messages we receive from our readers and their continued support. If you see ways in which we can improve, please let us know. We work for you.



Don Dickson
Publisher

Medical Mass Casualty Response Reporting and Training – 2005 to Present

Homeland Defense Journal Magazine and Training

- 33 feature articles written by 22 reporters/experts
- 2 Planning Handbooks for state and local planners
- 1 national survey of state executives responsible for pandemic readiness planning
- 4 Workshops
- 7 Conferences
- One book

"Although the visibility of avian influenza and pandemic preparedness has waned in the media, the threat of avian influenza and the potential for an influenza pandemic has not." U.S. Department of Health and Human Services

"**The stakes are high, and our greatest enemy is complacency,"** President George Bush.

- 322 confirmed human cases of avian influenza
- Fatality rate is over 60 percent
- Avian flue has been reported in 55 countries, including the U.S.
- More than 250 million birds have died or been slaughtered
- The virulent H5N1 virus has now split into two strains further complicating the search for a vaccine

Since 2003 there have been 322 confirmed human cases of avian influenza reported to the World Health Organization and of these, 195 died – a fatality rate of over 60 percent.

In the same period, there have been hundreds of confirmed cases in poultry and wild birds in 55 countries and more than 250 million birds have died or been slaughtered. The disease has steadily spread from the Far East to Africa and the Middle East and Europe. Last year there were outbreaks in Albania, Austria, Bosnia, Bulgaria, Czech Republic, Denmark, France Germany, Greece, Hungary, Italy, Poland, Russia, Serbia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

In September last year, U.S. authorities detected the H5N1 virus in wild ducks in Pennsylvania and Maryland and in January 2007, an avian flu outbreak at a commercial turkey farm in the UK led to the slaughter of 160,000 birds. Almost daily new cases are reported.

Now, American researchers say the deadly H5N1 form of bird flu has split into two distinct strains, a development that could make it harder to develop vaccines to stop the spread of the disease.

Although avian influenza and the threat of a pandemic may have dropped off the news pages, health experts worldwide warn that it is no time to be complacent. WHO and U.S. health experts continue to stress that it is not a question of 'if' but 'when' a pandemic strikes.

This was reinforced on August 23 at the North American Leaders Summit when President Bush, the President of Mexico and the Prime Minister of Canada, announced the North American Plan for Avian and Pandemic Influenza.

The Plan was developed as part of the Security and Prosperity Partnership of North America (SPP). The SPP is a trilateral effort launched in March 2005 to

increase security and enhance prosperity in Canada, Mexico and the United States through greater cooperation and information sharing.

The three nations are working together through the SPP to prepare for a threat that could disrupt our economies and cause widespread illness and death if it reaches our shores: highly pathogenic avian influenza—or bird flu—and the potential emergence of a human influenza pandemic.

Early Eradication Unlikely

The virus is now endemic in parts of Southeast Asia, is present in long-range migratory birds, and is unlikely to be eradicated in the short term. Although the timing cannot be predicted, history and science suggest the world will face at least one influenza pandemic this century. A worldwide outbreak of a new influenza virus could result in a high death toll, millions of hospitalizations, and hundreds of billions of dollars in direct and indirect costs to North American economies.

The North American Plan for Avian and Pandemic Influenza

The North American Plan for Avian and Pandemic Influenza outlines a collaborative North American approach that recognizes that mitigating the effects of a pandemic requires coordinated action by all three countries. It outlines how Canada, Mexico and the United States will work together to prepare for and manage outbreaks of highly pathogenic avian influenza and pandemic influenza.

At the March 2006 SPP summit in Cancun, Mexico, the leaders of the three countries committed to developing a comprehensive, coordinated, science-based approach to prepare for and manage avian and pandemic influenza. This common approach would be based on the four pillars of emergency management: prevention and mitigation, preparedness, response, and recovery. Canada, Mexico and the United States also established a senior-level Coordinating Body on Avian and Pandemic Influenza to facilitate effective planning and preparedness within North America for a possible outbreak.

Key Objectives of the North American Plan

The North American Plan provides a framework to accomplish the following:

- Detect, contain and control an avian influenza outbreak and prevent transmission to humans
- Prevent or slow the entry of a new strain of human influenza into North America
- Minimize illness and deaths
- Sustain infrastructure and mitigate the impact to the economy and the functioning of society.

The Plan establishes a framework for action on priority areas including: trilateral emergency coordination and communication; joint exercises and training; response to outbreaks in animals; surveillance among animals and in humans; laboratory practices; research; personnel exchange; screening for air, sea and land travel; and maintaining continuity for critical infrastructure and key services. Central to the Plan is a North American approach that undertakes measures to maintain the flow of people, services, and cargo across the borders during a severe pandemic while striving to protect our citizens.

The Plan also complements existing national emergency management plans, and builds upon the core principles of the International Partnership on Avian and Pandemic Influenza, the standards and guidelines of the World Organization for Animal Health, the World Health Organization (including the revised International Health Regulations), and the rules and provisions of both the World Trade Organization and the North American Free Trade Agreement. It represents a significant contribution to the concerted efforts of national and multilateral partners worldwide to combat a growing challenge to animal and human health.

WHO warns of more threats

Infectious diseases are also emerging more quickly around the globe, spreading faster and becoming increasingly difficult to treat, according to the World Health Organization.

The United Nations agency warned there was a good possibility that another major scourge like AIDS, SARS or Ebola fever with the potential of killing millions would appear in the coming years.

"Infectious diseases are now spreading geographically much faster than at any time in history," the WHO said.

It said it is vital to keep watch for new threats like the emergence in 2003 of SARS, or Severe Acute Respiratory Syndrome, which spread from China to 30 countries and killed 800 people.

"It would be extremely naive and complacent to assume that there will not be another disease like AIDS, another Ebola, or another SARS, sooner or later," WHO warned.

Since the 1970s, the WHO said, new threats have been identified at an "unprecedented rate" of one or more every year, meaning that nearly 40 diseases exist today which were unknown just over a generation ago.

During the past five years alone, WHO experts had verified more than 1,100 epidemics of different diseases. With more than 2 billion people traveling by air every year, the U.N. agency said: "an outbreak or epidemic in one part of the world is only a few hours away from becoming an imminent threat somewhere else."

Monitoring vital

WHO called for renewed efforts to monitor, prevent and control epidemic-prone ailments such as cholera, yellow fever and meningococcal diseases.

International assistance may be required to help health workers in poorer countries identify and contain outbreaks of emerging viral diseases such as Ebola and Marburg haemorrhagic fever, the WHO said.

It warned that global efforts to control infectious diseases have already been "seriously jeopardized" by widespread drug resistance, a consequence of poor medical treatment and misuse of antibiotics.

This is a particular problem in tuberculosis, where extensively drug-resistant (XDR-TB) strains of the contagious respiratory ailment have emerged worldwide. "Drug resistance is also evident in diarrhoeal diseases, hospital-acquired infections, malaria, meningitis, respiratory tract infections, and sexually transmitted infections, and is emerging in HIV," the report declared.

Although the H5N1 bird flu virus has not yet mutated into a form that passes easily between humans, as many scientists had feared, the next influenza pandemic was "likely to be of an avian variety" and could affect some 1.5 billion people.

"The question of a pandemic of influenza from this virus or another avian influenza virus is still a matter of when, not if," the WHO said. It said all countries must share essential health data, such as virus samples and reports of outbreaks, as required under international health rules, to mitigate such risks.

Accidents involving toxic chemicals, nuclear power and other environmental disasters should also be communicated quickly and clearly to minimize public health threats.

The U.S. Situation

Much has been accomplished to realize the U.S. Government's pandemic preparedness and response goals of: (1) stopping, slowing, or otherwise limiting the spread of a pandemic to the United States; (2) limiting the domestic spread of a pandemic and mitigating disease, suffering, and death; and (3) sustaining infrastructure and mitigating impact to the economy and the functioning of society.

Although the visibility of avian influenza and pandemic preparedness has waned in the media, the threat of avian influenza and the potential for an influenza pandemic has not. A pandemic occurs when a novel strain of influenza virus emerges that has the ability to infect humans and to cause severe disease, and where efficient and sustained transmission between humans occurs. Though we cannot be certain that *highly pathogenic avian influenza A H5N1* (H5N1) will spark a pandemic, we can be sure that a pandemic will occur at some point in

the future. It is everyone's responsibility to remain vigilant. We cannot become complacent and must continue to take the threat of a pandemic very seriously.

Over the past year, through the International Partnership on Avian and Pandemic Influenza, the United States and the international community have mobilized to confront the threat of an influenza pandemic at its source, by containing H5N1 poultry outbreaks and rapidly identifying associated cases of human disease. The United States is supporting efforts to improve laboratory diagnosis and early warning networks in more than 75 countries and is working with its partners to expand on-the-ground surveillance capacity, enhance national and regional laboratories, and improve knowledge about the movement and changes in H5N1 on a global scale to ensure that countries are able to quickly confirm outbreaks in animals or people.

In cooperation with the World Health Organization (WHO) and the United Nations Food and Agriculture Organization (FAO), U.S. experts have investigated outbreaks of H5N1 in countries on three continents and provided technical assistance, commodities, and logistical or financial support to 39 of the 60 countries and jurisdictions affected by H5N1.

More effective response

As a result of the efforts of the United States and the support of our international partners, the international community becomes aware of outbreaks sooner and is able to launch more effective and timely responses.

Although a pandemic virus has not yet emerged, the appearance of limited human clusters of H5N1 cases has tested our international surveillance and response capabilities. Should a pandemic emerge, whether from the current H5N1 subtype of concern or from another influenza virus with pandemic potential, the United States is better positioned today to detect an outbreak earlier, to support an international effort to contain the pandemic in its earliest stages, to limit the spread of the pandemic, and to save lives.

The United States has developed protocols and trained personnel to support an international effort to contain the pandemic in its earliest stages. The U.S. Government procured and pre-positioned overseas stockpiles of personal protective equipment, decontamination kits, and antiviral medications to complement global efforts to contain pandemic outbreaks.

Today, our Federal and State stockpiles contain enough antiviral medications to treat nearly 50 million people, with up to 6 million courses now reserved for containment efforts. If a pandemic begins outside the United States, and our international containment efforts fail, the U.S. Government is planning to implement border measures during a severe pandemic to slow the entry of a pandemic virus into the United States while allowing the flow of goods and people.

Safeguarding Health

Once an influenza pandemic reaches the United States, the primary focus is safeguarding the health of Americans. The U.S. Government is working to enhance the Nation's ability to detect and respond early and effectively to a pandemic. To better identify the first cases of pandemic influenza in a community, the U.S. Government has provided resources to State and local health departments to increase the number of sentinel providers and improve laboratory detection at public health laboratories. The U.S. Laboratory Response Network (LRN), which includes State public health laboratories, is prepared to conduct initial testing of suspected human infection with H5N1 within 24 hours of receipt. To ensure that suspected cases can be promptly confirmed and treated, the Federal Government is working with industry partners to develop rapid diagnostic tests to quickly discriminate pandemic influenza from seasonal influenza or other illnesses.

The Federal Government is investing in the expansion of vaccine manufacturing capacity, the advanced development of new cell-based vaccines, antigen-sparing technologies to stretch our vaccine supply, and the establishment and maintenance of pre-pandemic vaccine stockpiles.

In April 2007, the Federal Government approved the first pre-pandemic vaccine for humans against the H5N1 virus. The U.S. currently has enough of this pre-pandemic H5N1 vaccine for approximately 6 million people, with plans to stockpile enough pre-pandemic vaccine for 20 million people. In addition, antiviral medications are an important element of pandemic influenza preparedness. As of June 2007, the Strategic National Stockpile contains more than 35 million regimens of antiviral drugs with an additional 2 million regimens on order.

So far, individual States have stockpiled more than 13 million regimens of antiviral drugs. The Government's antiviral strategy includes not only stockpiling existing antiviral drugs, but also developing new antiviral medications to further broaden our capabilities to treat and prevent influenza.

In February 2007, the U.S. Government released groundbreaking Federal guidance for non-pharmaceutical interventions for mitigating the impact of a pandemic. This community mitigation strategy is important because the best protection against pandemic influenza, a matched pandemic vaccine, is not likely to be available at the outset of a pandemic.

Reducing the death toll

Recent scientific modeling and historical reviews of the 1918 pandemic suggest that non-pharmaceutical interventions (such as school closures, social distancing, and cancellation of large public gatherings) could be very effective at slowing the spread of disease and mitigating the outbreak, but only if they are implemented early and maintained consistently across communities affected by a pandemic. These interventions, coupled with the use of antiviral medications,

could dramatically reduce the number of people who become infected, potentially preventing illness and death in millions of Americans.

The U.S. Government has invested in health system preparedness of hospitals and medical facilities across the country, has produced tools to assist in planning for expansion in hospital capacity during a pandemic, and is stockpiling medical supplies for distribution to individual States in the event of a pandemic.

Each Federal department and agency is developing its own department- or agency-specific pandemic preparedness plan to ensure the continuation of Federal Government essential functions. Over the past year, the Federal Government has produced tools for businesses and other employers to assist them in pandemic planning and has conducted an extensive outreach effort to the private sector. Through these efforts, businesses operating at home and abroad have been provided practical action-oriented information to identify essential functions and critical planning elements, to protect the health of employees, to maintain continuity of business operations, and to sustain community function during a pandemic.

More needs to be done

Preparing the Nation for the threat of an influenza pandemic has provided a platform to address issues and concerns common to all types of mass casualty disasters. Promoting a culture of individual, family, and community preparedness is the foundation for all emergency planning efforts.

Though we have made significant progress over the past year to prepare the Nation and the international community for the threat of an influenza pandemic, much important work lies ahead. One of the most tangible benefits of planning and preparing at a Federal level has been the forging of close working relationships and unity of effort among Federal departments and agencies. It is important that we enhance connectivity and collaboration between all levels of government and all segments of society. Now is the time, before a pandemic emerges, to establish and test these relationships and partnerships. The Federal Government must continue playing a leadership role in fostering an environment of collaboration and public engagement.

Although we have realized progress in enhancing disease surveillance, critical gaps remain with respect to "real-time" disease detection and clinical surveillance in the United States. The Federal Government must redouble its efforts for developing "real-time" surveillance to ensure that we are not "blind" during the next pandemic. Real-time surveillance is needed to provide broad situational awareness, including the ability to detect, integrate, analyze, and operationally respond to pandemic influenza. The Federal Government must accelerate the development of rapid diagnostic tests and screening tests to ensure that our efforts to detect disease, treat ill people, and limit disease transmission can be appropriately and effectively implemented.

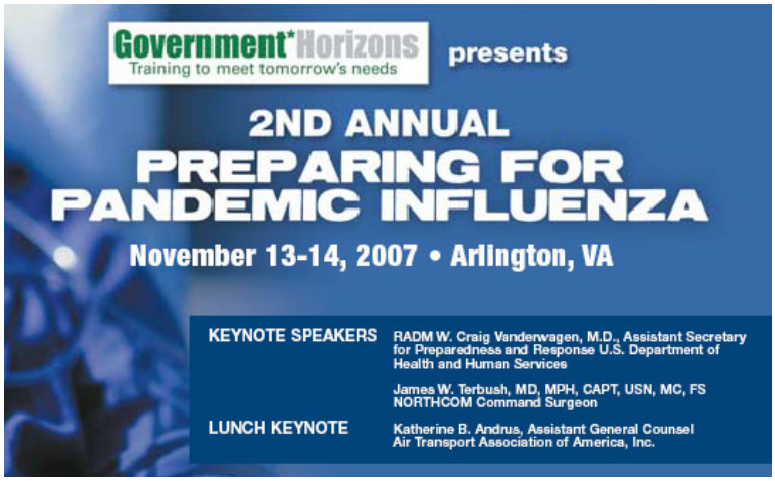
Many hospitals and emergency departments nationwide are already operating at or near capacity and may not have the capability to treat the large numbers of patients who may need care during a severe pandemic. Healthcare workers and first responders will be on the front lines during an influenza pandemic. Ensuring the availability of protective measures for these critical workers will be essential to our efforts to protect the health and safety of the public. Community planning efforts will require the coordination of many providers and organizations and must address how healthcare facilities can best share medical response assets of personnel, materiel, and infrastructure in order to assure the greatest benefit for the largest number of people in the most ethical manner with the highest standard of medical care. The Federal Government has incorporated both funding and guidance to assist in planning for the strengthening of mass casualty care capacity. The stockpiling of critical medical materiel, including a reassessment of antiviral medication stockpile goals, is one area the Federal Government needs to address in the coming year. However, medical countermeasures, such as antiviral medications, have little utility if they cannot be delivered quickly to those in need. The Federal Government is working with State and local public health officials to strengthen plans to swiftly distribute needed medical countermeasures.

Although the community mitigation strategy may significantly reduce illness and death, implementing this strategy will not be easy. To enhance individual and community adherence to these community mitigation measures, the Federal Government must continue to work with non-Federal stakeholders to address practical implementation considerations, including legal and feasibility concerns, at the State, local, and tribal levels and minimize any adverse consequences associated with implementation.

Our Nation's investment in pandemic preparedness could translate to a reduction in the number of deaths each year related to seasonal influenza. Improving disease detection and surveillance, utilizing antiviral medications, and promoting healthy behaviors such as hand washing and cough etiquette could help reduce the spread of seasonal influenza and other respiratory diseases.

The unprecedented efforts to prepare for and respond to the threat of a pandemic underscore the government’s resolve to protect human life and safeguard the Nation. No prior generation has ever anticipated and prepared for a pandemic.

“We have the opportunity to be the first generation to use our collective knowledge, determination, and resources to take on this task. The stakes are high, and our greatest enemy is complacency. We remain committed to this effort, not only for generations of Americans alive today, but also for the sake of generations to come.” President George Bush.



Don't take things for granted, be prepared and be informed. On November 13 and 14, the ***2007 Preparing for Pandemic Influenza Conference*** *is being held at the Sheraton National, Arlington, Virginia.*

The conference brings together an influential gathering of medical and public health leaders to stress the importance of national, state, and local preparedness to respond to a pandemic so that we can ensure the health and safety of our people in the face of this ominous threat. The conference will address three crucial areas that are an integral part of the National Strategy for Pandemic Influenza):

1) How real is the Pandemic threat today, and how should you prepare to respond at the federal, state, and local levels in the event that an influenza pandemic reaches the United States?

2) How an influenza pandemic can impact your community or business, and what measures should you be taking to ensure business continuity?

3) While a pandemic response is primarily a public health response, what is the best approach to properly communicate an outbreak to your staff, community, other agencies, organizations, and private institutions – and most importantly – to ensure families are prepared - in a coordinated and collaborative manner to ensure an effective overall response to such a crisis.

Immediately following the pandemic conference, there will be workshop: **Working with the Media in High Stress and High Concern Situations: A Journalist and Risk Communicator's Perspective. It** will continue until 12:30pm of November 15th.

For more information visit
http://governmenthorizons.org/Pandemic-Influenza-Nov07.htm

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Homeland Defense Journal, Inc., Suite 1003,
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Phone: 301-455-5633