Pandemic Flu—Are We Ready?
**Report Documentation Page**

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

<table>
<thead>
<tr>
<th>1. REPORT DATE</th>
<th>2. REPORT TYPE</th>
<th>3. DATES COVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC 2006</td>
<td>N/A</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. TITLE AND SUBTITLE</th>
<th>5a. CONTRACT NUMBER</th>
<th>5b. GRANT NUMBER</th>
<th>5c. PROGRAM ELEMENT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandemic Flu Are We Ready? Joint Center for Operational Analysis Quarterly Bulletin Volume IX, Issue 1, December 2006</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. AUTHOR(S)</th>
<th>5d. PROJECT NUMBER</th>
<th>5e. TASK NUMBER</th>
<th>5f. WORK UNIT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</th>
<th>8. PERFORMING ORGANIZATION REPORT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>USJFCOM JWFC ATTN: Joint Center for Lessons Learned 116 Lakeview Pkwy Suffolk, VA 23435-2697</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</th>
<th>10. SPONSOR/MONITOR’S ACRONYM(S)</th>
<th>11. SPONSOR/MONITOR’S REPORT NUMBER(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. DISTRIBUTION/AVAILABILITY STATEMENT</th>
<th>13. SUPPLEMENTARY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved for public release, distribution unlimited</td>
<td>The original document contains color images.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. ABSTRACT</th>
<th>15. SUBJECT TERMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. SECURITY CLASSIFICATION OF:</th>
<th>17. LIMITATION OF ABSTRACT</th>
<th>18. NUMBER OF PAGES</th>
<th>19a. NAME OF RESPONSIBLE PERSON</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. REPORT</td>
<td>unclassified</td>
<td>IU</td>
<td></td>
</tr>
<tr>
<td>b. ABSTRACT</td>
<td>unclassified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. THIS PAGE</td>
<td>unclassified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. NUMBER OF PAGES</td>
<td>52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18
Pandemic Influenza (PI)—the threat is real and the United States Government is taking major steps to ensure that we, as a nation, are prepared to handle the effects should it occur. Over the last year, analysts from the Joint Center for Operational Analysis (JCOA) have been involved in a study of the threat from the H5N1 virus and the actions being taken within governmental and non-governmental agencies to prepare for it. Specifically, the JCOA analysts have focused on the planning and preparation by the military to respond to a PI event.

In the aftermath of Hurricane Katrina, many changes in coordination of national disaster planning have been made. However, large scale governmental response still remains a major concern and there are no simple or universal remedies to the issue. The articles presented in this Bulletin articulate basic issues that must be considered by both government and military planners to integrate US military forces and resources when conducting defense support to civil authorities (DSCA). Recognizing that pandemic planning is a continuous process, and that the landscape of pandemic knowledge and preparations is in a state of constant change, the principles outlined in the following articles are offered by the authors for serious consideration during the course of conducting pandemic influenza planning. Each of the authors is an expert and presents his best insight into this planning effort.

The first article is a reprint from the Department of Health and Human Services (DHHS) website that provides details for understanding how a pandemic occurs. Although written in 2005, it will give the reader knowledge of the threat and how the H5N1 virus can shift in its molecular structure to threaten human populations in a very short timeframe.

This is followed by an article written by Mr. David Zacharias on Planning for DSCA. He discusses the planning and coordination necessary between the interagency and other organizations, as well as some of the weaknesses in the system.

The third article, Educating the DOD Community on Pandemic Influenza, COL Bill Smith, a US Army Civil Affairs officer, looks at the public education and communication aspects of preparing for a pandemic attack. How can we prepare the public to face this threat and help to mitigate the effects as much as possible, all while continuing with our normal mission of protecting this nation?

In Joint Civil-Military Planning for Pandemic Influenza: Training and Exercises, COL Smith discusses the steps needed for training our people, and then exercising the right core tasks that would be involved in a pandemic situation. He lists nineteen critical tasks needed for DOD support to civilian authorities that require training and evaluation in preparation for a possible pandemic.

Mr. David Zacharias, in his next article, discusses how the US government can achieve a unity of effort during a pandemic influenza crisis, operating under US Northern Command (USNORTHCOM) and integrating both active duty and National Guard forces. He discusses Title 10, Title 32, and State Active Duty forces, and the restrictions and benefits of each. Mr. Zacharias also reviews USNORTHCOM Plan 2591 for pandemic influenza.

The final article in this Bulletin is a reprint of a White House Press Release, dated 18 December 2006, with a six-month report on the status of pandemic influenza preparations.
Beginning in November 2006, our normal battle rhythm was again interrupted by a study request from higher headquarters with, of course, a very short suspense. In support of General Casey, the Joint Center for Operational Analysis (JCOA), along with the US Joint Forces Command Deputy Commander as the lead, began an in-depth study on Enabling Forces in Iraq. The actual details of the study are sensitive but required a three-month turn around of a four-star level product that had far reaching implications. As of press time the final study is almost complete.

Now that our new Director, Brigadier General Barclay, is firmly on board and the Enabling Forces study is almost complete, we have settled into a somewhat smooth rhythm while we execute a few new lines of operation. First, we continue to maintain a permanent presence in Iraq, but have shifted our focus to the “transition to self reliance” phase of operations. This will be a follow on study that is preceded by three major looks covering Operation IRAQI FREEDOM from May 2003 to Dec 2005. Next, although temporarily out of Afghanistan, we plan to engage General McNeil for his guidance on where he wants JCOA to focus our collection efforts. Third, we continue to work on our Humanitarian Assistance/Disaster Relief product (a compilation of the US response to the Pakistani earthquake, Guatemala mudslide, and Indonesia tsunami) and look to expand its scope. Finally, homeland defense is another expanding mission area that is in the developmental stage. It includes our initial study of the military’s preparedness for a possible influenza pandemic, covered in detail in this Bulletin.

Our Knowledge and Information Fusion Exchange (KnIFE) division continues to grow as word gets out about its increasingly robust capability. Each week the number of “hits” to the web site (http://knife.jfcom.smil.mil ) and official requests for information (RFI) increase significantly. Currently, KnIFE is only focused on the improvised explosive device (IED) threat, but future plans are to expand its function to include all asymmetric threats and with an increased analytical capability as well. For those looking for answers to any IED related issue/question, you should visit the KnIFE website. Contact can be established through the website’s RFI center, by e-mail, or by phone.

Please visit JCOA’s website at http://www.jfcom.smil.mil/jcoa and look under “publications” to access our books, briefings, and reports. There you will find the latest Operational level issues affecting US forces. Although we are actively engaged in operations, and continue to feed relevant findings to organizations that benefit from our work, if you have additional requirements, comments, or questions we would like the opportunity to hear from you. Our “end game” mission is to integrate relevant information and findings to benefit the warfighter – and our lines of communication are always open to additional opportunities to make an impact.

But let us not for a moment forget that, while study and preparation are necessary, war itself is the real school where the art of war is learned.

- John J. Pershing, addressing officers of 1st Division, April 1918’
Contents

Pandemic Influenza Background .......................................................................................................................... 1
Planning for Defense Support to Civil Authorities ............................................................................................. 5
Educating the DOD Community on Pandemic Influenza ..................................................................................... 16
Joint Civilian-Military Planning for Pandemic Influenza: Training and Exercises ........................................... 22
Achieving Unity of Effort within Government During a Pandemic Influenza Crisis ....................................... 29
Fact Sheet: Implementation of the National Strategy for Pandemic Influenza:
Six-Month Status Report ........................................................................................................................................ 39
JCOA Points of Contact .......................................................................................................................................... 41

JCOA Bulletin Staff:

BG James O. Barclay III, US Army, Director JCOA 757-203-7317 james.barclay@jfcom.mil
Mr. Alan D. Preisser, Editor 757-203-7497 alan.preisser@jfcom.mil
Mr. Josiah P. McSpedden, Cover Design and Layout 757-203-6119 josiah.mcspedden@jfcom.mil

Joint Center for Operational Analysis (JCOA) Bulletin
Pandemic Influenza Background

Editor’s Note: This article is reprinted by permission of the Department of Health and Human Services. It is intended to give the reader an overview of how a virus might change and create the threat of a pandemic flu outbreak. For the current status on this and other issues related to pandemic flu visit the website http://www.pandemicflu.gov/. Also, attached at the end of this article are a map and a chart detailing the locations of confirmed cases of human infection by the H5N1 virus.

Pandemics of influenza are extreme infectious disease outbreaks. Although many infectious disease outbreaks (e.g. Severe Acute Respiratory Syndrome [SARS], Ebola, HIV, or West Nile Virus) can cause devastation, these infections are typically limited in their spread to either localized areas or regions, or to at-risk populations. Pandemic influenza, by contrast, is an explosive global event in which most, if not all, populations worldwide are at risk for infection and illness. In past pandemics, influenza viruses have spread worldwide within months and are expected to spread even more quickly today given modern travel patterns.

It is the sheer scope of influenza pandemics, with their potential to rapidly spread and overwhelm societies and cause illnesses and deaths among all age groups, which distinguishes pandemic influenza from other emerging infectious disease threats and makes pandemic influenza one of the most feared emerging infectious disease threats.

A. Influenza viruses

The agent of pandemic influenza is the influenza virus, which is also responsible for causing seasonal influenza, known by most persons as the flu. Seasonal influenza, a common disease characterized by symptoms such as fever, fatigue, body pain, headache, dry cough, and sore throat, affects large numbers of people each year. Although most people infected with flu recover, it is still responsible for approximately 36,000 deaths and 226,000 hospitalizations each year in the US.

Influenza viruses are negative-stranded RNA viruses that have been classified taxonomically as orthomyxoviruses; they are divided into two types: “A” and “B” viruses. Influenza type C is not known to cause disease in humans and so is not applicable to this discussion. The remarkable variation of influenza strains—particularly type A—and their ability to cause annual epidemics of respiratory illness of varying intensity and severity, continue to be the focus of intense investigation. Only type A viruses are known to cause pandemics. Type A viruses are further divided into subtypes based on the specific hemagglutinin (H) and neuraminidase (N) proteins on the virus surface. Currently, two subtypes of A viruses are in worldwide circulation in humans: H3N2 and H1N1. The emergence of both of these subtypes in the 20th century led to separate pandemics. For example, the 1918 pandemic resulted from the emergence and spread of the H1N1 virus while the 1968 pandemic was associated with the H3N2 virus. The 1957 pandemic was associated with the emergence and spread of the H2N2 virus; however, this virus subtype stopped circulating in 1968. Influenza pandemics are believed to have occurred for at least 300 years at unpredictable intervals.

B. Why influenza pandemics occur

1. Drift and shift

An important feature of influenza viruses that helps to explain much of their epidemiological patterns is the ability and propensity of these viruses to modify (drift) or replace (shift) two key viral proteins, hemagglutinin and neuraminidase, on the viral surface. Because these proteins are the main targets for the immune system, changes in these proteins can have minor to profound effects on the antigenicity of influenza viruses.

a) Drift

Influenza viruses can change through antigenic drift, which is a process in which mutations to the virus genome produce changes in the viral H or N. Drift is a continuous ongoing process that results in the emergence of new
strain variants. The amount of change can be subtle or dramatic, but eventually one of the new variant strains becomes dominant, usually for a few years, until a new variant emerges and replaces it. In essence, drift affects the influenza viruses that are already in worldwide circulation. This process allows influenza viruses to change and re-infect people repeatedly through their lifetime and is the reason the influenza virus strains in vaccine must be updated each year.

b) Shift
In contrast to drift, pandemic viruses arise through a process known as antigenic shift. In this process, the surface existing viral H and N proteins are not modified, but are replaced by significantly different H and Ns. Since influenza A viruses that bear new (or novel) H or H/N combinations are perceived by immune systems as new, most people do not have pre-existing antibody protection to these novel viruses. This is one of the reasons that pandemic viruses can have such severe impact on the health of populations.

C. Animal reservoirs

Novel influenza viruses occasionally emerge among humans as part of the natural ecology and biology of influenza viruses. Wild birds are considered the reservoir for influenza viruses because more influenza A subtypes (15) circulate among wild birds than humans or other animal species. Normally, animal influenza viruses do not infect humans. However, avian influenza viruses can sometimes cross this barrier and directly infect humans. This was demonstrated in 1997, when an outbreak of avian influenza A (H5N1) viruses infected both domestic poultry and humans in Hong Kong, leading to 18 hospitalizations and 6 deaths. Since then, other outbreaks of avian viruses (such as H9N2 in 1999, H7N2 in 2002, H7N7 in 2003, and H5N1 again in 2004) have occurred and been found to directly infect people. Fortunately, these avian viruses lacked the ability to spread easily from person-to-person and therefore did not precipitate larger outbreaks or a pandemic.

Pandemic viruses can also arise when some of the genes from animal influenza viruses mix or reassort with some of the genes from human influenza viruses to create a new hybrid influenza virus. This can occur when a single animal (for example, a pig or possibly a person) is simultaneously co-infected by both a human influenza virus and an avian influenza virus. In this situation, genes from the human and avian viruses can reassort and create a virus with the surface proteins derived from the avian virus (hence, creating a new subtype) and the internal proteins derived from the human virus, enhancing the transmissibility of the hybrid virus. The process of reassortment is not theoretical. Reassorted viruses have been frequently identified and are thought to have been responsible for the 1957 and 1968 pandemic viruses.

D. Distinguishing pandemic from seasonal influenza

Several epidemiological features distinguish pandemic influenza from seasonal influenza. Pandemics of influenza are unusual events and their timing cannot be predicted. For example, only three pandemics occurred in the 20th century (1918, 1957, and 1968). The infrequency and unpredictable timing of these events is explained by the fact that influenza pandemics occur only when a new (or novel) influenza A virus emerges and spreads globally. By definition, most people have never been exposed to these viruses and therefore are susceptible to infection by them. In contrast, seasonal influenza virus strain variants are modified versions of influenza A viruses that are already in widespread circulation. Therefore, there is usually some level of pre-existing immunity to strain variants. Because of the frequent appearance of new variants, virus strains contained in seasonal interpandemic trivalent influenza vaccines must be updated annually.

E. Impact of influenza and influenza pandemics

An annual influenza season in the US, on average, results in approximately 36,000 deaths, 226,000 hospitalizations, and between $1 billion and $3 billion in direct costs for medical care. This impact occurs because influenza infections result in secondary complications such as pneumonia, dehydration, and worsening of chronic lung and heart problems. Despite the severity of influenza epidemics, it is sobering to understand that the effects of seasonal influenza are moderated because most individuals have some underlying degree of immunity to recently circulating influenza viruses either from previous infections or from vaccination.

It is clear that pandemic influenza has the potential to pose disease control challenges unmatched by any other natural or intentional infectious disease event. Pandemic influenza viruses have demonstrated their ability to spread worldwide within months, or weeks, and to cause infections in all age groups. While the ultimate number of infections, illnesses, and deaths is unpredictable, and
could vary tremendously depending on multiple factors, it is nonetheless certain that without adequate planning and preparations, an influenza pandemic in the 21st century has the potential to cause enough illnesses to overwhelm current public health and medical care capacities at all levels, despite the vast improvements made in medical technology during the 20th century.

Certain modern trends could increase the potential for pandemics to cause more illnesses and deaths than occurred in earlier pandemics:

- First, the global population is larger and increasingly urbanized, allowing viruses to be transmitted within populations more easily.

- Second, levels of international travel are much greater than in the past, allowing viruses to spread globally more quickly than in the past.

- Third, populations in many countries consist of increasing numbers of elderly persons and those with chronic medical conditions, thus increasing the potential for more complicated illnesses and deaths to occur.

This combination of factors suggests that the next pandemic may lead to more illnesses occurring more quickly than in the past, overwhelming countries and health systems that are not adequately prepared.

The 1957 pandemic, during an era with much less globalization, spread to the US within 4-5 months of its detection in China, and the 1968 pandemic spread to the US from Hong Kong within 2-3 months. As was amply demonstrated by the SARS outbreak, modern travel patterns may significantly reduce the time needed for pandemic influenza viruses to spread globally to a few months or even weeks. The major implication of such rapid spread of an infectious disease is that many, if not most, countries will have minimal time to implement preparations and responses once pandemic viruses have begun to spread. While SARS infections spread quickly to multiple countries, the epidemiology and transmission modes of the SARS virus greatly helped to contain the spread of this infection in 2003, along with quarantine, isolation, and other control measures. Fortunately, no widespread community transmission took place. By contrast, because influenza spreads more rapidly between people and can be transmitted by those who are infected but do not yet have symptoms, the spread of pandemic influenza to multiple countries is expected to lead to the near simultaneous occurrence of multiple community outbreaks in an escalating fashion. No other infectious disease threat, whether natural or engineered, poses the same current threat for causing increases in infections, illnesses, and deaths so quickly in the US and worldwide.

F. H5N1 avian influenza

Although it is unpredictable when the next pandemic will occur and what strain may cause it, the continued and expanded spread of a highly pathogenic—and now endemic—avian H5N1 virus across much of eastern Asia, Russia, and eastern Europe represents a significant pandemic threat. Human avian H5N1 influenza infection was first recognized in 1997 when it infected 18 people in Hong Kong, causing 6 deaths. Concern has increased in recent years as avian H5N1 infections have killed poultry flocks in countries throughout Asia and in parts of Europe. Since 2003, over 100 human H5N1 cases have been diagnosed in Thailand, Vietnam, Cambodia, and Indonesia. The H5N1 virus circulating in Asia has raised concerns about the potential for a pandemic because:

- The avian H5N1 virus is widespread and endemic in much of Asia with spread to Russia and Europe.

- The avian H5N1 virus is becoming more deadly in a growing number of bird species and mammals.

- Wild birds and domestic ducks may be infected asymptomatically, providing a reservoir for infection of other domestic poultry species.

- The virus is able to transmit directly from birds to some mammals, and in some circumstances, to people.

- There is sporadic spread directly from animals to humans, with suspected human-to-human transmission in rare instances.

Effects of Past Pandemics on the U.S.

<table>
<thead>
<tr>
<th>Pandemic</th>
<th>Estimated U.S. Deaths</th>
<th>Influenza A Strain</th>
<th>Populations at greatest risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918-1919</td>
<td>500,000</td>
<td>H1N1</td>
<td>Young, healthy adults</td>
</tr>
<tr>
<td>1957-1958</td>
<td>70,000</td>
<td>H2N2</td>
<td>Infants, elderly</td>
</tr>
<tr>
<td>1968-1969</td>
<td>34,000</td>
<td>H3N2</td>
<td>Infants, elderly</td>
</tr>
</tbody>
</table>

Joint Center for Operational Analysis (JCOA) Bulletin
• Genetic studies confirm that H5N1, like other influenza viruses, is continuing to change and evolve.

While H5N1 is the greatest current pandemic threat, other avian influenza subtypes have also infected people in recent years. In 1999, H9N2 infections were identified in Hong Kong; in 2003, H7N7 infections occurred in the Netherlands; and in 2004, H7N3 infections occurred in Canada. Such outbreaks have the potential to give rise to the next pandemic, reinforcing the need for continued surveillance and ongoing vaccine development efforts against these strains.

Last revised: November 8, 2005
Planning for Defense Support to Civil Authorities

David A. Zacharias
Operational Research Analyst

Introduction:

Recent experience and insight gained from Hurricane Katrina lessons learned concerning federal government planning and coordination suggest that modifications are needed for how the government approaches future large-scale planning and coordination efforts. Many infectious disease experts believe that our world is highly susceptible to a pandemic threat due to the unpredictable behavior of a novel strain of influenza (A) (H5N1).

Although this disease is principally carried and spread by migratory birds, and is called avian flu, it has demonstrated a mortality rate in humans infected by the virus of greater than 50 percent.

While the H5N1 virus is not currently contagious between humans, in preparation for this eventuality the President recently published “The National Strategy for Pandemic Influenza Implementation Plan (NSPIIP),” clarifying both government and non-governmental responsibilities and summarizing some key planning considerations for the interagency. This document tasks government agencies to support mitigation efforts for pandemic influenza and dictates that the primary mechanism for coordinating and guiding the response will be the National Response Plan (NRP). The NSPIIP also states: “Joint and integrated planning across all levels of government and the private sector is essential to ensure that available national capabilities and authorities produce detailed plans and response actions that are complementary, compatible, and coordinated.” However, recognized differences between federal department cultures have made the planning process involving multiple agencies difficult at best.

Department of Defense (DOD) support planning for the federal pandemic influenza response to date is well ahead of the other agencies involved, however, it is general in nature due to the lack of identified intergovernmental military assistance requirements. Joint Publication 3-08 Volumes I and II (Interagency, Intergovernmental Organization and Nongovernmental Organization Coordination During Joint Operations) address suitable tools that can be used by military commanders to establish helpful coordinating relationships with intergovernmental agencies, however they do not set forth any doctrinal necessity or provision by which DOD can take charge and support an interagency response with unity of effort, absent unity of command.

Through analysis it becomes clear that a fundamental need exists within the federal government to establish a synchronized interagency planning process for successfully incorporating DOD capabilities into the full gamut of planning required to protect national security and, specifically, to respond to pandemic influenza.

Issue: DOD’s capacity to perform effective civil support planning to assist the Federal Government pandemic influenza mitigation efforts can be enabled by an Interagency congruent planning process.

Mitigating pandemic influenza effects to preserve national security will require the complete wherewithal of America

Although the United States (US) currently contends with influenza – annually resulting in about 36,000 deaths, greater than 200,000 hospitalizations, and with a total cost of more than $10 billion – a worst case pandemic influenza outbreak scenario in the US environment today would be catastrophic to the nation’s security. The last three 20th century pandemics sweeping the globe (in 1918, 1957, and 1968) killed millions of people worldwide; unlike other natural disasters, a pandemic affecting the North American continent would be protracted and pervasive, causing substantial and persistent economic losses in almost every state. Every sector of the US economy would at some point be severely affected as this disease does not present itself all at once, but in separate and distinct waves.

In addition to the poultry industry and all of its associated subsidiary businesses within the food industry, the entertainment establishment, public transport and travel companies, retailers, and most providers of non-essential services would become economically distressed. Without a stable workforce, the nation would experience disruption of government services and be susceptible to sustained intermittent utility outages, ultimately producing significant
anxiety and concern. The healthcare system would quickly become overwhelmed leading to chaotic secondary affects that the American people have not been disciplined to tolerate well, such as management of overwhelming death. Infectious disease experts from the World Health Organization (WHO) and the Center for Disease Control (CDC) deem the likelihood of a pandemic resulting from a novel influenza virus—like H5N1—as a viable threat. Both humans and animals could be at risk from this deadly virus.

Even though the timing and severity of the next pandemic are uncertain and unpredictable at best, the influenza (A) H5N1 virus has become of considerable concern to US health officials. As of 16 October 2006, the WHO has confirmed the presence of H5N1 in 10 countries worldwide with 256 reported cases of human infection, resulting in 151 deaths.8 To prevent another 1918-like pandemic catastrophe—which killed 675,000 people in the United States, including 43,000 in the US military and 8,500 in Chicago alone, and doubled the normal death rate from all other causes of death in the United States—the federal government must be substantially better prepared to respond than it was for Hurricane Katrina.9 This means changing the current government planning paradigm so that when the full capabilities of America are necessary to mitigate national security threats—like pandemic influenza—it can be effectively employed.

Coordination of interagency planning and execution is vital to successfully mitigating a pandemic

The president outlined a national strategy to mitigate pandemic influenza in November 2005. It was followed by the NSPIIP published in May 2006. These documents provide broad guidance to the nation to begin pandemic mitigation planning. The NSPIIP also gives the Secretary of Homeland Security primary responsibility for coordination of federal operations and resources; the establishment of associated reporting requirements; and duties associated with conducting ongoing communications between federal, state, local, and tribal governments, the private sector, and nongovernmental organizations.10 However, the Department of Homeland Security (DHS) has yet to
provide clear guidance to the interagency for coordinating supporting efforts.

The intent of Homeland Security Presidential Directive (HSPD)-5 promulgated in February 2003, was to enhance the ability of the United States to manage domestic incidents by establishing a single comprehensive national incident management system. In concert with HSPD-5, the president published two other directives with the intent to establish a common approach to national incident management: (1) HSPD-7, which established a national policy for federal departments and agencies to identify and prioritize US critical infrastructure and key resources, and then to protect them from terrorist attacks; (2) and HSPD-8, which established policies to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies.

These Homeland Security Presidential Directives resulted in promulgation of the NRP in December 2004. It was under this new directive that the government managed its response to the aftermath of Hurricane Katrina. However, absence of an initial unified government strategy in providing assistance to the people of New Orleans demonstrated that government planning and coordination required significant improvement. Although the NRP provided the mechanism by which federal agencies executed national incident management, it did not direct how the myriad of concerned government and non-government agencies should conduct their mutual collaboration and mutual support planning necessary when responding to a given disaster.

Although the NSPIIP allows for an 18-month window to complete initial planning, the short timeframe makes it difficult for interagency coordination of a massive magnitude, as required by this overall effort to occur effectively. Another consideration is protection of the health of US citizens. The Department of Health and Human Services (HHS) is tasked to communicate information related to a pandemic, and is in charge of protecting America’s overall health; yet, finding HHS planning and coordinating information for public use is difficult at best. Without this input to federal planning

---

**Pandemic Influenza 18 Month Planning Window**

Disseminated Planning Documents

- **May 06**
  - National Strategy for Pandemic Influenza
  - Pandemic Influenza Implementation Plan

- **August 06**
  - Pandemic Influenza Final Report

Interagency Projected Planning Completion Dates

- **May 07**
  - Joint Interagency Planning Plan

- **November 07**
  - Interagency Planning Plan
efforts, any planning conducted by other federal or state agencies in the interim is ineffectual at best. Specifically, as the DOD has produced a Pandemic Influenza Implementation Plan (August 2006), its department wide planning efforts may not be relevant when DHS and HHS guidance is finally published.

Review of US Northern Command (USNORTHCOM) civil support planning in light of joint doctrine is revealing about the impact of stovepiped government approaches on DOD planning efforts.

Joint Publication 3-08: Interagency, Intergovernmental Organization, and Nongovernmental Organization Coordination During Joint Operations Volumes I and II provides significant background information for military commanders, along with fundamental operating principles to facilitate coordination between the DOD and various governmental agencies, intergovernmental agencies, nongovernmental agencies, and regional organizations. However, this publication does not provide a joint intergovernmental planning process designed to achieve successful coordination between supporting and supported agencies. According to military doctrine, in these situations, successful coordination is entirely dependent on the individual military and civilian leader’s capabilities, rather than a compatible and complementary planning process which compels agreement during the course of mission analysis and in the development of feasible solutions. The interagency may lack the capacity to conduct and execute effective operational planning, and that there is a need for DOD planning expertise to fill this gap. If this view is accurate, then it is recognized that military planning and execution processes and capabilities are not only different, but also more disciplined than conventional interagency planning methods.

Comparing how the United States Agency for International Development (USAID) conducts its activity design planning process with DOD’s operationally-oriented planning and execution system

Military assistance is defined as civil support since DOD has normally always been in support of other designated lead federal agencies. Notwithstanding this general military view, the National Strategy for Pandemic Influenza Implementation Plan, comprised of inherently complex tasking, has assigned 31-primary role tasks and 83-supporting role tasks to the DOD as part of the national pandemic influenza response. These roles call for DOD to plan, interact, communicate, and coordinate with the numerous federal departments and agencies—to include, US allies, along with US individual state and local governments.

**DOD operational planning and execution capability is recognized within the US government**

The leading roles assigned to DOD by the Homeland Security Council and approved by the president in the NSPIIP, appear to indicate government recognition that

**The Armed Forces of the United States are authorized under certain conditions to provide assistance to US civil authorities.**

While the most visible support occurs during domestic emergencies or major disasters, the majority of DOD’s efforts are directed toward civilian law enforcement or intelligence agencies. This assistance is known as civil support within the defense community because the assistance will always be in support of a lead federal agency. Requests for assistance from another agency may be predicated on mutual agreements between agencies or stem from a Presidential designation of a Federal Disaster Area or a Federal State of Emergency. DOD typically only responds after the resources of other federal agencies, state and local governments to include National Guard, and NGOs have been exhausted or when military assets are required.
can highlight differences in how interagency organizations approach issue resolution, which intrinsically makes coordination between agencies complicated. USAID uses a “results framework logic” approach, whereas DOD uses the Joint Operational Planning and Execution System (JOPES).

What is a results framework? “A results framework (RF) presents an operating unit’s strategy for achieving a specific objective. Typically, it is laid out in graphic form supplemented by narrative. An RF includes the objective and the intermediate results, whether funded by USAID or its partners, necessary to achieve it. The framework also conveys the development hypothesis implicit in the strategy and the cause-and-effect linkages between the intermediate results and the objective. It includes any critical assumptions that must hold for the development hypothesis to lead to achieving the relevant objective. In short, a person looking at a results framework should be able both to understand the premises underlying the strategy and to see within the framework those intermediate results critical to achieving the objective.”

This system of planning is not a combination of policies, processes, and technology capabilities, and it allows great flexibility in how information is gathered, processed, and used in determining courses of action. However, the methodology to continuously validate planning assumptions is not clear or inherently systemic within the process. Valid assumptions replace unknown facts in any planning process and should be continuously revalidated. Not having a systematic approach in updating planning facts makes coordination and operational planning efforts between origination difficult and challenging.

How is JOPES different in nature? It is an integrated joint, conventional command and control system used by military planners to conduct joint planning, execution, and monitoring activities. It supports senior-level military decision makers and their staffs by providing methodology to determine the best course of action (COA) to accomplish assigned tasks and direct the actions necessary to accomplish any assigned mission.

---

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Pillar</th>
<th>DoD Role</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Primary -</td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-lead</td>
<td>Pillar</td>
</tr>
<tr>
<td>4: International Efforts</td>
<td>4.1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4.3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>5: Transportation/Borders</td>
<td>5.1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5.2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>5.3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>6: Protect Human Health</td>
<td>6.1</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>6.2</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>6.3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>7: Animal Health</td>
<td>7.1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7.3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8: Law Enforcement, Security</td>
<td>8.1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8.3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9: Continuity of Operations</td>
<td>9.1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: National Strategy for Pandemic Influenza Implementation Plan May 2006
JOPES is a complete planning system that includes people, procedures, policies, communications, and supporting information systems (IS) software. Every planning function within the military is tied to this well established process. It has an inherent methodology to validate planning assumptions when conducting both deliberate and crisis action planning efforts. Because the JOPES methodology and the RF process are incompatible, the military planner’s capability to quickly evaluate valid requirements for providing DOD assistance in the international arena is abated. As a result, unity of effort is impacted because the organizations involved promote competing priorities. Dissimilar organizational planning processes facilitate differences in assumptions and perspectives which cloud clear understanding of the problem at hand and, ultimately, prevent effective resolution. Today, military combatant commanders are unquestionably the federal government’s best source to

![Characteristics of Results Framework Logic](image)

**The Joint Operation Planning and Execution System (JOPES) is the integrated system used to plan and execute joint military operations.** JOPES is a combination of joint policies and procedures (guidance), and automated data processing (ADP) support used to plan and execute joint military operations. Although JOPES (and its related systems) has been used for over 20 years to support the development of operation plans and timephased force and deployment data (TPFDD), the current automated system was given its first real baptism of fire in Operation Desert Shield to assist in managing a real world operational deployment. Since then, JOPES ADP has been used in virtually every deployment. Even though its performance is far from ideal, it has become an integral part of our ability to deploy forces.

*Source: Users Guide for JOPES dated 1 May 1995*
conduct operational planning within government. Every plan produced by a military combatant commander has an innate operational aspect to it. They own trained planners, the necessary resources, and employ a supporting planning system used to plan all military campaigns – JOPES. The armed forces of the United States live and die by their planning capabilities; therefore, the standards for military planning are inherently much higher than elsewhere in the interagency.

More defined requirements for military civil support leads to better military support planning

DOD pandemic influenza planning is focused in the following strategic areas in accordance with the NSPIIP:

1. Protection of the health and safety of personnel and resources.
2. Determination of essential functions and services, and the maintenance of each in a pandemic influenza outbreak.
3. Support to federal, state, and local governments;
4. Effective communications.
5. Support to international partners, international stability, and security.

Nineteen planning categories were formulated by DOD based on current military operational capabilities to support national and international mitigation efforts in the DOD Pandemic Influenza Implementation Plan. However, these DOD operational capabilities are not without limits and are relatively expensive to use. The issue for military planners quickly becomes to decipher how best to mutually support a domestic and international pandemic influenza response, while simultaneously maintaining and managing the military resources necessary to sustain national security obligations world-wide.

As USNORTHCOM has been given the missions of conducting homeland defense (HLD) and civil support (CS) operations, it follows that DOD designated Commander, USNORTHCOM as the military supported commander for pandemic influenza response. Additionally, the Secretary of Defense recently tasked USNORTHCOM to prepare a concept plan

DOD Critical Planning Categories

<table>
<thead>
<tr>
<th>Number</th>
<th>DOD Critical Planning Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intelligence</td>
</tr>
<tr>
<td>2</td>
<td>Force Protection</td>
</tr>
<tr>
<td>3</td>
<td>Biosurveillance, Disease Detection and Information Sharing</td>
</tr>
<tr>
<td>4</td>
<td>Interagency Planning Support</td>
</tr>
<tr>
<td>5</td>
<td>Surge Medical Capability to Assist Civil Authorities</td>
</tr>
<tr>
<td>6</td>
<td>Medical Care to U.S. Forces</td>
</tr>
<tr>
<td>7</td>
<td>Patient Transport and Strategic Airlift</td>
</tr>
<tr>
<td>8</td>
<td>Installation Support to Civilian Agencies</td>
</tr>
<tr>
<td>9</td>
<td>Bulk Transport of Pharmaceuticals / Vaccines</td>
</tr>
<tr>
<td>10</td>
<td>Security Support of Pharmaceutical/Vaccine Production (Critical Infrastructure Protection (CIP))</td>
</tr>
<tr>
<td>11</td>
<td>Security Support of Pharmaceutical/Vaccine Distribution</td>
</tr>
<tr>
<td>12</td>
<td>Communications Support to Civil Authorities</td>
</tr>
<tr>
<td>13</td>
<td>Quarantine Assistance to U.S. Civil Authorities</td>
</tr>
<tr>
<td>14</td>
<td>Military Assistance for Civil Disturbances</td>
</tr>
<tr>
<td>15</td>
<td>Mission Assurance: Defense Industrial Base</td>
</tr>
<tr>
<td>16</td>
<td>Mortuary Affairs</td>
</tr>
<tr>
<td>17</td>
<td>Continuity of Operations and Continuity of Government</td>
</tr>
<tr>
<td>18</td>
<td>Support to International Allies and Non-Governmental Organizations (NGOs)</td>
</tr>
<tr>
<td>19</td>
<td>Public Affairs Support to Civil Authorities</td>
</tr>
</tbody>
</table>

Source: DOD Pandemic Influenza implementation Plan dated 06 Aug 06
(CONPLAN) to synchronize worldwide operations to mitigate and contain the effects of an outbreak of pandemic influenza.

In the interim, USNORTHCOM CONPLAN 2591 (CONPLAN for Pandemic Influenza) is being developed in accordance with Chairman, Joint Chiefs of Staff Planning Order 141224ZNOV05 to conduct execution-level planning for supporting the federal response to pandemic influenza. CONPLAN 2591 addresses force health protection (FHP), defense support of civil authorities (DSCA), and humanitarian assistance/disaster relief (HA/DR) operations in the USNORTHCOM area of responsibility (AOR). The large scope of these missions requires effective military interaction between the numerous participating action agencies.

This coordination effort is currently being conducted through a joint interagency coordination group (JIACG) liaison sponsored by the Homeland Security Council. Although the JIACG provides military interface with the interagency, military civil assistance requirements have not been well-specified for use by the USNORTHCOM planner since there is no intrinsic planning process defined for its use.

Planning military support for civil organizations without sufficient information puts USNORTHCOM planners in the difficult position of having to create and/or use flawed planning assumptions.

As DOD is clearly a supporting agency to civil authorities by military doctrine, it must have the requisite information in enough detail to provide adequate support. If not, inefficient use of limited military resources will occur to the detriment of the overall federal response.

The USNORTHCOM area of responsibility includes the 48 contiguous states and the District of Columbia, Alaska, Canada, Mexico, Cuba, the Bahamas, Puerto Rico, US Virgin Islands, British Virgin Islands, the Gulf of Mexico, the Caribbean Sea, portions of the Atlantic Ocean, and other islands (excluding Greenland). Operational planning in this geographic area can require significant input from numerous agencies. Limiting information gathering and communication processes to within a JIACG construct will not produce effective military-civil support planning for complex responses, like pandemic influenza.

**Historically, planning and coordination involving multiple government agencies does not portend success against a pandemic influenza threat**

Issues with US Government planning and coordination have been argued both inside and outside the government for sometime. Several think tank organizations have expressed the need for improving the way our government approaches, conducts, and executes planning regarding all facets of government responsibility. They collectively acknowledge that one of the most critical government functions is protecting the nation’s security, and in this era of advanced technology and limited resources accomplishing this purpose requires all entities of government to mutually support each other effectively and efficiently. The Goldwater-Nichols Phase II Report published by the Center for Strategic and International Studies (CSIS) has espoused that our government lacks a standard approach to planning interagency operations and routinely reinvents the wheel, in this regard, with each new administration.

The Government Accountability Office (GAO), in a series of results-oriented government reports, has found that in order to facilitate collaboration, federal agencies need to address the compatibility standards, policies, procedures, and data systems that will be used in the collaborative effort.

To further strengthen the argument framing the need for a consistent planning process, a National Defense University presentation contends that there is the lack of a coherent approach to strategic planning between civilian and military agencies, implying a need for changing the planning structure within the interagency.
Results Oriented Government
Government Accounting Office (GAO)

What GAO Found

– Many Issues cut across more than one agency and their actions are not well coordinated

– Agencies face a range of barriers when they attempt to work collaboratively

– To facilitate collaboration, agencies need to address the compatibility of standards, policies, procedures, and data systems that will be used in the collaborative effort

Goldwater-Nichols Phase II Report
Center for Strategic and International Studies (CSIS)

Government Routinely Reinventing the Wheel

“First, unlike the U.S. military, which has doctrine and a standard approach to planning its operations, the U.S. government as a whole lacks established procedures for planning and conducting interagency operations. Each new administration tends to reinvent this wheel, either issuing new Presidential guidance –which too often overlooks the lessons learned and best practices of its predecessors – or ignoring the issue entirely until it faces an actual crisis.”

Source: CSIS Goldwater Nichols Phase Two Report dated July 2005 pg 43
The Problem

• Strategic planning for crisis response among military and civilian agencies is disconnected:
  
  - structural differences among agencies
  - competing bureaucratic interests
  - differences in what “planning” is all about
  - information sharing practices
  - time pressures
  - lack of understanding of planning by other agencies

• We lack a coherent approach to strategic planning that is multi-agency in nature and extends planning and coordination to multinational and multilateral partners for implementation


Summary:

Individual agency cultures, languages, and responsibilities are key components in understanding the weaknesses in multi-agency planning and coordination. When the same language and words, along with the same concept and ideas, mean different things to different agencies, coordination and cooperation are undermined. To fulfill the President’s intent of bringing to bear the resources of the United States against the global threat of pandemic influenza in order to maintain national security, the interagency requires a core planning process to discipline multiple agency planning involvement. For USNORTHCOM to provide effective military support capabilities requires more than mere synchronization efforts via a few designated interagency liaisons and coordinators—it requires a deliberate planning process to facilitate the creation of valid plans of action that will adequately protect national security—and no less is expected by United States citizens.

Endnotes:

1 Stacey L. Knobler, Alison Mack, Adel Mahmoud, Stanley M. Lemon, ed., The Threat of Pandemic Influenza: Are we Ready? (Executive Summary).


3 Ibid. 2.

4 Ibid. 3.


6 Joint Chiefs of Staff Publication 3-08, Interagency, Intergovernmental Organizations and Non-governmental Organization Coordination During Joint Operations, Volume I, 17 March 2006

7 Dr Sherry Cooper. The Avian Flu Crisis: An Economic Update. BMO-Nesbitt Burns Special Report. 13 March 2006.


12 Ibid.


17 Joint Chiefs of Staff Publication 3-08, *Interagency, Intergovernmental Organizations and Nongovernmental Organization Coordination During Joint Operations*, Volume I, 17 March 2006

18 USAID Performance Workshop 2004, retrieved 1 November 2006, retrieved from http://www.usaid.gov/am/assets/02_Results_Frameworks

19 Joint Chiefs of Staff Publication. *User’s Guide for JOPES (Joint Operational Planning and Execution System)* 1 May 1995

20 USNORTHCOM CONPLAN 2591. CONPLAN FOR PANDEMIC INFLUENZA Base Plan. 16 August 2006.


**About the Author:**

David Zacharias is a retired naval officer having more than thirty years of active duty service as a nuclear-trained submariner, Carrier Battle Group Operations Officer, and Joint Specialty Officer. His experience includes the gamut of naval warfare and joint duty assignments involving joint operations, joint training, and joint concept development and experimentation. Employed by CUBIC Defense Applications Group Threat Technologies Division, he currently serves as an operational analyst focusing on CBRNE related matters for US Joint Forces Command Joint Center for Operations Analysis.
Educating the DOD Community on Pandemic Influenza

COL William Smith
US Army

To prepare for and respond optimally to an influenza pandemic, the Department of Defense (DOD) community will depend on effective communications from both DOD and non-DOD sources.

Introduction:

The DOD public affairs and public health officials are faced with a communication dilemma. While experts believe that an influenza pandemic will likely occur in the foreseeable future, the unpredictable timing makes it difficult for officials to know how aggressively to sound the alarm. They don’t want to be accused of needlessly frightening the public. They also don’t want to be accused of leaving the public unprepared for a disaster. Although a detailed pandemic influenza communication plan is included in the government-wide National Strategy for Pandemic Influenza Implementation Plan (NSPI-IP) and DOD’s own Pandemic Influenza Implementation Plan, the preponderance of pandemic influenza information for military families will come through non-DOD sources such as local radio and television stations.

Pandemic influenza (PI) viruses are extremely contagious and may spread quickly throughout the world causing illness and death, even among generally healthy groups such as military personnel. The most severe of recent pandemics was the 1918 “Spanish flu” when 500,000 people died in the United States and 20-50 million people died worldwide. United States military operations in World War I were impacted as 48,000 US military members died from the pandemic influenza virus and subsequent bacterial pneumonias. Based on the range of severity across the three most recent pandemics, the US Centers for Disease Control and Prevention (CDC) estimate that over the course of several pandemic waves sweeping across US localities, the country could have approximately 90 million cases; 865,000 to 9.9 million hospitalizations; and 209,000 to 1.9 million related deaths. Military and civilian medical systems will likely be overwhelmed. Limited antiviral drug supplies, as well as the lack of an effective vaccine, will exacerbate the situation early during the pandemic.

The public needs to be aware of this threat so they can prepare themselves emotionally and logistically, assist their community to prepare, and support the preparedness efforts of the government. They must understand what precautions they can take to reduce their risk of becoming infected, what measures may be implemented by the government, and where they can get additional information. Military families may be faced with additional information needs if the military member is deployed or if dependents obtain medical care from the base medical facility, which may or may not be capable of supporting their healthcare needs during a pandemic. In addition to the information that the general public will need to know, DOD families will want to know if their spouse will be redeployed from overseas or if family members stationed overseas will be sent back to the continental United States (CONUS). They will need to know if DOD antiviral drug supplies will be available for the entire family or if Service members and/or their dependents will need to receive theirs from the national stockpile or other sources (e.g., private providers). If they are members of the Reserves or National Guard, they will need to know the likelihood of being called to duty to support civilian agencies and if and how they will obtain antiviral drugs and/or vaccines.

All these questions require a carefully planned and executed risk communications program to ensure the DOD community and the general public are properly educated and prepared for an influenza pandemic. Health authorities recognize the importance of crafting and delivering messages that not only put the risk into the appropriate context, but that also are appropriately tailored to the population(s) at risk. One message does not fit all audiences, and the receptivity of the audience will depend upon prior relationships and perception of trust. To be most effective, public information must be accurate, transparent, and disseminated early; provide practical strategies; and arouse an appropriate level of public action, without causing undue fear or maladaptive responses (e.g., increased and unwarranted medical care demand).

Risk Communication is fundamental to positively influencing human behavior in preparation for and response to a pandemic:

A flu pandemic is similar to other disasters because it will disrupt daily routines. People will be asked to take personal action to reduce the spread of the pandemic
flu virus and may or may not be prepared to do so, through lack of information and/or willingness. The public will actively seek information if the probability is high enough that a disaster or health emergency is going to occur, or when it actually hits. With uncertainty of the timing and severity of a future influenza pandemic, people may be reluctant to seek the information on their own; therefore, information needs to be “pushed” to them in active form such as through public service announcements (PSA) on local TV and radio stations, newspaper and magazine articles, or posters in public places. A lack of public preparedness and adequate response can, at its worst, threaten social unity. The public needs to know what an influenza pandemic means to them, what the government is doing, what they can do to prepare, and what to expect if a pandemic strikes.

The majority of people will take appropriate actions to prepare and will act reasonably during an emergency. However, the CDC has identified stresses and expected psychological and behavioral manifestations that may occur in a crisis, including a pandemic influenza crisis, which military commanders and emergency responders should be aware of. They are:

- **Denial** – Some members of the community will experience denial. They will choose to ignore warnings and not take appropriate actions. For example, some may not believe the threat is real or believe the threat is not real to them personally. At the same time, others may misunderstand, misperceive, or become confused by the warnings and recommended actions.

- **Stigmatization** – Some people may become stigmatized by their communities and be refused services of public access, or be treated with disdain and fear. Fear and isolation of a group perceived to be contaminated or risky to associate with will hamper community recovery and affect any efforts to quarantine, evacuate, or temporarily relocate potentially exposed individuals. Stigma may also lead to maladaptive responses in communities (e.g., hate crimes toward those believed to be the ‘vectors’ of disease).

- **Fear and Avoidance** – Fear is an important psychological consideration in the response to a crisis. The fear of the unknown or the fear of uncertainty may be the most debilitating of the psychological responses to disaster. With fear at the core, an individual may act in extreme and sometimes irrational ways to avoid the perceived or real threat. At the same time, the appropriate perception of risk and fear can motivate individuals to act in adaptive, rational ways to avoid the threat. Thus, one major reason for communicating adequately with the public in advance of a crisis, when this is possible, is to manage fear.

- **Withdrawal, Hopelessness, and Helplessness** – Some people can accept that the threat is real, but because they believe the threat looms so large, they may feel the situation is hopeless. They feel helpless to protect themselves or their loved ones and thus withdraw. Avoiding such feelings of hopelessness and helplessness is another important reason to communicate adequately with the public and provide them with practical actions they can take to minimize their risk and cope with challenges as they arise.

These stresses can be addressed through an effective and timely risk communication program during all phases of a pandemic, but perhaps most importantly during the pre-pandemic phases, to raise awareness, minimize confusion, shape adaptive responses, and empower the public to protect themselves in the event of an actual pandemic.

A recent survey conducted by the Trust for America’s Health and Columbia University asked journalists to assess the impact of a hypothetical influenza pandemic. The respondents described detailed, diverse, and frequently chilling ways in which society would be affected. Some of the social affects they described were “panic,” “confusion,” “societal breakdown,” “no one wants to leave home,” “refusal to accept quarantine,” “people at the bottom suffering most,” and “chaos.” Some of the economical effects described were “international commerce shuts down,” “flights cancelled,” “ridiculous shortages,” “hoarding,” and “global economy goes into a tailspin.” It is very unlikely that all of these effects will materialize; however, many could become reality if the public is not well informed and assured. Unless we act now to improve efforts to educate the public in advance of a pandemic, the United States may be facing many of these consequences, and at a time when our country’s ability to respond to such issues will be severely impaired.
The Department of Health and Human Services is the lead agency for Pandemic Influenza Risk Communication

The National Strategy for Pandemic Influenza Implementation Plan states that, “Uncertainty during a pandemic will drive many of the outcomes we fear, including panic among the public, unpredictable and unilateral actions by governments, instability in markets, and potentially devastating impact on the economy. The need for timely, accurate, credible, and consistent information that is tailored to specific audiences cannot be overstated.” The Department of Health and Human Service (DHHS) has been designated as the lead agency for pandemic influenza communications in the NSPI-IP. It states that “DHHS, in coordination with Department of Homeland Security (DHS), DOD, and Veterans Administration (VA), shall develop and disseminate a risk communication strategy within 6 months.” It also states that “DOD and VA, in coordination with DHHS, shall develop and disseminate educational material, coordinated with and complementary to messages developed by DHHS but tailored for their respective departments, within 6 months.”

Supplement 10 (Public Health Communications) of the DHHS Pandemic Influenza Plan provides a summary of the roles and responsibilities in public health communication at the national, state, and local levels during each phase of a pandemic. As directed by the NSPI-IP, DHHS has included a communication strategy that is designed to:

• Prepare the US public and communities for a pandemic.

• Communicate the need for local preparedness.

• Develop central messages and materials that can be shared broadly.

• Coordinate across DHHS and other federal departments.

• Provide support to our global partners.

Although DHHS has clearly accepted the lead for risk communication and has developed a comprehensive communication strategy, there are still some hurdles to overcome. Recent events such as the Hurricane Katrina response have led to a less than favorable public impression of the national government and a lack of trust of certain agencies “within the beltway.” The public’s awareness of and need for a responsible government is heightened during a crisis. A lack of continuity, control, adequate resources, or full knowledge of the event can invoke fear and threaten social unity. DHHS will have to demonstrate competence, honesty, and commitment to gain the trust of the American public. It will be important for any risk communication efforts to not only include a credible, trusted spokesperson for pandemic influenza (e.g., someone who is a recognized and accepted authority on public health emergencies) but to also ensure that all critical communicators (other local officials, mayors, governors, etc) speak with “one voice,” and take efforts to tailor their communications to reach all audiences (e.g., non-english speaking citizens, vulnerable populations, etc).

Public education to date has focused more on a “pull” rather than “push” method, thereby requiring the American public to educate itself

Initial PI education efforts have been dependent on the public seeking information on the internet. Probably the most comprehensive and popular source of information on pandemic influenza is the government website http://www.pandemicflu.gov. The American Public Health Association recently launched its Get Ready campaign to help the public prepare for a potential influenza pandemic and outbreaks of other emerging infectious diseases. Currently, the campaign includes the Get Ready for Flu blog, a web site, and podcasts. All of these efforts require individuals to have access to the internet and be willing to search for this information. Although this is an efficient method of getting information to the public, it fails to consider the millions of people who do not use the internet to get or stay informed. The Journal of Medical Internet Research pointed out that “Web health information requires a reading level that prohibits optimal access by some low-literacy adults.” There are also many people that would not be considered “low-literacy” that still rely on radio, TV, and print media as their primary source of information. Even among the population that does use the internet frequently, a study has demonstrated that only 35 percent use it for health information. This leaves a large portion of the population uninformed on what to expect and how to react to a pandemic influenza emergency.
In order to strengthen public preparedness – both emotionally and practically – efforts to enhance adaptive responses will also be needed; that is, increase compliance with recommendations and restrictions, and promote positive coping. To facilitate these reactions, the public should be informed via multiple channels (news media, radio, Internet) prior to any widespread transmission. They should be informed that an influenza pandemic is likely to happen and provided with practical advice about what they can do to prepare themselves and their loved ones. Some alternative communication mechanisms recommended by Department of Homeland Security are:

- Establish a toll free number the public can call to receive answers.
- Develop pre-scripted public service announcements.
- Prepare information sheets to allow people to read important information in their own time and in their own environment.
- Implement Emergency Alert System and scrolling TV messages.7

What is the critical information that needs to be communicated to the public in advance for them to prepare? There are some essential and simple messages to communicate to the public:

### The Basics

- An influenza pandemic is likely to occur in the foreseeable future, but the timing and severity cannot be predicted accurately in advance.
- A pandemic influenza could be a devastating event, but appropriate personal and community responses can lessen the impact.
- Many precautions can be taken to minimize the spread of disease and impact of pandemic influenza, such as social distancing (decreasing physical contact with others), good hygiene, use of anti-viral drugs (if available), and use of vaccines (if available).
- Anti-viral medication, if available, will be in short supply and directed first to essential workers.
- Vaccines may not be available until many months after the pandemic begins.
- In order to minimize the risk of transmission, individuals may be asked to stay home for extended periods of time.
- Places where the public gathers, such as large sporting events, schools, and child care centers may be closed due to staffing shortages and as a method to limit the spread of disease.

### What The Public Can Do Now

- Get a flu vaccine. The annual flu vaccine will not necessarily protect you from pandemic influenza, but it will help prevent you from getting “seasonal” flu. This can lessen the burden on the health care system during a pandemic.
- Begin stockpiling some extra food and supplies to the extent practical. If social distancing is put into place, individuals may be discouraged from shopping. At the same time, if critical industries suffer workforce shortages, access to food and supplies may be limited.

### What The Public Can Do During A Pandemic

- Listen to and follow the media for government advisories, and frequently visit an authoritative or designated state web site for updates.
- Stay home when sick.
- Seek appropriate medical advice and care when needed (instructions for when to seek medical care should be available through the advisories).
- Practice good hygiene such as frequent hand washing, not coughing or sneezing near others, and social distancing (e.g., avoid public gatherings).8

As we improve our ability to communicate the risk of a pandemic to the public, we must then guard against complacency. This is already becoming evident to a certain extent. Dr. Julie Gerberding, Director of the CDC, recently said “Regardless of which virus it is, it is going to be very apparent to anyone who is reading the newspaper or thinking about pandemic influenza that already we are beginning to cross that threshold
back into complacency.” Because of the uncertainty of the timing, magnitude, and severity of a pandemic, it will be very easy to lose the attention of the public unless there is a well planned and executed program to remind them of the threat and the preparations they must maintain. This may be accomplished through awareness campaigns on a regular basis coordinated with the media.

**The DOD community is dependent on the national media to provide timely public health information**

The DOD has approximately 9.2 million military medical beneficiaries, including about 2.4 million active duty and reserve personnel across the globe. The DOD community is also composed of DOD civilian personnel, contractors, and retirees. Although efforts are underway to reach this population through DOD public affairs, the principal source of health information for most of the DOD community will be through non-DOD sources such as local radio and TV stations, and newspapers. The DOD Pandemic Influenza Implementation Plan states that “The top priority is the protection of DOD forces and those contractors performing critical roles, as well as the associated resources necessary to maintain readiness. Also, it is critical to ensure the DOD is able to sustain mission assurance while ensuring that it maintains the ability to meet our strategic objectives. Priority consideration is also given to protect the health of DOD beneficiaries and dependents.” To achieve this, commanders and leaders at all levels must ensure that their forces and families are informed and prepared to respond to a pandemic flu emergency.

United States Northern Command (USNORTHCOM) has been designated as the supported command for pandemic influenza planning, and has specified in its concept plan (CONPLAN) that during the “plan and monitor” phase which we are currently in, subordinate commands and other combatant commands (COCOM) should “communicate force health protection information to internal audiences.” It does not specify if “internal audience” includes DOD civilians, contractors, and retirees, however. The Public Affairs Annex states “When directed, USNORTHCOM will conduct public affairs operations to contribute to the overall communication goals of the DOD and the USG [United States Government], in order to minimize the spread and effect of Avian Flu and to maintain the conditions of confidence and readiness in the US Armed Forces to conduct global operations.” This is not to say that efforts are not underway to inform the DOD community; however, there is significant disparity in the level of importance and effort across various commands and installations. A quick review of the websites of eight major commands revealed that only two provide a significant amount of PI information that was easy to navigate to. The US Army Center for Health Promotion and Preventive Medicine (USACHPPM) has prepared a very informative fact sheet “Pandemic Influenza Fact Sheet for Leaders” and a tri-fold called “Pandemic Flu Brochure,” both of which can be downloaded from their website [http://chppm-www.apgea.army.mil](http://chppm-www.apgea.army.mil). However, once again the commander or designated public health emergency officer must know where to go to get this information and distribute it so that all the military medical beneficiaries have access to it.

**Recommendations:**

- A national level public education campaign is needed now to enhance the public’s understanding of pandemic flu. Such communications should be credible and consistent (e.g., through a recognized and trusted national spokesperson such as the Surgeon General or CDC Director). More research needs to be done to determine the most effective messages and the means to get them across to the public (this will include creating different messages for different populations).

- At the state and local level, we need to expand programs to educate the general public about what a pandemic is, what could happen during a pandemic, what the community can do now to prepare, and what they should do when a pandemic happens.

- DOD must support national level communications, as appropriate, and maintain conditions of confidence and readiness in the Armed Forces to conduct its global operations and ensure implementation of a national level education program that will reach the entire DOD community.

- To ensure that messages meet the specific needs of the DOD community, DOD needs to provide additional educational campaigns and messages focused on the unique problems that military service members and their families will face when a pandemic strikes.
• Installation commanders and unit commanders must ensure they have utilized every possible method of educating the people under their command and their families on how to prepare for a pandemic.

• Leaders at all levels should emphasize personal hygiene habits that will reduce seasonal cold and influenza absenteeism now, and that will carry over to a pandemic emergency.

Conclusion:

When influenza pandemic strikes this country, the US military will be asked to support our civil authorities in some way. We will also be expected to maintain our readiness and continue the efforts in Iraq, Afghanistan, the War on Terrorism, or any other national security commitments at the time. Pandemic influenza viruses do not discriminate from those in uniform, their families, or those who support the force; therefore, we can expect to suffer the same effects as the rest of the population, thus placing a greater strain on our readiness. The most prepared public or military health system may be incapable of responding adequately to all needs. The vast majority of critical decisions will probably be made by average people doing the best they can. The only way to ensure the DOD community and the American public is prepared to make the right decisions is to provide them with realistic expectations and the information they need. Because of the complexity of issues likely to arise in a pandemic influenza emergency, it will be important to take into account and harness psychological and behavioral factors that can either facilitate preparedness or result in public panic. Effective communications, well in advance of a pandemic emergency, can tip the balance toward the positive side of this equation. Understanding what a pandemic is, what needs to be done at all levels to prepare for pandemic influenza, and what could happen during a pandemic, will help the DOD community and the public at large make informed decisions—both as individuals and as a nation.

Endnotes:

5 Journal of Medical Internet Research, Sep 2004.
6 Track Internet Usage, Track4win, 2 Feb 2002.
8 “Preparing for a Pandemic Influenza,” A Primer for Governors and Senior State Officials, NGA Center for Best Practices, 2006.

About the Author:

Colonel William Smith is currently serving as the team lead for the Pandemic Influenza study for the Joint Center for Operational Analysis. Colonel Smith is a retired civil affairs officer recalled to active duty in 2005. Prior to being recalled, he was working for Titan Corporation as an operations analyst in the Future Concepts Division of US Special Operations Command. In addition to the Pandemic Influenza study, he has served as the JCOA team lead for collection teams going to Afghanistan and Pakistan. He is a graduate of Army Command and General Staff College and the Air War College, and received a Bachelor of Science Degree in Education from Central Missouri State University.
Joint Civilian-Military Planning for Pandemic Influenza: Training and Exercises

COL William Smith
US Army

Preparing the nation for pandemic influenza (PI) requires the convergence of public health and national security planning, giving rise to the need for well coordinated and integrated exercises and training events at all levels of government.

Introduction

Although the timing, nature, and severity of the next pandemic cannot be predicted, a planned and coordinated response is critical to minimizing the public health impact, the social and economic disruption, and the ability to maintain a high level of national security. The unique characteristics of a pandemic—the capability to affect many locations at once, the extended length of such an event, and the possibility of multiple waves—will strain local, state, and federal resources and military readiness. It is unlikely that there will be sufficient civilian emergency personnel, equipment, and supplies to respond adequately to multiple areas of the country for a sustained period of time. The impact of a pandemic will likely be pervasive and unlike any emergency our society has faced in modern times.

All US resources will be needed to respond to a pandemic.

We expect that a pandemic would quickly spread across the country. We know that we do not have sufficient antiviral drugs for the entire population, and we expect that it will be months before a pandemic vaccine is produced and made widely available. We also know that American cities do not have hospitals that can handle thousands of patients in the event of a major local outbreak. Emergency rooms and intensive care units do not have the staff or respirators that would be needed. We expect that the military will be called upon to provide critical capabilities. We don’t know, in most cases, how the general public will react to these situations; therefore, it is incumbent on us to plan for and rehearse the worse case scenario.

Planning is the basis for preparedness.

Every state and agency has developed, or is in the process of developing, a pandemic influenza plan. Many plans are very extensive while others are left very broad. There is a lot we know about the potential for a pandemic; however, there is a lot we still do not understand, such as the impact on public health and emergency response personnel, what the second and third order of effects will be, and what is the total impact it will have on our nation. The best way to validate our plans, identify gaps, and explore the unknown is through a comprehensive set of successive, overlapping, and coordinated drills and exercises that include all levels of government, first responders, public health, health care, military, business sector, and non-governmental organizations.

Training and exercises are critical to good planning.

Training can take many forms. The following are types of training events and exercises that the Federal Emergency Management Agency (FEMA) recommends, but these can also be modified to fit the particular situation.

- **Orientation and Education Sessions** – These are regularly scheduled discussion sessions to provide information, answer questions, and identify needs and concerns.
- **Tabletop Exercises** – Members of the emergency management group meet in a conference room setting to discuss their responsibilities, and how they would react to emergency scenarios. This is a cost-effective and efficient way to identify areas of overlap and confusion before conducting more demanding operational drills and exercises.
- **Walk-through Drills** – The emergency management group and response teams actually perform their emergency response functions. This activity generally involves more people and is more thorough than a tabletop exercise.
- **Functional Drills** – These drills test specific functions such as medical response, emergency notifications, warning and communications procedures, and equipment, though not necessarily at the same time. Personnel are asked to evaluate the systems and identify problem areas.
• **Functional Exercises (FE)** – The FE, also known as a command post exercise (CPX), is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions. The objective of the FE is to execute specific plans and procedures and apply established policies, plans, and procedures, under crisis conditions, within or by particular function teams.

• **Full-scale Exercise** – A real-life emergency situation is simulated as closely as possible. This involves company emergency response personnel, employees, management, and community response organizations.

Exercises are an instrument to train for and practice prevention, vulnerability reduction, response, and recovery capabilities in a risk-free environment. They also can be used to assess and improve performance. Exercises are also an excellent way to demonstrate community resolve to prepare for disastrous events. The US Department of Homeland Security, Office for Domestic Preparedness (DHS/ODP), has a goal of helping jurisdictions gain an objective assessment of their capacity to prevent or respond to, and recover from, a disaster so that jurisdictions can make modifications or improvements prior to the occurrence of a real incident. Well-designed and executed exercises are the most effective means of:

• Testing and validating policies, plans, procedures, training, equipment, and interagency agreements.

• Clarifying and training personnel in roles and responsibilities.

• Improving interagency coordination and communications.

• Identifying gaps in resources.

• Improving individual performance.

• Identifying opportunities for improvement.

The Department of Defense (DOD) has identified nineteen critical planning tasks in anticipation of providing support to civilian authorities.

The federal military may be asked to respond to a pandemic in an overwhelming situation or when specific capabilities are needed, but the stakes are so high that military commanders cannot wait until it arrives to start planning how to respond. The DOD Implementation Plan for Pandemic Influenza includes nineteen critical planning tasks that were developed from the five Homeland Security Council planning priorities, and based on DOD capabilities. These tasks establish the basis for DOD’s support to civil authorities. Further, they can be used by civilian agencies to identify support that would fill possible shortfalls in their PI plans and to develop pre-scripted requests for assistance (PSA), which can be developed prior to a pandemic. To validate these PSAs and identify further gaps, a systematic testing and evaluation process should be developed and implemented that will include the supported agency(s) and stakeholders for each of the nineteen tasks.

• **Task #1: Intelligence** (Advance International Cooperation; Ensure Early Warning/Situational Awareness; Ensure Effective Risk Communication).

• **Task #2: Force Protection** (Establish Stockpiles of Vaccines; Establish a Border/Transportation Strategy; Provide Comprehensive Guidance on Community Shielding).

• **Task #3: Biosurveillance, Disease Detection, and Information Sharing** (Ensure Rapid Response; Ensure Early Warning/Situational Awareness; Establish Screening Protocols and Implementation Agreements; Provide Comprehensive Guidance on Community Shielding; Develop Rapid Diagnostics, Advanced Technology/Production for Influenza Vaccine).

• **Task #4: Interagency Planning Support** (Establish a Border/Transportation Strategy; Ensure Rapid Response; Ensure Effective Risk Communication; Provide Guidance on Maximizing Surge Capacity; Provide Clear Guidance for Private Sector/Institutions).

• **Task #5: Surge Medical Capability to Assist Civil Authorities** (Lab; Public Health Teams; Diagnostics; Medical Personnel; Provide Guidance on Maximizing Surge Capacity; Develop Rapid Diagnostics; Establish Stockpiles of Vaccine).
• Task #6: Medical Care to US Forces (Establish Stockpiles of Vaccine).

• Task #7: Patient Transport and Strategic Airlift (Establish a Border/Transportation Strategy; Establish Stockpiles of Vaccine and support evacuation of non-infected individuals).

• Task #8: Installation Support to Civilian Agencies (Advance International Cooperation; Ensure Early Warning/Situational Awareness).

• Task #9 Bulk Transport of Pharmaceuticals/Vaccines (Establish Stockpiles of Vaccine).

• Task #10: Security in Support of Pharmaceutical/Vaccine Production (Critical Infrastructure Protection (CIP); Establish Stockpiles of Vaccine).


• Task #12: Communications Support to Civil Authorities (Ensure Early Warning/Situational Awareness; Ensure Effective Risk Communication).

• Task #13: Quarantine Assistance to US Civil Authorities (Ensure Rapid Response).

• Task #14: Military Assistance for Civil Disturbances (Establish a Border/Transportation Strategy).

• Task #15: Mission Assurance: Defense Industrial Base (Advance Technology/Production Capacity for Influenza Vaccine).

• Task #16: Mortuary Affairs (Ensure Rapid Response).

• Task #17: Continuity of Operations and Continuity of Government (Establish a Border/Transportation Strategy; Provide Clear Guidance for Private Sector/Institutions).

• Task #18: Support to International Allies and Non-Governmental Organizations (NGO) (Advance International Cooperation; Build International Capacity; Ensure Rapid Response; Establish Screening Protocols; Ensure Effective Risk Communication; Provide Clear Guidance for Private Sector/Institutions).

• Task #19: Public Affairs Support to Civil Authorities (Ensure Effective Risk Communication).

Civil authorities should consider DOD response capabilities available to them.

One of the biggest challenges facing the military and civilian planners is how to effectively integrate DOD capabilities into national, state, and local pandemic response. In their planning, civilian authorities at local, state, and federal levels should consider the full range of their potential needs during a pandemic influenza emergency, including needs for DOD support. Prior understanding of the DOD assets available, their limitations, and the requesting procedures can be achieved through careful joint planning, training, and exercising.

Joint planning, training, and exercises will optimize use of resources and improve response.

Meeting essential needs during a pandemic will pose technical and logistical challenges to the military, as well as state and local officials. Essential needs will include: health care (medical care, mental health care); goods (e.g., food, water, and medical supplies); services (e.g., sanitation, energy, communication, financial); public safety and security (police, fire, and rescue); and other societal and infrastructure activities. Assessing these requirements and identifying solutions that combine actions can be achieved most effectively through joint planning and exercises undertaken well in advance of any outbreak and include participation by state and local emergency personnel, the National Guard, local military installations, and the private sector to the extent possible.

Who has the responsibility to ensure exercises are coordinated? The National Implementation Plan outlines the roles of each federal department in a pandemic. It assigns responsibility for medical issues to the Secretary of Health and Human Services; non-medical emergency efforts and coordination to the Secretary of Homeland Security; and international response issues to the Secretary of State. The Department of Defense is a supporting agency in a
pandemic; therefore, it is incumbent on the lead agencies to initiate a comprehensive exercise plan that would include all supporting agencies.

Each agency – civilian and military – has its own specific objectives, and accordingly may have its own approaches to conducting preoperational training and exercise events. DOD traditionally conducts training in a hierarchical structure that allows line authority from top to bottom. State and local governments do not have these rigid authority lines; therefore, they have more flexibility in conducting training and exercises and, absent lines of authority across agencies, must use a different approach for oversight to ensure unity of effort and comprehensiveness of examining plans.

There are many systems and organizations used by state and local emergency response teams with which the military should become familiar. This can be accomplished through training and exercise events that include not only state and local authorities, but also DOD to demonstrate their own capabilities and determine how they can interact with comparable DOD capabilities.

Failure to have the key players at a training or exercise event can have serious impact on the success. DOD should have representation at as many of these as feasible to facilitate planning by both DOD and the civilian agencies that may require DOD support. At such events, DOD should inform the participants of the capabilities and limitations of the military, and the laws and authorities that must be considered in a pandemic. The states’ National Guard forces have traditionally participated in state and local disaster exercises, but a pandemic influenza exercise should expand beyond the state lines and include the federal (United States Code Title X) forces which will be called upon when the states are overwhelmed.

**Exercising the right things at the right time will also help optimize use of response resources.**

The US Department of Homeland Security Office of Domestic Preparedness implemented the Homeland Security Exercise and Evaluation program (HSEEP) as part of the 2002 National Security Act to enhance and assess terrorism prevention, response, and recovery capabilities at the federal, state, and local levels. HSEEP is a threat and performance-based exercise program that provides doctrine and policy for planning, conducting, and evaluating exercises. It includes a cycle, mix, and range of exercise activities of varying degrees of complexity and interaction; however, it does not specifically address pandemic influenza. HSEEP is also a program of financial and direct support designed to assist state and local governments with the development and implementation of a state exercise and evaluation program to assess and enhance domestic preparedness. Some of the areas described below may be particularly important to address through joint training and exercises.

- **The National Incident Management System (NIMS)** was issued by the Department of Homeland Security (DHS) on 1 March 2004, to provide a comprehensive and consistent national approach to all-hazard incident management at all jurisdictional levels and across functional disciplines. The successful implementation of the NIMS depends on the participation and integration of all state, territorial, and community-based organizations, including public, non-governmental, and private organizations that may have a role in preventing, preparing for, responding to, or recovering from an incident. States, territories, tribes, and local jurisdictions should therefore consider and include appropriate organizations in their NIMS implementation efforts, including private sector emergency medical and hospital providers; transportation systems; utilities; and special facilities such as industrial plants, nuclear power plants, factories, military facilities, stadiums, and arenas. This system should be incorporated in any DOD pandemic exercise or training event to coordinate NIMS capabilities with military plans and procedures.

- **Emergency Support Functions (ESF).** The National Response Plan (NRP) applies a functional approach that groups the capabilities of federal departments and agencies and the American Red Cross into a number of longstanding ESFs to provide the planning, support, resources, program implementation, and emergency services that are most likely to be needed during Incidents of National Significance. The federal response to actual or potential incidents of national significance is typically provided through the full or partial
activation of the ESF structure as necessary. The ESFs serve as the coordination mechanism to provide assistance to state, local, and tribal governments, or to federal departments and agencies conducting missions of primary federal responsibility. Exercises can be designed to test individual or related ESFs.

- **The Public Health Emergency Surveillance System (PHESS),** is a surveillance monitoring system designed to detect early trends that may indicate a public health emergency, and the national Health Alert Network (HAN), which is used to communicate urgent information electronically, via telephone and fax machine, to a broad variety of constituencies through a cascading network. PHESS and HAN could be integrated into exercises and training events to examine the reliability and functionality of disease detection and emergency communications for a pandemic. They provide vital health information and the infrastructure to support the dissemination of that information at the state and local levels, and beyond. The HAN Messaging System currently directly and indirectly transmits health alerts, advisories, and updates to over one million recipients. This system is being phased into the overall public health information network (PHIN) messaging component. The command and control structure of the military should be examined in depth to ensure the flow of requirements and support provided by the military will meet worst case scenarios. Communications must be tested to ensure connectivity between the military and civilians.

- **Contingency Situations.** In addition, personnel losses through sickness, caring for sick family members, and forced absenteeism (e.g., taking care of children at home when schools are closed) will be substantial. They will be compounded by absenteeism by persons too scared to leave home to work. Undertaking exercises and using models to assess the impact on state populations will help to develop effective responses at the state and local levels.

The use of exercises will help to define national and state specific requirements. Because the response to a pandemic will require resources and expertise from various agencies and disciplines throughout the federal, state, and local government structures, an exercise should assess the capacity of multiple organizations and the effectiveness of interagency cooperation and interoperable communications. Sharing of data from these exercises will help prepare regions and the nation to better face an influenza pandemic, and can inform other incidents involving naturally occurring diseases or bioterrorism threats. It is important that all concerned understand their respective roles and the governing legal authorities so that they can coordinate their efforts under a complex set of federal, state, tribal, and local laws. Joint training and exercises will help prepare for an effective response to a pandemic influenza emergency.

**DOD planning tasks associated with defined ESFs can help guide joint planning and exercises, and ultimately Defense Support to Civilian Authorities.**

The fifteen ESFs provide a framework to integrate DOD’s nineteen critical planning tasks into a functionally aligned method to develop joint plans and conduct joint exercises. The ESF structure found in the NRP provides a modular structure to energize the precise components that can best address the requirements of the incident. This provides an excellent opportunity for the military to exercise only those elements that would interact with the specific ESF functions. The National Guard will probably be the only part of the military that would provide law enforcement support, and therefore they would match up with ESF #13 – Public Safety and Security related agencies and organizations to plan and rehearse such tasks as quarantine assistance, military assistance for civil disturbances, or security in support of pharmaceutical production or distribution; the DOD Public Affairs staff would link up with ESF #15 – External Affairs personnel to coordinate pandemic influenza messages for both prior to and during a pandemic (see chart below). These are just a couple of examples of how combining the related functional areas could streamline the planning and exercising process.

**Lessons learned must be acted on.**

“At a time when the convergence of public health and national security is plain, it is at our peril that we allow any disconnect to persist. It should also go without saying that after-action ‘hot washes’ should be conducted to identify lessons learned during exercises, and that such lessons should then be fed back into the
Building on previous events is also critical to ensuring that lessons learned are addressed and the solutions are validated. National level exercises such as TOP OFF, ARDENT SENTRY, and GLOBAL TEMPEST should make their observations and conclusions available to states and other agencies to ensure that plans are synchronized and their own exercises can address these issues at their level. For example, governors must be aware of any national level plans to enforce movement restrictions within their state and the triggers for such decisions. State and local officials must determine through worst case scenario exercises what military capabilities they may need that would exceed their own National Guard’s capabilities. This information needs to be fed through the appropriate channels so it can be incorporated in the national level plans and exercises.

Coordination of training and exercises can improve planning efficiency.

Time and resources are critical commodities for the nation’s first responders, agencies, and other organizations with major event preparedness roles that might be participating in pandemic preparation events. They cannot afford to go to multiple exercises or training events that duplicate the same training or evaluate the same tasks. Given the importance of joint planning and exercises, all sides must make an effort to include all relevant partners in training and exercises and to coordinate such events to the extent practical, even in the face of parallel organizational mandates and funding streams.

Recommendations

- Develop and implement DOD guidance for outreach to relevant federal, state, and local agencies that is intended to familiarize key stakeholders with potentially needed DOD emergency support; and, in turn, facilitate DOD planning for defense support to civilian authorities (DSCA).
• Undertake DOD DSCA planning based on this input.

• Develop DOD policy and guidance regarding actions DOD can take to foster joint planning, training, and exercises with civilian authorities at federal, state, and local levels.

• Seek and develop interagency consensus on a comprehensive exercise plan that will follow a logical sequence of events and will identify the key agencies and other stakeholders for each level of event.

• USNORTHCOM should sponsor a dedicated national level pandemic exercise that would include participation by all states to explore the interstate and interagency issues that will occur in a pandemic. This should be followed by DOD outreach to state and local authorities for purposes of specific, tailored local pandemic planning.

• Develop a mechanism to ensure that lessons learned and priority actions identified from each of the exercise events are implemented (and measured) to help improve preparedness.

Conclusion

The Director of CDC, Dr. Julie Gerberding recently stated “What we are learning through our pandemic influenza exercises will help us prepare for whatever the next pandemic or outbreak might bring.” An influenza pandemic will force many key decisions to be made in a dynamic environment of shifting events. Therefore, partnerships must be built now and tested to ensure appropriate and rapid action. The coordinated planning and preparation of the military and other government agencies is more critical than ever before. The impact of the disease, areas affected, capabilities available, and stages of recovery must be considered constantly when determining response. For this reason, localities, states, the federal government, and the private sector will need to test and evaluate pandemic influenza plans through periodic exercises that expose gaps and build relationships among, and across, all levels of government and institutions to effectively address those gaps. The ability to make good decisions “on the fly” will be as important as good planning made in advance of a pandemic. Proper planning and training for an influenza pandemic will produce benefits even if a pandemic proves very mild or does not occur since the preparation involved is transferable to virtually any type of public health emergency. Done well – and jointly by relevant military and civilian stakeholders – pandemic influenza planning will help the nation become better prepared for all types of hazards.

Endnotes:

1 Department of Defense Implementation Plan for Pandemic Influenza, July 2006.

About the Author:

Colonel William Smith is currently serving as the team lead for the pandemic influenza study for the Joint Center for Operational Analysis. Colonel Smith is a retired US Army civil affairs officer recalled to active duty in 2005. Prior to being recalled, he was working for Titan Corporation as an operations analyst in the Future Concepts Divisions of US Special Operations Command. In addition to the pandemic influenza study, he has served as the JCOA team lead for collection teams going to Afghanistan and Pakistan. He is a graduate of Army Command and General Staff College and the Air War College, and received a Bachelor of Science Degree in Education from Central Missouri State University.
Achieving Unity of Effort within Government During a Pandemic Influenza Crisis

David A. Zacharias
Operational Research Analyst

Currently, the H5N1 subtype influenza virus (commonly called Bird Flu) has infected over 200 people and demonstrates remarkable similarity with the 1918 H5N1 subtype influenza virus. It is believed that the 1918 H5N1 subtype influenza virus may have killed as many as 25 million people in the first 25 weeks of its initial outbreak, as compared to acquired immune deficiency syndrome (AIDS) which has killed more than 25 million people over the past 25 years.1 If a pandemic of this nature were to occur in our established society today, manifesting similar mortality rates, the lasting demographic, societal, and economic effects are not only unknown, but incalculable. In 1918, 15-40 year olds and pregnant women were hit the hardest. In essence a similar type disaster would affect the most productive population in the United States, dramatically increase the average age as the birth rate declined, reduce the consumption of goods, and overwhelm healthcare providers for a long period of time. Generally, long lasting pandemic effects are ignored in most economic analyses:2 however, the government must assume the worst consequences. Therefore, if severe pandemic circumstances are to be mitigated, unity of effort among all the diverse government agencies will be critical in preserving United States’ (US) national security.

The recent disaster of Hurricane Katrina demonstrated the difficulty in aligning the response efforts of numerous federal government agencies to achieve unity of effort when trying to accomplish complex goals and objectives. In the aftermath of that multistate storm, coordination for providing relief assets and resources was disconnected as each affected state had a different federal coordinating officer (FCO) appointed to manage their particular needs. Additionally, the FCO’s superior was not the Department of Homeland Security designated principal federal official, which precluded a fully coordinated regional response through each of the joint field offices (JFO) that were established. Accordingly, management of federal resources among the states was resolved in Washington, DC, an intrinsically inefficient process.3

In New Orleans, the local incident command organization was overwhelmed from the catastrophe’s onset. Communication problems between higher-level authorities prevented the responders from compiling an accurate operational picture. The National Incident Management System (NIMS) proved incapable of providing an organizational structure to synchronize efforts between the numerous federal, state, and non-governmental agencies engaged in relief efforts.4

Although recent changes to the National Response Plan have been designed to improve better coordination within the interagency for government disaster response efforts, effectively integrating supporting Department of Defense (DOD) operational capabilities within the boundaries of US law still remains challenging.

During government relief operations for Hurricane Katrina, supporting military forces were unable to achieve effective coordination with other governmental agencies. This situation developed because separate chains of command directed each state’s National Guard

Unity of Command

The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective. Unity of command means that all forces operate under a single commander with the requisite authority to direct all forces employed in pursuit of a common purpose. Unity of effort, however, requires coordination and cooperation among all forces toward a commonly recognized objective, although they are not necessarily part of the same command structure. In multinational and interagency operations, unity of command may not be possible, but the requirement for unity of effort becomes paramount. Unity of effort – coordination through cooperation and common interests – is an essential complement to unity of command.
and federal Title 10 United States Code (USC) forces. National Guard personnel who were deployed to the disaster area worked directly for The Adjutant General (TAG) and Governors of the state they were supporting, while Title 10 response forces were assigned to Joint Task Force - Katrina (JTF-K) under the command of Lieutenant General Russell Honoré.

While the National Guard and Title 10 military forces provided significant assistance to civil authorities, they did so without adequate means (facilities, equipment, communications, and procedures) to successfully combine operational capabilities and execute mutually supporting operations. The inability of the DOD to coordinate disparate military forces that lacked unity of command stymied the overall federal government’s response.5

The Joint Staff Officer’s Guide indicates that the primary purpose for unity of command within military organizations is to assure unity of effort by forces in combat.6 Unity of command means a single responsible commander has been given the inherent authority to direct and employ his assigned forces in pursuit of a common goal on the battlefield. However, different types of military forces employed together to conduct operations other than war, and who are not part of the same command structure, must attain unity of effort to achieve common objectives, often in a different manner.

For example, when DOD conducts military multinational operations, providing for unity of command is unlikely, but the need for unity of effort is absolute. Absent unity of command, the primary means for different organizations to reach common goals is through effective coordination by way of a solid partnership and close cooperation.

In the post-Katrina political environment, it became clear that the norm for a federal government response to any future catastrophic events within the United States will include employment of both National Guard and Title 10 capabilities. However, a state’s National Guard and federal Title 10 military forces are fundamentally different entities as prescribed by the United States Constitution and related laws. As a

---

**Command and Control vs Operational Control**

**Command and Control** — The *exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission*. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called C2. (JP 0-2)

**Operational Control** — Command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority) and may be delegated within the command. When forces are transferred between combatant commands, the command relationship the gaining commander will exercise (and the losing commander will relinquish) over these forces must be specified by the Secretary of Defense. Operational control is the *authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission*. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called OPCON. (JP 0-2)

---

Source Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms
Homeland Security vs Homeland Defense

Homeland Security (HLS) is not the same as Homeland Defense (HLD)

- HLS is the prevention, preemption, and deterrence of, and defense against, aggression targeted at U.S. territory, sovereignty, domestic population, and infrastructure as well as the management of the consequences of such aggression and other domestic emergencies.

- HLD is the protection of U.S. territory, domestic population and critical infrastructure against military attacks emanating from outside the United States.

USNORTHCOM HLS Response Missions

- Enemy Attack
- Insurrection
- Civil Disturbance
- Earthquakes
- Fire & Flooding
- Drought
- Landslides
- Meteor & Space Debris Impacts
- Animal Disease
- Mass Immigration
- Hurricane/Typhoon/Tornado
- Tsunami/Tidal Wave
- Volcanic Eruption
- Biological Incident
- Explosion
- Radiological Incident
- Snowstorm
- Oil Spill
- Chemical Incident
- Pandemics / Epidemics
- Postal Work Stoppage
- Military Support to Civil Authorities
- Military Support for Civil Law Enforcement
- Military Support For Civil Disturbances
- Counterdrug Operations
- Critical Infrastructure Protection
- Continuity of Operations
- Counter Terrorism
- State Funerals

The threat of pandemic influenza is a US national security concern and is considered to be a homeland security issue as defined by the Homeland Security Act of 2002. As such, the President has tasked DOD in the National Strategy for Pandemic Influenza Implementation Plan to support a federal government response to pandemic influenza if the need should arise. Since US Northern Command (USNORTHCOM) missions are oriented to homeland defense (HLD) and civil support (CS) operations, it is expected that USNORTHCOM will be assigned to conduct DOD-wide planning and coordination in support of US government pandemic response efforts. This planning should provide a suitable means to integrate military operational capabilities with interagency resources to support a unified federal government effort, which can effectively mitigate a 1918-like pandemic scenario. Because the National Guard is not resourced or organized to provide an immediate or large scale response to a catastrophic event, DOD relies on USNORTHCOM’s civil support planning to provide the means by which unity of effort can be attained among supporting federal military forces.

However, USNORTHCOM Concept Plan 2591 (CONPLAN For Pandemic Influenza) states that Title 10 USC commanders cannot exercise command and control over National Guard forces in Title 32/State Active Duty (SAD) status; nor can National Guard commanders in Title 32/SAD status exercise command and control over Title 10 forces. This CONPLAN also describes the following methods of realistically attaining unity of effort between federal and state military forces:
Joint Center for Operational Analysis (JCOA) Bulletin

Differences in Military Status
Title 10 USC Status vs National Guard Status

- **Title 10 Duty (Active Duty Status)**
  - Federal Money, Federal Control
  - Federal military troops on active duty under DoD chain of command
  - UCMJ Applies

- **Title 32 Duty (Full Time National Guard Duty Status)**
  - Federal Money, State Control
  - In Training status for war fighting missions
  - For Federal missions using Federal dollars
  - Includes Inactive Duty for Training (IDT) and (Active Training) AT

- **State Active Duty (SAD):**
  - State Money, State Control
  - Governor controlled with state funding

Source: National Guard Bureau Office of the Chief Counsel and Chief, Counter-drug and Operational Law Briefing

- Conducting mutual operations within the National Incident Management System (NIMS)

- Using dual-status commanders pursuant to Title 32 USC § 325, or

- The establishment of a coordinating authority through a memorandum of agreement.

Based on the failure of NIMS to effectively align responder efforts for Hurricane Katrina, USNORTHCOM lacks an operationally feasible tool for effectively coordinating military support to civil authorities. As DOD has not fully implemented a training and exercise program to familiarize military personnel on NIMS functionality and the use of this specific non-military communications system for disaster management, using another coordination methodology in concert with NIMS employment would be prudent.

Unless National Guard forces are federalized under Title 10 USC, USNORTHCOM is forced to develop a command and control methodology based on Sections 315 and/or 325 of Title 32 USC.

Section 325 of Title 32, as amended in 2004, allows a National Guard officer to retain his or her respective state commission after being ordered to federal military active duty (per Title 10 USC) and to serve in a “dual status” capacity. This allows the National Guardsman to exercise command authority in a mutually exclusive manner over both Title 10 and Title 32/SAD military personnel.10

This military command and control process is easily implemented by a Memorandum of Agreement (MOA) between federal and state authorities. The remaining requirement for placing the selected National Guard officer on active duty in command of a dual-status joint task force (JTF) becomes a DOD administrative task, which occurs after the President authorizes and the respective state governor approves the decision to use this option.

TITLE 32 USC § 325

- Title 32 USC 325 provides for the appointment of a National Guard officer familiar with the state and local area of operations to command in both a state (Title 32) and federal (Title 10) status thereby assuring a state-federal unity of effort.

- This dual status appointment requires authorization by the President and consent of the State Governor.

Source: National Guard Bureau Office of the Chief Counsel and Chief, Counter-drug and Operational Law Briefing and Title 32 USC.
There are some considerations that a dual-status commander must account for in order to allow smooth operational implementation of this authority and concept of operations. These include:

- Understanding the separate roles and mission of both Title 10 and National Guard (Title 32/SAD) forces.
- Maintaining separation of funding between the different military status units.
- Not confusing Title 10 and Title 32 authorities:
  - Use separate Title 10/32 staff members for important leadership and decision making roles.
  - Remember that “dual status” does not extend to staff members.
- Do not violate the Posse Comitatus Act or Department of Defense Directive 5525.5 when employing Title 10 forces.

This arrangement is most advantageous to a single state governor: (1) it allows the governor to maintain operational control of his state National Guard assets, while his state is being supported by federal military forces through a commander reporting directly to him through the TAG; and (2) it allows for the designated dual-status commander, familiar with a particular state and local areas of operations, to provide unity of effort effectively for the two disparate military forces reporting to separate and distinct chains of command. This command and control methodology works particularly well in certain situations, such as the recent 2004 G8 Summit held in Georgia and in other National Special Security Events (NSSE). Another good example of successful dual-status command and control

---

**Posse Comitatus Act**

**18 USC § 1385**

“Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned for not more than two years, or both.”

---

**Posse Comitatus And The National Guard**

- State Active Duty and Title 32 USC status Guardsmen *(NOT in the service of the United States)* have whatever authority is provided by State law to take action regarding criminal activity occurring in their presence, often the same authority as a private citizen.
- Title 10 USC Guardsmen *(IN the service of the United States)* do NOT have the authority to trespass, stop, question, detain, arrest, or search private citizens.

---

Source: National Guard Bureau Office of the Chief Counsel and Chief, Counter-drug and Operational Law Briefing

---

Joint Center for Operational Analysis (JCOA) Bulletin
was Operation Winter Freeze. This operation employed military resources consisting of National Guardsmen from three northeastern states, as well as Title 10 forces. The operation was conducted in support of the nation’s federal law enforcement agencies for the interdiction of suspected transnational threats within and along the approaches to the continental United States over a 295 mile stretch of the US-Canadian border.12

The primary disadvantage of a dual-status command and control scheme is that it does not readily support a large geographic area of operations which includes multiple states, as was the case during the Hurricane Katrina response. Using this form of military control in this situation would require as many dual-status commanders as there were affected state governors, unless an MOA could be rapidly agreed upon. Control of the military would quickly become unwieldy as the federal government and the various governors competed for limited military capabilities.

On 17 October 2006, the National Defense Authorization Act for Fiscal Year 2007 was signed into law by President Bush as Public Law 109-364.13 This legislation amends chapter 15 of Title 10 USC § 333 – the so-called “Insurrection Act” of 1807 and changed its name from “Insurrection” to “Enforcement of Laws to Restore Public Order.” As such, the Insurrection Act, Section 333, has been revised and the narrow interpretation of Title 10 USC Chapter 15 authorizing the use of the nation’s armed forces to put down insurrections, enforce federal authority, and suppress conspiracies that may interfere with enforcement of either federal or state law, has been conspicuously broadened to not even require affected state governor authorization or approval.

The President is now allowed to federalize the National Guard along with employing federal armed forces as necessary to suppress domestic violence, obstruction and resistance to federal law, and federal court orders.
Furthermore, this authority does not appear to be impaired by the Posse Comitatus Act (Title 18 USC § 1385) as described previously. Although these amendments were born out of a perceived substandard federal response to Hurricane Katrina, the legal use of federal military forces to enforce federal law is a new presidential power.

This alternative would effectively centralize control of forces and relieve all military funding burdens from the states. However, the lawful usurping of a governor’s primary military operational response force through which he protects and supports his constituency, may be politically suspect unless circumstances are so dire that state’s rights must be trumped to sustain national security.

Further, establishing command and control of all military forces using this means would be politically cumbersome since state governors generally oppose federalizing their National Guard without their explicit consent. Governors are elected state government officials with primary responsibility for making decisions concerning the safety and well being of their state’s citizens; also, they fully believe they are in the best position to coordinate the resources necessary to prepare for, respond to, and recover from any catastrophe. They argue that although federal aid and assistance is sometimes necessary to provide for an adequate disaster response, the US Constitution inherently gives them complete control of their respective state’s capabilities—to include their National Guard—to successfully accomplish these inherent responsibilities.

Another concern by governors is that states have already planned the allocation and apportionment of National Guard resources for pandemic response missions. Specifically, many states already have Internet websites promulgating pandemic influenza procedures and plans. Almost all of the states’ plans address a broad range of issues regarding command and control, surveillance, vaccination, antiviral drugs, communication, and emergency management and containment measures. The National Guard provides a significant operational capability for each governor to implement state wide plans.

Since most governors have limited operational resources, they remain open to discussing how best to team with federal emergency officials when having to deal with disastrous events while maintaining control over their National Guard assets. Therefore, it is incumbent upon USNORTHCOM as the primary military planner for defense support to civilian authorities (DSCA), to provide an enduring military command and control scheme that will maximize the use of DOD capabilities by combining and synchronizing National Guard and federal military resources effectively.

Since Title 10 USC forces are not routinely trained to conduct DSCA type missions of the magnitude implicit within this newly formed law, this option appears to be a “fail-safe” solution. Because this new paradigm is yet untested, a thorough analysis of the newly enacted legislation must be performed to determine overall political implications, impact on DSCA, and consequences of presidential implementation.

The establishment of a long-term coordinating authority between governors and the Commander of USNORTHCOM is the other
military control construct that could be used without undue political angst. This approach could be quite effective and still maintain the integrity of state’s rights. This course of action is suggested in USNORTHCOM CONPLAN 2591 that would provide for coordinating relationships between Title 10 and Title 32/SAD organizations. In this capacity, coordinating authority would be granted to Title 10 military officer(s) in command assignments.

This operational environment would provide the distinct advantage for each of the states to respond to their specific governor’s intent as required. Additionally, this methodology would provide the means to effectively maintain separate and limited domestic roles for Title 10 forces as prescribed by US law. This collaboration scheme is a reflection of multinational missions that both National Guard and Title 10 forces have conducted before. The primary issue involved in using this methodology is chiefly political in nature. Political inhibitors can be overcome when there is a necessity for unity of purpose. In the event of pandemic influenza, the need for maintaining and sustaining national security and safety of the citizenry is paramount for all involved.

The command and control structure proposed in USNORTHCOM CONPLAN 2591 (next page) shows a coordinating relationship between the Title 10 regional JTF commanders and each of their associated state’s National Guard JTF elements. Another coordinating relationship is also established through the National Guard Bureau (NGB) with the governors through the TAGs. How these coordinating relationships are implemented will be the basis for effective military support being executed during a pandemic, and will set the precedent for all future joint military National Guard and Title 10 multistate disaster response operations.

How the coordination will occur between designated regional JTF commanders (Title 10) and the states is not clear. Executing DSCA in response to a pandemic will require exceptionally close collaboration and communication between all federal, state, and local responders. This is especially important in order to protect the health of the responders, as well as establish and maintain effective situational awareness.

Coordinating Authority Defined

A commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more Military Departments, two or more joint force components, or two or more forces of the same Service.

The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. In the event that essential agreement cannot be obtained, the matter shall be referred to the appointing authority. Coordinating authority is a consultation relationship, not an authority through which command may be exercised.

Coordinating authority is more applicable to planning and similar activities than to operations. (JP 0-2)

Source Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms
The immediacy for DSCA command and control implementation depends on when efficient human to human transfer of H5N1 pandemic influenza presents itself. It is expected to be first detected overseas, which implies that the US international response has to be simultaneous with pre-planned domestic actions to effectively contain and mitigate pandemic influenza effects. For instance, the public health community is expected to be overwhelmed quickly and will require rapid regeneration to mitigate multiple waves of influenza infectious events. Some state plans have already accounted for this eventuality and have assigned distribution and security missions for anti-viral drugs and vaccines to the National Guard.

To provide a credible national mitigation effort in keeping with the National Strategy for Pandemic Influenza Implementation Plan, the DSCA coordination framework must be in place at the onset of the pandemic. This will have the added benefit of more efficiently incorporating federal government support planning and military assistance requirements into military planning. USNORTHCOM and NGB planners must work closely with intergovernmental players on a regular and routine basis.

To date, neither the NGB nor USNORTHCOM have fully addressed this crucial issue in their planning. Until multistate, multi-jurisdictional coordination is satisfactorily established that involves the best operational force the nation possesses, the means to gather all the necessary resources and establish purposeful unity of effort cannot, and will not, be accomplished.

A Feasible Solution

DOD could immediately initiate formal “coordinating authority” relationships among the 50 states by instituting coordinating authority agreements between

The immediacy for DSCA command and control implementation depends on when efficient human to human transfer of H5N1 pandemic influenza presents itself. It is expected to be first detected overseas, which implies that the US international response has to be simultaneous with pre-planned domestic actions to effectively contain and mitigate pandemic influenza effects. For instance, the public health community is expected to be overwhelmed quickly and will require rapid regeneration to mitigate multiple waves of influenza infectious events. Some state plans have already accounted for this eventuality and have assigned distribution and security missions for anti-viral drugs and vaccines to the National Guard.

To provide a credible national mitigation effort in keeping with the National Strategy for Pandemic Influenza Implementation Plan, the DSCA coordination framework must be in place at the onset of the pandemic. This will have the added benefit of more efficiently incorporating federal government support planning and military assistance requirements into military planning. USNORTHCOM and NGB planners must work closely with intergovernmental players on a regular and routine basis.

To date, neither the NGB nor USNORTHCOM have fully addressed this crucial issue in their planning. Until multistate, multi-jurisdictional coordination is satisfactorily established that involves the best operational force the nation possesses, the means to gather all the necessary resources and establish purposeful unity of effort cannot, and will not, be accomplished.

A Feasible Solution

DOD could immediately initiate formal “coordinating authority” relationships among the 50 states by instituting coordinating authority agreements between
each of the governors and the Commander, USNORTHCOM. Coordinating authority agreements should also be established without delay between the individual state TAGs and the associated regional JTF headquarters commanders as designated by USNORTHCOM.

Endnotes:

4. Ibid.
5. Ibid.
9. USNORTHCOM CONPLAN 2591. CONPLAN FOR PANDEMIC INFLUENZA Base Plan. 16 August 2006.
17. USNORTHCOM CONPLAN 2591. CONPLAN FOR PANDEMIC INFLUENZA Base Plan. 16 August 2006. Ibid.
18. Ibid.

About the Author:

David Zacharias is a retired naval officer having more than thirty years of active duty service as a nuclear-trained submariner, Carrier Battle Group Operations Officer, and Joint Specialty Officer. His experience includes the gamut of naval warfare and joint duty assignments involving joint operations, joint training, and joint concept development and experimentation. Employed by CUBIC Defense Applications Group Threat Technologies Division, he currently serves as an operational analyst focusing on CBRNE related matters for US Joint Forces Command Joint Center for Operations Analysis.
Fact Sheet: Implementation of the National Strategy for Pandemic Influenza: Six-Month Status Report

Today, Frances Fragos Townsend, The Assistant To The President For Homeland Security And Counterterrorism, Summarized Progress The U.S. Government Has Made Implementing The Actions In The National Strategy For Pandemic Influenza Implementation Plan. The National Strategy for Pandemic Influenza was released by the President on November 1, 2005, on the same day that the President requested $7.1 billion from Congress to accomplish the objectives of the Strategy. The Implementation Plan was released on May 3, 2006, and directed Federal Departments and Agencies to undertake over 300 actions in support of the National Strategy.

The Progress Report Released Today Is An Action-By-Action Summary Of Progress So Far. In order to track implementation of the Strategy, each of its more than 300 actions includes a measure of performance and a timeline for completion. This report summarizes the state of progress on each action (“completed” or “in progress”), and provides a description of efforts that have been undertaken by the responsible Departments and Agencies.

Summary Of Progress Implementing The Strategy

Ninety-Two Percent Of All Actions Due Within Six Months Of Release Of The Implementation Plan in May 2006 Have Been Completed. The remaining eight percent of actions are still in progress, and should be completed shortly.

This Outcome Is A Result Of The Tireless Work Of Federal Employees In Departments And Agencies Across The Government, Working Domestically And Abroad. Specific progress includes:

• Federal Pandemic Preparedness Plans: All Federal Departments and Agencies are developing their own pandemic preparedness plans to ensure that they are addressing all elements of a comprehensive checklist. The “meta-checklist” guiding their efforts is available for any institution to use, at www.pandemicflu.gov.

• Statewide Pandemic Planning Summits: Secretary Leavitt and other senior officials from the Department of Health and Human Services have led Statewide pandemic planning summits in all States. We are investing $600 million in State and local preparedness efforts, including the exercising of pandemic plans across communities and at all levels of government.

• Community-Wide Mitigation Strategies: We have focused unprecedented attention on the role of community-wide mitigation strategies, such as early school closure, cancellation of public gatherings, and other “social distancing” behaviors in reducing illness during a pandemic. Interim guidance on the ways communities can use these interventions most effectively will be released in January.

• Vaccine Production: We have invested over $1 billion in the development of new cell-culture technologies for influenza vaccine production, and will soon announce contracts to adapt existing egg-based vaccine facilities for pandemic vaccine production.

• Adjuvants: Very promising results on the testing of “dose-stretching” materials, also known as “adjuvants,” have recently been announced by companies involved in this research. If proved to be safe and effective, adjuvants could allow a dramatic reduction in the amount of vaccine necessary to immunize a person against a pandemic virus, thereby allowing us to vaccinate many more people with our vaccine stockpile.

• Rapid Diagnostic Tests: We have invested in the development of rapid diagnostic tests, to allow swift recognition of a pandemic virus in the human
population, thereby allowing rapid isolation and treatment of infected individuals.

- **Bird Surveillance System**: We have put a nationwide wild bird surveillance system in place to provide early warning of an outbreak of H5N1 in the bird population, and are reporting the results of these efforts to the public on an ongoing basis.

- **International Efforts**: We have invested $434 million in international efforts, far more than any other nation, in an effort to build infrastructure in affected regions of the world to rapidly recognize and respond to an outbreak of a pandemic virus. In addition to improving these nations’ ability to control outbreaks of H5N1 in their bird populations, these systems may make it possible to slow, stop, or limit the spread of a pandemic virus to the U.S.

**The Work Ahead**

**This Progress Is Very Promising, But Much Work Remains.** In addition to the small number of “six-month” actions that are not yet complete, a number of other actions that are due at nine, 12, and 24 months are underway and will require sustained effort and resources.

**Actions Due Within Six Months.** Actions due within six months that are still underway include the development of best practices and guidance for selected State and local entities and improvements in mortality reporting by communities. It is anticipated that these actions will be rated “complete” shortly.

**Most Importantly, We Must Continue To Encourage All Entities, From Government Agencies To Schools To Individuals And Families, To Develop Their Own Pandemic Plans.** This is essential for the resilience of communities and of the Nation. Much of the guidance necessary for this planning can be found on www.pandemicflu.gov.

[1] Due to ongoing scientific analysis and the need for additional consultation with public health, education, and faith and community based organizations, the due dates for 12 actions related to community containment were moved to February 1, 2007. Several of these actions have been completed, but may require revision upon the completion of the interim community containment guidance in December 2006. These 12 actions are not counted in this summary of progress implementing the Strategy.

Return to this article at: http://www.whitehouse.gov/news/releases/2006/12/20061218.html
Notes
Notes
JCOA BULLETIN DELIVERED TO YOU ELECTRONICALLY!

The JCOA Bulletin is now available through electronic subscription and distribution to approved subscribers. Subscriptions are currently only available on the Non-Secure Internet Protocol Router Network (NIPRNET).

Users within the jfcom.mil: There is no need to register for a Webgate account. You have two options to access the sign up: first option, you can go to the JWFC homepage and locate the link on the right hand column for the JCOA Bulletin; or, second option, under the sub-heading ‘Publication’ on the Command Support page, locate the link for the JCOA Bulletin.

Once at the JCOA Bulletin page, you will see the subscription link. Click on the link, fill out, and submit the subscription form.

You will be notified via e-mail when your subscription registration has been approved (if your request must be manually approved). The next time the JCOA Bulletin is distributed against the JCOA list of subscribers, you will receive e-mail with the latest Bulletin attached.

Users outside the jfcom.mil: You will need to register and be approved for a JWFC Webgate account. The Webgate account allows you to access the JCOA web site and thus submit the Bulletin subscription request. Go to the unclassified web site by the following URL: http://jfcom.mil/. The webgate page for the NIPRNET will open and you may select “Account Request” from the left side of the page.

When filling out the information needed to obtain a Webgate account, you will be asked for a sponsor/POC and a purpose for the request. For the purpose of obtaining an electronic JCOA Bulletin subscription, please use Mr. Mike Barker as the sponsor/POC.

Once a Webgate account has been established, you will need to visit the same URL above and sign in. Then go to the organization’s link on the left side. After reaching the JCOA homepage, click on the link for a subscription to the JCOA Bulletin. Fill out and submit the subscription form.

You will be notified via e-mail when your subscription registration has been approved (if your request must be manually approved). The next time the JCOA Bulletin is distributed against the JCOA list of subscribers, you will receive an e-mail with the latest Bulletin attached.

Disclaimer
The opinions, conclusions, and recommendations expressed or implied within are those of the contributors and do not necessarily reflect the views of the Department of Defense, USJFCOM, the JCOA, or any other government agency. This product is not a doctrinal publication and is not staffed, but is the perception of those individuals involved in military exercises, activities, and real-world events. The intent is to share knowledge, support discussions, and impart information in an expeditious manner.