

GAO

Report to the Committee on Oversight  
and Government Reform, House of  
Representatives

June 2007

# INFLUENZA PANDEMIC

## DOD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation





Highlights of [GAO-07-696](#), a report to the Committee on Oversight and Government Reform, House of Representatives

## Why GAO Did This Study

An influenza pandemic could impair the military's readiness, jeopardize ongoing military operations abroad, and threaten the day-to-day functioning of the Department of Defense (DOD) due to a large percentage of sick or absent personnel.

GAO was asked to examine DOD's pandemic influenza planning and preparedness efforts. GAO previously reported that DOD had taken numerous actions to prepare departmentwide, but faced four management challenges as it continued its efforts. GAO made recommendations to address these challenges and DOD generally concurred with them. This report focuses on DOD's combatant commands (COCOM) and addresses (1) actions the COCOMs have taken to prepare and (2) management challenges COCOMs face going forward. GAO reviewed guidance, plans, and after-action reports and interviewed DOD officials and more than 200 officials at the 9 COCOMs.

## What GAO Recommends

GAO recommends that DOD take steps to clarify the COCOMs' roles and responsibilities for pandemic influenza-related efforts, identify the sources and types of resources needed for the COCOMs to accomplish these efforts, and develop options to mitigate the effects of factors that are outside of their control. DOD concurred with each of these recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-07-696](http://www.gao.gov/cgi-bin/getrpt?GAO-07-696).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Davi M. D'Agostino at (202) 512-5431 or [dagostinod@gao.gov](mailto:dagostinod@gao.gov).

# INFLUENZA PANDEMIC

## DOD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation

### What GAO Found

COCOMs have taken numerous management and operational actions to prepare for an influenza pandemic, and the COCOMs' efforts are evolving. Each of DOD's nine COCOMs has established or intends to establish a working group to prepare for an influenza pandemic. Additionally, eight of the nine COCOMs have developed or are developing a pandemic influenza plan. Half of the COCOMs have conducted exercises to test their pandemic influenza plans and several are taking steps to address lessons learned. Five of the nine COCOMs have started to use various media, training programs, and outreach events to inform their personnel about pandemic influenza. Each of the geographic COCOMs has worked or plans to work with nations in its area of responsibility to raise awareness about and assess capabilities for responding to avian and pandemic influenza.

Although COCOMs have taken numerous actions, GAO identified three management challenges that may prevent the COCOMs from being fully prepared to effectively protect personnel and perform missions during an influenza pandemic, two of which are related to issues GAO previously recommended that DOD address. First, the roles, responsibilities, and authorities of key organizations relative to others involved in DOD's planning efforts remained unclear in part due to the continued lack of sufficiently detailed guidance from the Secretary of Defense or his designee. As a result, the unity and cohesiveness of DOD's efforts could be impaired and the potential remains for confusion and gaps or duplication in actions taken by the COCOMs relative to the military services and other DOD organizations, such as in completing actions assigned to DOD in the *Implementation Plan for the National Strategy for Pandemic Influenza*. Second, GAO identified a disconnect between the COCOMs' planning and preparedness activities and resources, including funding and personnel, to complete these activities, in part, because DOD's guidance does not identify the resources required to complete these activities. The continued lack of a link between planning and preparedness activities and resources may limit the COCOMs' ability to effectively prepare for and respond to an influenza pandemic, including COCOMs' ability to exercise pandemic influenza plans in the future. Third, GAO identified factors that are beyond the COCOMs' control—such as limited detailed guidance from other federal agencies on support expected from DOD, lack of control over DOD's stockpile of antivirals, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical materiel—that they have not yet fully planned how to mitigate. While GAO recognizes the challenge of pandemic influenza planning, not yet developing options to mitigate the effects of factors that are beyond their control may place at risk the COCOM commanders' ability to protect their personnel and perform missions during an influenza pandemic. For example, if a nation decides to close its borders at the start of a pandemic, COCOMs and installations may not be able to obtain needed supplies, such as antivirals.

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**Abbreviations**

ASD	Assistant Secretary of Defense
ASD(HD&ASA)	Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs
CENTCOM	Central Command
COCOM	combatant command
DOD	Department of Defense
EUCOM	European Command
JFCOM	Joint Forces Command
NORTHCOM	Northern Command
PACOM	Pacific Command
SOCOM	Special Operations Command
SOUTHCOM	Southern Command
STRATCOM	Strategic Command
TRANSCOM	Transportation Command
WHO	World Health Organization

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United States Government Accountability Office  
Washington, DC 20548

June 20, 2007

The Honorable Henry A. Waxman  
Chairman  
The Honorable Tom Davis  
Ranking Member  
Committee on Oversight and Government Reform  
House of Representatives

An influenza pandemic—a novel influenza virus that has the ability to infect and be passed efficiently among humans—could significantly impair the military’s readiness, jeopardize ongoing military operations abroad, and threaten the day-to-day functioning of the Department of Defense (DOD) due to a large percentage of sick or absent personnel. The vulnerability of U.S. armed forces to an influenza pandemic was demonstrated during World War I when at least 43,000 U.S. servicemembers died—about half of all of the deaths of U.S. servicemembers during World War I—due to influenza or influenza-related complications, and another 1 million servicemembers were hospitalized, which limited the military’s ability to continue ongoing missions. According to the Centers for Disease Control and Prevention, the “Spanish flu” pandemic of 1918–1919 killed at least 50 million people worldwide, including approximately 675,000 in the United States.<sup>1</sup> According to the World Health Organization (WHO), it is not a question of if, but when, another influenza pandemic will occur. During the peak weeks of an outbreak of a severe influenza pandemic, the Homeland Security Council estimates that 40 percent of the U.S. workforce might not be at work due to illness, the need to care for family members who are sick, or fear of becoming infected. DOD military and civilian personnel and contractors would not be immune and the department would face a similar absentee rate.

Recent concerns about the possibility of an influenza pandemic have arisen due to an unprecedented outbreak of H5N1, a deadly strain of avian influenza which began in Hong Kong in 1997 and spread among bird

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<sup>1</sup>The 1957 “Asian flu” pandemic and 1968 “Hong Kong flu” pandemic caused far fewer deaths—70,000 and 34,000, respectively, in the United States—partly because of antibiotic treatment of secondary infections and more aggressive support care.

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populations in parts of Asia, the Middle East, Europe, and Africa, with limited infections in humans. According to WHO, 309 human cases of H5N1 resulting in 187 human deaths had been reported worldwide as of May 31, 2007. Scientists and public health officials agree that the rapid spread of the virus in birds and the occurrence of limited infections in humans have increased the risk that this disease may mutate into a form that is easily transmissible among humans. According to WHO, three conditions must be met before an influenza pandemic begins: (1) a new influenza virus subtype that has not previously circulated in humans must emerge, (2) the virus must be capable of causing disease in humans, and (3) the virus must be capable of being passed easily among humans. The H5N1 virus currently meets the first two of these three conditions.

To address the potential threat of an influenza pandemic, the Homeland Security Council issued its *National Strategy for Pandemic Influenza* in November 2005.<sup>2</sup> The *Implementation Plan for the National Strategy for Pandemic Influenza* (national implementation plan),<sup>3</sup> which was released in May 2006, tasked each federal agency with developing its own implementation plan that addresses two issues: (1) how it would address the actions assigned to the agency and (2) its approach to employee safety, continuity of operations, and communications with stakeholders departmentwide. DOD finalized its implementation plan for pandemic influenza in August 2006 and released the plan publicly in May 2007.<sup>4</sup> Of the more than 300 actions in the national implementation plan, DOD is responsible for 114 actions—31 actions as a lead agency and 83 actions as a supporting agency.<sup>5</sup> Appendix I lists these actions, the implementation deadline, and the lead DOD organization responsible for implementing the action.

DOD began its departmentwide planning and preparedness efforts in September 2004, when the Assistant Secretary of Defense (ASD) for

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<sup>2</sup>Homeland Security Council, *National Strategy for Pandemic Influenza* (Washington, D.C.: November 2005).

<sup>3</sup>Homeland Security Council, *Implementation Plan for the National Strategy for Pandemic Influenza* (Washington, D.C.: May 2006).

<sup>4</sup>DOD, *Department of Defense Implementation Plan for Pandemic Influenza* (Arlington, Va.: August 2006).

<sup>5</sup>The national implementation plan generally identifies lead and support roles for the actions federal agencies are responsible for completing but it is not explicit in defining these roles or processes for coordination and collaboration.

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Health Affairs issued guidance to the military departments on preparing for an influenza pandemic. The Deputy Secretary of Defense designated the ASD for Homeland Defense and Americas' Security Affairs (ASD[HD&ASA]), within the Office of the Under Secretary of Defense for Policy, as the lead for DOD's pandemic influenza planning efforts,<sup>6</sup> and DOD identified functional leads to oversee the 31 actions assigned to DOD as a lead agency in the national implementation plan. The ASD(HD&ASA) is the lead for those actions related to providing defense support of civil authorities, the ASD for Health Affairs is the functional lead for force health protection actions, and the Joint Staff oversees the combatant commands' (COCOM) planning and implementation efforts. In August 2006, the Secretary of Defense named the U.S. Northern Command (NORTHCOM) the lead COCOM for directing, planning, and synchronizing DOD's global response to pandemic influenza.

As operational commanders, DOD's unified COCOMs are an essential part of the department's pandemic influenza planning. There are currently nine COCOMs—five with geographic responsibilities and four with functional responsibilities.<sup>7</sup> The five COCOMs with geographic responsibilities are the U.S. Central Command (CENTCOM), U.S. European Command (EUCOM), NORTHCOM, U.S. Pacific Command (PACOM), and U.S. Southern Command (SOUTHCOM). Their geographic areas of responsibility are shown in figure 1. The four functional COCOMs are the U.S. Joint Forces Command (JFCOM) which, among other things, engages in joint training and force provision; U.S. Special Operations Command (SOCOM), which trains, equips, and deploys special operations forces to other COCOMs and leads counterterrorist missions worldwide; U.S. Strategic Command (STRATCOM), whose missions include space and information operations; missile defense; global command and control; intelligence, surveillance, and reconnaissance; strategic deterrence; and integration and synchronization of DOD's departmentwide efforts in combating weapons

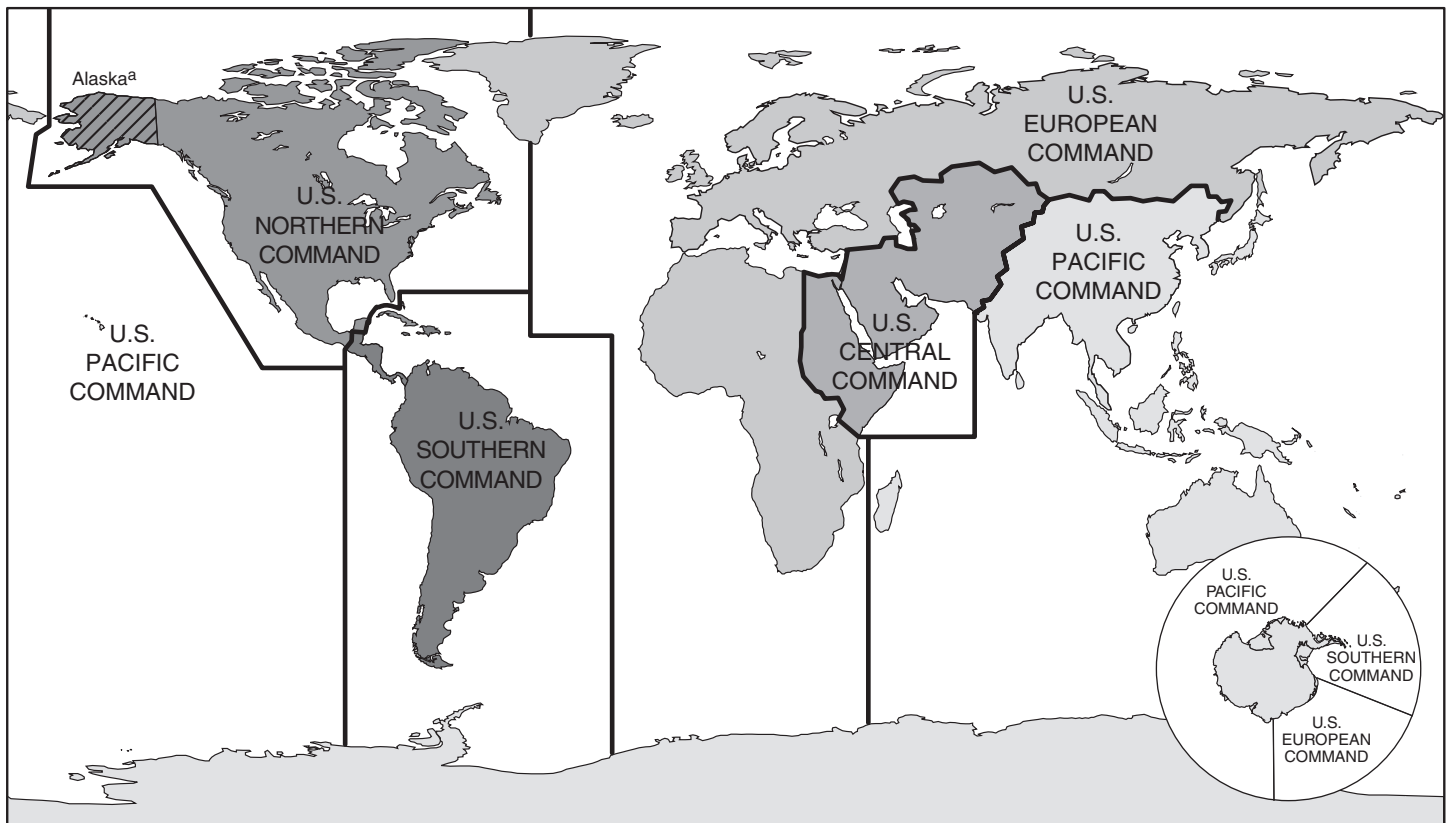
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<sup>6</sup>The Office of the Under Secretary of Defense for Policy was reorganized in December 2006. This reorganization included, among other things, the Office of the Assistant Secretary of Defense for Homeland Defense being renamed the Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs. Throughout this report we refer to the office by its current name.

<sup>7</sup>In February 2007, the Secretary of Defense announced that DOD will establish a sixth COCOM with geographic responsibilities—the U.S. Africa Command—which is expected to become operational by September 2008. Responsibility for African operations currently is divided among EUCOM, CENTCOM, and PACOM.

of mass destruction; and U.S. Transportation Command (TRANSCOM), which provides air, land, and sea transportation for DOD.

**Figure 1: Geographic COCOMs' Areas of Responsibility**



Source: GAO presentation of DOD data.

Notes: Areas of responsibility are as of October 1, 2006. In February 2007, the Secretary of Defense announced that DOD will establish a sixth COCOM with geographic responsibilities—the U.S. Africa Command—which is expected to become operational by September 2008. Responsibility for African operations currently is divided among EUCOM, CENTCOM, and PACOM.

<sup>2</sup>The state of Alaska is assigned to NORTHCOM's area of responsibility. Forces based in Alaska, however, remain assigned to PACOM.

You asked that we examine DOD's planning and preparedness efforts for an influenza pandemic. In September 2006, we issued a report on DOD's



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efforts to prepare its workforce for an influenza pandemic.<sup>8</sup> We reported that since September 2004, DOD had taken a number of actions to prepare for an influenza pandemic; however, DOD faced four management challenges for its ongoing pandemic influenza preparedness efforts. We found that DOD had not defined lead and supporting roles and responsibilities, oversight mechanisms, or goals and performance measures for its planning efforts; had not requested funding to support pandemic influenza preparedness; had not fully defined or communicated which types of personnel—military and civilian personnel, contractors, dependents, and beneficiaries—would be included in vaccine and antiviral distribution; and had not fully developed a communications strategy. We recommended that DOD take actions to address these issues. DOD generally concurred with our recommendations, but had not yet taken actions to address our recommendations. While our September 2006 report focused on DOD’s planning and preparedness efforts departmentwide, this report focuses on the COCOMs’ planning and preparedness efforts for an influenza pandemic. Specifically, this report addresses (1) the actions the COCOMs have taken to prepare for an influenza pandemic and (2) management challenges the COCOMs face as they continue their planning and preparedness efforts.

To address these objectives, we reviewed drafts of the five geographic COCOMs’ plans and one functional COCOM’s plan that were available at the time of our review. We did not evaluate the plans; rather, we used the plans to determine the actions the COCOMs have taken and plan to take to prepare for an influenza pandemic. We also reviewed a November 2005 Joint Staff planning order, an April 2007 Joint Staff planning order, DOD’s implementation plan for pandemic influenza, the *Implementation Plan for the National Strategy for Pandemic Influenza*, DOD budget requests and appropriations, and after-action reports for exercises. We met with more than 200 officials involved in pandemic influenza planning and preparedness efforts at the nine COCOMs, service and special operations subcomponents at two COCOMs (EUCOM and PACOM), and U.S. Forces Korea. We also met with officials from the Office of the ASD(HD&ASA), the Office of the ASD for Health Affairs, and the Joint Staff. Additionally, we met with officials at the Department of State to discuss their pandemic influenza planning and preparedness efforts in relation to the COCOMs’

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<sup>8</sup>GAO, *Influenza Pandemic: DOD Has Taken Important Actions to Prepare, but Accountability, Funding, and Communications Need to be Clearer and Focused Departmentwide*, [GAO-06-1042](#) (Washington, D.C.: Sept. 21, 2006).

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efforts abroad. Finally, we compared COCOMs' actions to date with best practices we have identified in prior work on risk management, influenza pandemics, emergency preparedness, and general management. We conducted our review from September 2006 through April 2007 in accordance with generally accepted government auditing standards. Further details on our scope and methodology are in appendix II.

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## Results in Brief

DOD's COCOMs have taken numerous actions to prepare for an influenza pandemic, including management actions, such as establishing working groups, and operational actions, such as coordinating with other nations. The COCOMs' pandemic influenza planning and preparedness efforts are evolving. At the time of our review, each of the COCOMs had established or intended to establish a working group to oversee plan development and work on other aspects of pandemic influenza preparation. Additionally, eight of the nine COCOMs had developed or were developing a pandemic influenza plan. Although SOCOM's headquarters is not developing a pandemic influenza plan, officials said they expect each of the geographically-based special operations commands will develop an annex for their geographic COCOMs' plans. To test their pandemic influenza plans, half of the COCOMs have conducted a pandemic or avian influenza-specific exercise or included a pandemic or avian influenza scenario within another exercise, and nearly all of the COCOMs plan to address pandemic influenza in future exercises. Several of the COCOMs are taking steps to address some lessons learned from the exercises. Five of the nine COCOMs have started to use various strategies, including using various media outlets, training programs, and outreach events, to inform their personnel—including military and civilian personnel, contractors, dependents, and beneficiaries—about pandemic influenza. For example, PACOM held an outreach event that combined providing seasonal flu vaccinations with distributing information about pandemic influenza. Each of the geographic COCOMs has worked or plans to work with nations in its area of responsibility to raise awareness about and assess capabilities for responding to avian and pandemic influenza. For example, CENTCOM has performed assessments and identified gaps for Afghanistan's pandemic influenza preparedness and response.

Although COCOMs have taken numerous actions, we identified three management challenges that may prevent the COCOMs from being fully prepared to effectively protect personnel and perform their missions during an influenza pandemic. Two of these challenges—the lack of clearly defined roles and responsibilities and the lack of information on required resources—are related to departmentwide issues that we

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recommended DOD take actions to address in our September 2006 report, but DOD has not yet taken action to address them. The challenges are as follows:

- The roles, responsibilities, and authorities of key organizations involved in DOD's pandemic influenza planning and preparedness efforts relative to other organizations leading and supporting the department's pandemic influenza planning efforts—including NORTHCOM as the lead for DOD's planning and the individual COCOMs—remained unclear because of the continued lack of sufficiently detailed guidance from the Secretary of Defense or his designee. We have previously reported that, as with preparing for and responding to any other type of disaster, leadership roles and responsibilities must be clearly defined, effectively communicated, and well understood to facilitate rapid and effective decision making.<sup>9</sup> As a result of not yet issuing guidance fully and clearly defining the roles, responsibilities, authorities, and relationships of key organizations, such as offices within the Office of the Secretary of Defense, the military services, and the COCOMs, the unity and cohesiveness of DOD's pandemic influenza preparation could be impaired. Furthermore, the potential remains for confusion and gaps or duplication in actions taken by the COCOMs relative to other DOD organizations, such as the military services. For example, officials from the Office of the ASD(HD&ASA) and the Joint Staff said the COCOMs were responsible for completing few actions assigned to DOD in the national implementation plan; however, COCOM officials reported that they were, in part, responsible for implementing between 12 and 18 of these actions.
- Second, we identified a disconnect between the COCOMs' planning and preparedness activities and resources to complete these activities in part because DOD's guidance for the COCOMs' planning efforts does not identify the resources required to complete these activities. We have previously reported that information on required resources is critical for making sound analyses of how to pursue goals.<sup>10</sup> Without

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<sup>9</sup>GAO, *Homeland Security: Preparing for and Responding to Disasters*, [GAO-07-395T](#) (Washington, D.C.: Mar. 9, 2007) and GAO, *Emergency Preparedness and Response: Some Issues and Challenges Associated with Major Emergency Incidents*, [GAO-06-467T](#) (Washington, D.C.: Feb. 23, 2006).

<sup>10</sup>GAO, *Agencies' Annual Performance Plans Under the Results Act: An Assessment Guide to Facilitate Congressional Decisionmaking*, [GAO/GGD/AIMD-10.1.18](#) (Washington, D.C.: Feb. 1, 1998).

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realistic information on required resources, decision makers cannot determine whether a strategy to achieve those goals is realistic and cost effective, or make trade-offs against other funding priorities. The continued lack of a link between planning and preparedness activities and resources may limit the COCOMs' ability to effectively prepare for and respond to an influenza pandemic. For example, EUCOM and PACOM officials said a lack of resources will limit their ability to exercise their pandemic influenza plans in the future.

- Third, we identified factors that are beyond the COCOMs' control—such as limited detailed guidance from other federal agencies on the support expected from DOD, lack of control over DOD's stockpile of antivirals, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical materiel—that they have not yet fully planned how to mitigate. We have recommended a comprehensive risk-management approach, including putting steps in place to reduce the effects of any outbreak that does occur, as a framework for decision making.<sup>11</sup> Some COCOMs have taken steps to mitigate the effects of these factors that are beyond their control; however, planning officials from at least one COCOM said they will not develop specific plans to address some of these factors until they receive more information. Planning officials from three COCOMs and two service subcomponents said that planning to provide support at the last minute could lead to a less effective and less efficient use of resources. While we recognize the difficulty of planning for an influenza pandemic, not yet developing options to mitigate the effects of factors that are beyond their control may place at risk the COCOM commanders' ability to protect their personnel, including military and civilian personnel, contractors, dependents, and beneficiaries, and perform their missions during an influenza pandemic. For example, if a nation decides to close its borders at the start of a pandemic, COCOMs and installations may not be able to obtain needed supplies, such as antivirals.

We are making three recommendations to improve the COCOMs' ongoing pandemic influenza planning and preparedness efforts. Specifically, we recommend that DOD take steps to clarify the COCOMs' roles and

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<sup>11</sup>GAO, *Homeland Security: Applying Risk Management Principles to Guide Federal Investments*, [GAO-07-386T](#) (Washington, D.C.: Feb. 7, 2007) and GAO, *Hurricane Katrina: GAO's Preliminary Observations Regarding Preparedness, Response, and Recovery*, [GAO-06-442T](#) (Washington, D.C.: Mar. 8, 2006).

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responsibilities in DOD's pandemic influenza planning and preparedness efforts, identify the sources and types of resources needed for the COCOMs to accomplish their pandemic influenza-related efforts, and develop options to mitigate the effects of factors that are beyond their control.

We provided a draft of this report to DOD and the Department of State in April 2007 for their review and comment. In written comments on a draft of this report, DOD concurred with all of our recommendations and noted that the department is confident that future plans will adequately address specific roles, resources, and risk mitigation. The Department of State had no comments. DOD also provided us with technical comments, which we incorporated in the report, as appropriate. DOD's comments can be found in appendix III.

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## Background

Planning for an influenza pandemic is a difficult and daunting task, particularly because so much is currently unknown about a potential pandemic. While some scientists and public health experts believe that the next influenza pandemic could be spawned by the H5N1 avian influenza strain, it is unknown when an influenza pandemic will occur, where it will begin, or whether a variant of H5N1 or some other strain would be the cause. Moreover, the severity of an influenza pandemic, as well as the groups of people most at risk for infection, cannot be accurately predicted. Past pandemics have spread worldwide within months and a future pandemic is expected to spread even more quickly given modern travel patterns. The implication of such a rapid spread is that many, if not most, countries will have minimal time to implement preparations and responses once a pandemic virus begins to spread. However, as we have previously reported, despite all of these uncertainties, sound planning and preparedness could lessen the impact of any influenza pandemic.<sup>12</sup>

Preparing for an influenza pandemic can be helpful not only to lessen a pandemic's impact, but also to help prepare for other disasters that may occur. As we have previously reported, the issues associated with preparation for and response to an influenza pandemic are similar to those for any other type of disaster: clear leadership roles and responsibilities, authority, and coordination; risk management; realistic planning, training, and exercises; assessing and building the capacity needed to effectively

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<sup>12</sup>[GAO-06-1042](#).

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respond and recover; effective information sharing and communication; and accountability for the effective use of resources.<sup>13</sup> At the same time, a pandemic poses some unique challenges. Rather than being localized in particular areas and occurring within a short period of time, as do disasters such as earthquakes, explosions, or terrorist incidents, an influenza pandemic is likely to affect wide areas of the world and continue for weeks or months. Past pandemics have spread globally in two and sometimes three waves, according to WHO, and a pandemic is likely to come in waves lasting months, according to the national implementation plan. Additionally, responding to an influenza pandemic would be more challenging than dealing with annual influenza. Each year, annual influenza causes approximately 226,000 hospitalizations and 36,000 deaths in the United States. According to WHO, an influenza pandemic would spread throughout the world very quickly, usually in less than a year, and could sicken more than a quarter of the global population, including young, healthy individuals who are not normally as affected by the annual flu.

WHO defines the emergence of an influenza pandemic in six phases (see fig. 2). Based on this definition, the world currently is in phase 3, in which there are human infections from a new influenza subtype, but no or very limited human-to-human transmission of the disease. In addition, the Homeland Security Council developed “stages” that characterize the outbreak in terms of the threat that the pandemic virus poses to the U.S. population. These stages, also shown in figure 2, provide a framework for a federal government response to an influenza pandemic. Currently there are new domestic animal outbreaks in an at-risk country, which corresponds to the federal government’s stage 0.

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<sup>13</sup> [GAO-07-395T](#).

**Figure 2: Comparison of WHO Pandemic Phases and Federal Government Stages**

WHO phase	Description	Federal government stage	Description
<b>Interpandemic period</b>			
Phase 1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.	Stage 0	New domestic animal outbreak in an at-risk country.
Phase 2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
<b>Pandemic alert period</b>			
Phase 3	Human infections with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Stage 0	New domestic animal outbreak in an at-risk country.
		Stage 1	Suspected human outbreak overseas.
Phase 4	Small clusters with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	Stage 2	Confirmed human outbreak overseas.
Phase 5	Larger clusters but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
<b>Pandemic period</b>			
Phase 6	Pandemic: increased and sustained transmission in the general population.	Stage 3	Widespread human outbreaks in multiple locations overseas.
		Stage 4	First human case in North America.
		Stage 5	Spread throughout the United States.
		Stage 6	Recovery and preparation for subsequent waves.

Source: Homeland Security Council.

## COCOMs Have Taken Numerous Actions to Prepare for an Influenza Pandemic

COCOMs have taken numerous management and operational actions to prepare for an influenza pandemic and the COCOMs' efforts are evolving. While the COCOMs are at different stages in their planning and preparedness efforts, each has taken actions to plan and prepare for an influenza pandemic. These actions include establishing working groups, developing plans, exercising plans, implementing strategies to inform personnel about pandemic influenza, and coordinating with other nations. Table 1 summarizes the COCOMs' actions to prepare for an influenza pandemic.

**Table 1: Summary of COCOMs' Actions to Prepare for an Influenza Pandemic**

Combatant command	Established working groups	Developed plans	Conducted exercises	Informed personnel	Coordinated with other nations
CENTCOM	X	X	X		X
EUCOM	X	X	X	X	X
JFCOM		X			
NORTHCOM	X	X	X	X	X
PACOM	X	X	X	X	X
SOCOM		<sup>a</sup>			
SOUTHCOM	X	X		X	X
STRATCOM	X	X	X	X	
TRANSCOM	X	X			

Source: GAO analysis of DOD data.

<sup>a</sup>SOCOM headquarters is not developing a pandemic influenza plan. However, SOCOM planning officials expect that the geographically-based special operations commands will develop an annex to their geographic COCOM's plan.

### COCOMs Have Established Working Groups to Address Pandemic Influenza

Each of the geographic COCOMs has established a working group to address various aspects of pandemic influenza, and each of the functional COCOMs has either established a working group or is planning to do so. Medical and operational planning officials from the geographic COCOMs told us they viewed pandemic influenza planning as both an operational and force health protection issue and, accordingly, these groups are generally led by officials in the operations or plans and policy directorates, the office of the command surgeon, or a combination of these offices. Officials from across the command, and in some cases service subcomponents and other federal agencies, participate regularly or as needed. These working groups oversee pandemic influenza plan development and work on other aspects of pandemic influenza preparation. For example, PACOM's working group is headed by three officials, one each from the operations directorate, plans and policy directorate, and the Office of the Command Surgeon. According to a PACOM official, intelligence, logistics, and public affairs officials regularly attend meetings, and officials from other directorates and subcomponents attend as needed. The group was established to develop a pandemic influenza response plan covering PACOM's geographic area of responsibility based on the November 2005 Joint Staff order to plan for an influenza pandemic.



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In addition to its core pandemic influenza planning team, PACOM tasked two of its service subcomponents to lead operational groups with responsibilities for pandemic influenza preparation and response in PACOM's area of responsibility. PACOM designated its Marine subcomponent, Marine Forces Pacific, to lead PACOM's international support response during an influenza pandemic, which will be conducted through a multiservice task force formed to conduct relief operations during an influenza pandemic.<sup>14</sup> The task force may also conduct noncombatant evacuation operations of Americans living abroad. PACOM also tasked its Army subcomponent, U.S. Army Pacific, to assist partner governments and conduct defense support of civil authorities in PACOM's domestic area of responsibility through a standing task force that defends PACOM's domestic region from external military threats. PACOM's domestic area of responsibility, in contrast to the command's foreign area of responsibility, consists of the state of Hawaii, and various U.S. territories, possessions, and protectorates, including Guam, American Samoa, and the Marshall Islands.

Normally in a supporting role, the functional COCOMs were not formally tasked to plan for pandemic influenza by the November 2005 Joint Staff planning order. However, each established or intends to establish a group to prepare for pandemic influenza. For example, JFCOM is in the process of establishing a pandemic influenza working group. Prior to establishing the group, JFCOM's operations directorate was leading its pandemic influenza planning efforts. Once established, JFCOM's working group will include representatives from select directorates, the installation where JFCOM's headquarters is located, and the regional public health emergency officer,<sup>15</sup> according to JFCOM officials.

Additionally, in 2007 NORTHCOM established a working group, called the Global Pandemic Influenza Working Group, to develop DOD's global plan for pandemic influenza that applies to all of DOD's COCOMs, military services, and defense agencies. The working group has met three times in 2007 and included representatives from the Office of the Secretary of Defense; the Joint Staff; the geographic COCOMs; three of the four

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<sup>14</sup>While Marine Forces Pacific will lead PACOM's international support response in most of the command's area of responsibility, U.S. Forces Korea will lead PACOM's international support response on the Korean peninsula.

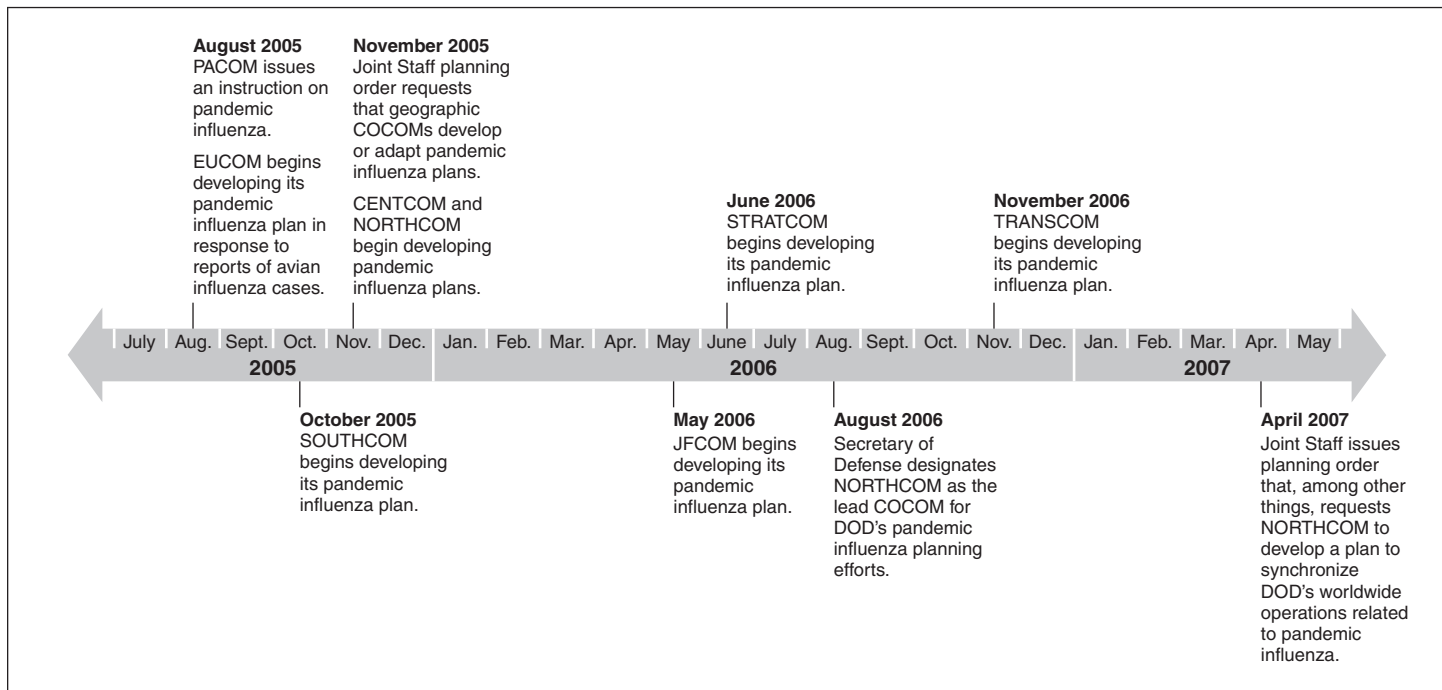
<sup>15</sup>The Public Health Emergency Officer is the primary medical official designated to manage public health emergencies on installations.

functional COCOMs; the four military services; two defense agencies—the Defense Intelligence Agency and the Defense Logistics Agency—and the Air Force Medical Intelligence Center; and other interagency partners, including the Departments of State, Health and Human Services, Homeland Security, and Agriculture.

### COCOMs Have Developed Pandemic Influenza Plans for Their Areas of Responsibility

At the time of our review, eight of the nine COCOMs had developed or were developing a plan to prepare for and respond to a potential pandemic influenza outbreak. Figure 3 illustrates when the COCOMs started their pandemic influenza planning efforts.

**Figure 3: Timeline of COCOMs' Pandemic Influenza Planning Efforts**



Source: GAO analysis of DOD information.

Note: SOCOM headquarters is not developing a pandemic influenza plan. However, SOCOM planning officials expect that the geographically-based special operations commands will develop an annex to their geographic COCOMs' plan.

In November 2005, the Joint Staff requested that the geographic COCOMs develop or adapt existing pandemic influenza plans to address force health

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protection, defense support of civil authorities, and humanitarian assistance. Two geographic COCOMs, EUCOM and PACOM, began developing plans before the November 2005 planning order. In August 2005, PACOM issued an instruction on pandemic influenza preparation and response. Similarly, in August 2005, EUCOM began developing its plan as a result of media reports of avian influenza cases. Although the Joint Staff did not request that the functional COCOMs develop plans, three of the four functional COCOMs are developing plans to preserve their ability to continue their own operations or to address their support role during an influenza pandemic. While SOCOM's headquarters was not developing a pandemic influenza plan, SOCOM planning officials said they expect each of the geographically-based special operations commands will develop an annex for their respective geographic COCOMs' plan; the tasking to develop these plans will come from the geographic COCOM, rather than SOCOM. For example, PACOM's special operations component is developing a plan for special operations forces in PACOM's area of responsibility.

Each of the geographic COCOMs' plans contain phases that indicate various actions for the COCOMs to take prior to and during a potential pandemic. DOD generally uses phases in its plans when conducting complex joint, interagency, or multinational operations to integrate and synchronize interrelated activities. The Joint Staff required that the geographic COCOMs' plans take into account the WHO phases for an influenza pandemic; however, the COCOMs were not required to adopt the same phases. This allowed the COCOMs to develop their own phasing structures for their plans and, as a result, the COCOMs plans have different phasing structures. By definition, an influenza pandemic would simultaneously affect multiple geographic COCOMs' areas of responsibility and would, therefore, require unified and cohesive efforts to respond. According to officials from the Office of the ASD(HD&ASA), the Joint Staff, and two of the COCOMs, differing phasing structures may result in the COCOMs' plans having gaps and duplication of effort among the COCOMs. Using a uniform phasing structure may increase the likelihood that all COCOMs understand what actions to take and when to take those actions, resulting in a unified and cohesive effort. At the time of our review, NORTHCOM, as the lead COCOM for DOD's planning efforts, was drafting an overarching plan for the COCOMs' response to an influenza pandemic, which is to include a common phasing structure for the COCOMs' plans.

The COCOMs' plans include not only actions to respond to an influenza pandemic, but also actions to prepare for an influenza pandemic.

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According to planning officials, each of the geographic COCOMs is implementing actions from the initial phases of their plans. Planning officials at four of the five geographic COCOMs told us that advance preparation was essential for an effective pandemic response.

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### COCOMs Have Conducted Exercises for Pandemic Influenza Plans

To test their pandemic influenza plans, five of the nine COCOMs have conducted a pandemic influenza-related exercise. Three of the geographic COCOMs—CENTCOM, EUCOM, and PACOM—and one of the functional COCOMs—STRATCOM—conducted a pandemic or avian influenza-specific exercise. For example, EUCOM conducted its Avian Wind exercise in June 2006, which included more than 100 participants representing partner nations, other federal agencies, and DOD and EUCOM components. The exercise was designed to identify and enhance the coordination of actions to plan for, respond to, contain, and mitigate the effects of avian or pandemic influenza within EUCOM's area of responsibility. The other three COCOMs held smaller tabletop exercises to familiarize participants with pandemic influenza in general and the COCOMs' plans more specifically. Additionally, two of the geographic COCOMs—NORTHCOM and PACOM—included a pandemic influenza scenario within another exercise. SOUTHCOM planning and medical officials said they have not yet conducted a pandemic influenza exercise because they are waiting for information from the countries in their area of responsibility to determine the status of pandemic influenza planning and preparedness of those countries which, in turn, will help SOUTHCOM recommend exercises to address gaps in those countries' preparedness. Until SOUTHCOM has a clearer assessment of its partner nations' capabilities, SOUTHCOM officials do not believe generic pandemic influenza-related exercises are cost-efficient. In the absence of pandemic influenza-related exercises, medical and operational planning officials from SOUTHCOM said the command is coordinating with interagency partners, such as the Pan American Health Organization and the U.S. Agency for International Development, to gather information on other countries' capabilities and planning efforts. Although SOUTHCOM plans to conduct its own regional tabletop exercise later in fiscal year 2007, SOUTHCOM officials said the command will not (and cannot) get ahead of the Department of State as the lead federal agent—and other interagency partners—in such activities. Each of the geographic COCOMs and three of the four functional COCOMs are planning to conduct pandemic influenza-specific exercises or include pandemic influenza scenarios in future exercises. For example, STRATCOM plans to conduct three tabletop exercises—an internal exercise for STRATCOM's staff; an exercise with the installation where STRATCOM's headquarters is located (Offutt Air

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Force Base, Nebraska); and an exercise with STRATCOM's staff, the installation, and the civilian community—to test STRATCOM's pandemic influenza plan to continue its own operations.

Officials from the five COCOMs that have held exercises said they identified some lessons as a result of their exercises and are starting to take steps to address these lessons. Some of these lessons were general and related to overall planning efforts. For example, in March 2006, CENTCOM conducted a tabletop exercise to familiarize participants with the command's pandemic influenza plan. The results of the exercise facilitated establishing an operational planning team to continue to address pandemic influenza efforts, according to CENTCOM's lead planning official. Similarly, an official responsible for planning PACOM's exercises said the command included avian influenza in one scenario in its Cobra Gold exercise in May 2006, a regularly scheduled multinational exercise hosted by Thailand. In the exercise, PACOM, the Royal Thai Army, and the Singapore Army planned for implications and conducted operations supporting humanitarian assistance in an area where H5N1 avian influenza was a factor. According to a planning official, PACOM determined that the command needs to hold a separate pandemic influenza exercise to effectively test its pandemic influenza plan. However, an official responsible for planning PACOM's exercises said it has been a challenge to meet another exercise requirement without additional resources, including personnel and funding. Similarly, U.S. Forces Korea planning officials said the command has not held a pandemic influenza-specific exercise or included a pandemic influenza scenario in any war-planning exercises because of the time required and lack of funding for such a scenario. Influenza pandemic exercises have not been a priority because U.S. Forces Korea has been focused on events involving North Korea. According to a representative from one of the U.S. Army garrisons in South Korea, the key lesson learned from a tabletop exercise was that they are "very unprepared" for an influenza pandemic. Lessons learned from other exercises pertained to more specific aspects of plans. For example, officials involved in EUCOM's Avian Wind exercise identified the need to update the command's continuity of operations plan to increase the likelihood that critical missions, essential services, and functions could continue during an influenza pandemic. As a result, EUCOM planning officials report that the command plans to update its continuity of operations plan in spring 2007 to include pandemic influenza.

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## COCOMs Have Started to Provide Information to Personnel about Pandemic Influenza

Five of the nine COCOMs—EUCOM, NORTHCOM, PACOM, SOUTHCOM, and STRATCOM—have started to provide information to their personnel, including military and civilian personnel, contractors, dependents, and beneficiaries, about a potential influenza pandemic. COCOMs have used various strategies to inform personnel about pandemic influenza, including using various media outlets, training programs, and outreach events.

Each of the COCOMs that have started to provide information to their personnel used radio or television commercials, news articles, briefings, or a combination of these means, to inform personnel about avian and pandemic influenza. Additionally, three of the COCOMs had a page on their publicly available Web sites that included some avian and pandemic influenza information and links to other Web sites, such as the federal government's pandemic influenza Web site, [www.pandemicflu.gov](http://www.pandemicflu.gov).

Three COCOMs—EUCOM, PACOM, and STRATCOM—offered training courses to inform personnel about pandemic influenza. Both EUCOM and PACOM offered training for public health emergency officers. In May 2006 and September 2006, EUCOM's training for its public health emergency officers included general information about pandemic and avian influenza as well as strategies about how to communicate pandemic influenza-related information to beneficiaries. According to STRATCOM officials, in October 2006, STRATCOM required military and civilian personnel to complete a computer-based training module about pandemic and avian influenza that included information on force health protection measures, among other issues.

Additionally, three COCOMs—PACOM, STRATCOM, and EUCOM—have used outreach programs to inform personnel, including military and civilian personnel, contractors, dependents, and beneficiaries, about pandemic influenza. A group of military medical professionals at PACOM conducted a series of public outreach events at military exchanges in Hawaii that combined providing seasonal flu vaccinations to military personnel, dependents, and beneficiaries with educating personnel by distributing information about general preventive health measures, as well as pandemic influenza. For example, the PACOM officials distributed pamphlets on cough etiquette, how to prepare for an influenza pandemic, and a list of items to keep on hand in an emergency kit. Figure 4 shows one of PACOM's military medical professionals sharing information with dependents and beneficiaries at a November 2006 event at the Navy Exchange in Honolulu, Hawaii. Similarly, STRATCOM held an outreach event, called "Pandemic Influenza Focus Day," in November 2006 for its military and civilian personnel and contractors. During the Focus Day,

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each directorate or office met to discuss the impact that a 40 percent absenteeism rate due to personnel being sick, caring for someone who was sick, or afraid to come to work, would have on the individual directorate or office.<sup>16</sup> Additionally, in March 2006, EUCOM directed service subcomponents that had not already done so to hold installation-level meetings to inform military and civilian personnel, contractors, dependents, and beneficiaries about the threat of avian influenza and related preventive measures.

**Figure 4: Official Provides Information about Pandemic Influenza at PACOM's Outreach Event**



Source: GAO.

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<sup>16</sup>The assumption of 40 percent absenteeism is based on the planning assumptions for a severe pandemic in the national implementation plan.

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## COCOMs Have Coordinated with Other Nations

Each of the geographic COCOMs has started to work or plans to work with nations in its area of responsibility to raise awareness about and assess capabilities for responding to avian and pandemic influenza. COCOMs undertook some of these outreach efforts as a result of an action assigned to DOD as a lead agency in the national implementation plan to conduct assessments of avian and pandemic influenza preparedness and response plans of the militaries in partner nations (action 4.1.1.3). For example, CENTCOM's lead planning official reported that CENTCOM performed assessments and identified gaps for Afghanistan's pandemic influenza preparedness and response and has obtained funding for projects with the Afghanistan National Army and the Ministries of Public Health, Agriculture, and Higher Education. The CENTCOM official also noted, among other outreach efforts in the region, a meeting with a military medical delegation from Pakistan to discuss assessing the Pakistani military's pandemic influenza preparedness and response efforts. Officials involved in EUCOM's pandemic influenza planning and humanitarian assistance programs reported that EUCOM plans to complete the assessments through its regular coordination efforts with militaries in partner nations. While EUCOM obtained \$1 million from the Combatant Commander Initiative Fund to complete actions assigned to DOD as a lead agency in the national implementation plan,<sup>17</sup> EUCOM officials cited resources, including funding, as a challenge to completing these assessments by the November 2007 deadline.

COCOMs also have started to take or plan to take other actions to work with other nations related to pandemic influenza. For example, SOUTHCOM plans to hold regional conferences focused on pandemic influenza to help educate partner nations, assess the preparedness of nations in the region, and identify appropriate contacts within the nations. SOUTHCOM planning and medical officials said they have two conferences tentatively planned, but noted that the number of conferences they can hold will be determined by the availability of funding. According to these officials, the conferences will address a variety of topics related to pandemic influenza, including developing plans and interagency collaboration. Moreover, officials from PACOM, Marine Forces Pacific, U.S. Forces Japan, and U.S. Forces Korea participated in a multilateral

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<sup>17</sup>The Combatant Commander Initiative Fund contains funds that may be requested by a COCOM commander and provided by the Chairman of the Joint Chiefs of Staff for various activities, including humanitarian and civil assistance, military training and education for military and related civilian personnel of foreign countries, and personnel expenses of defense personnel for bilateral or regional cooperation programs.



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workshop with officials from Japan and South Korea to discuss the potential threat of a pandemic influenza in the Asia-Pacific region. Participants shared information about national strategies and military response plans and discussed ways to leverage existing partnerships, enhance interoperability, and integrate planning efforts to minimize the health and economic impact of an influenza pandemic.

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## COCOMs Face Three Management Challenges as They Continue to Prepare for an Influenza Pandemic

While COCOMs have taken numerous actions to prepare for an influenza pandemic, we identified three management challenges that the COCOMs face as they continue their planning and preparedness efforts. First, the roles, responsibilities, and authorities of key organizations involved in the COCOMs' planning and preparedness efforts relative to other lead and supporting organizations remained unclear. As a result, the unity and cohesiveness of DOD's pandemic influenza preparation could be impaired and the potential remains for confusion among officials and gaps and duplication in actions taken by the COCOMs relative to the military services and other DOD organizations in implementing tasks, such as the actions assigned to DOD as a lead agency in the national implementation plan. Second, we identified a disconnect between the COCOMs' planning and preparedness activities and resources, including funding and personnel, to complete those activities. The continued disconnect between activities and resources may limit the COCOMs' ability to effectively prepare for and respond to an influenza pandemic. Third, we identified some factors that are beyond the COCOMs' control—such as limited detailed guidance from other federal agencies on the support expected from DOD, lack of control over DOD's antiviral stockpile, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical materiel—that they have not yet fully planned how to mitigate. While we recognize the difficulty in planning for an influenza pandemic, not yet developing options to mitigate the effects of such factors may place at risk the COCOM commanders' ability to protect their personnel—including military and civilian personnel, contractors, dependents, and beneficiaries—or to perform their missions during an influenza pandemic.

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## Roles, Responsibilities, and Authorities of Key Organizations Relative to Others Are Not Fully and Clearly Defined

The roles, responsibilities, and authorities of key organizations involved in DOD's pandemic influenza planning and preparedness efforts relative to other organizations leading and supporting the department's pandemic influenza planning efforts—including NORTHCOM as the lead for DOD's planning and the individual COCOMs—remained unclear because of the continued lack of sufficiently detailed guidance from the Secretary of Defense or his designee. We have previously reported that in preparing for and responding to any type of disaster, leadership roles and responsibilities must be clearly defined, effectively communicated, and well understood to facilitate rapid and effective decision making.<sup>18</sup> As a result of not yet issuing guidance fully and clearly defining the roles, responsibilities, authorities, and relationships of key organizations, the unity and cohesiveness of DOD's pandemic influenza preparation could be impaired, and the potential remains for confusion among COCOM officials and gaps or duplication in actions taken by the COCOMs relative to the military services and other DOD organizations.

In our September 2006 report, we identified the absence of clear and fully defined guidance on roles, responsibilities, and lines of authority for the organizations involved in DOD's pandemic influenza preparedness efforts as a potential hindrance to DOD's ability to effectively prepare for an influenza pandemic, and recommended that DOD take actions to address this issue,<sup>19</sup> but DOD had not yet done so. Officials from the Office of the ASD(HD&ASA), the Office of the ASD for Health Affairs, and the Joint Staff responded to the recommendations in our September 2006 report by stating that DOD's implementation plan for pandemic influenza clearly establishes the roles and responsibilities for organizations throughout DOD. In its implementation plan, DOD established offices of primary responsibility for policy oversight of various tasks and outlined medical support tasks assigned to various organizations, but we found that the plan stopped short of fully and clearly identifying roles, responsibilities, and lines of authority for all key organizations, including the COCOMs. Since planning has occurred concurrently within DOD at various levels from the Office of the Secretary of Defense to installations, a more extensive delineation of roles, responsibilities, and lines of authority could lead to a more efficient and effective effort.

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<sup>18</sup>GAO-07-395T and GAO-06-467T.

<sup>19</sup>GAO-06-1042.

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DOD has outlined NORTHCOM's roles and responsibilities as the lead COCOM for the department's pandemic influenza planning efforts. In August 2006, the Secretary of Defense named NORTHCOM the lead COCOM for directing, planning, and synchronizing DOD's global response to pandemic influenza, or the "global synchronizer" for DOD's pandemic influenza planning. In April 2007, the Joint Staff issued a planning order that, among other things, outlined NORTHCOM's roles and responsibilities as global synchronizer, including

- serving as a conduit between the Joint Staff or Office of the Secretary of Defense and the COCOMs, military services, and defense agencies on pandemic influenza-related issues;
- assessing and advocating for resources for the COCOMs, military services, and defense agencies; and
- leading planning efforts for the COCOMs, military services, and defense agencies, but not the execution of those plans in the other COCOMs' areas of responsibility.

While DOD has outlined NORTHCOM's roles and responsibilities as the global synchronizer, the command's roles, responsibilities, and authorities relative to the lead offices for DOD's overall pandemic influenza planning efforts, as well as the relationships between the organizations, were not yet fully and clearly defined. The ASD(HD&ASA) is the lead, in coordination with the ASD for Health Affairs, for DOD's pandemic influenza planning and preparedness efforts departmentwide, and the Joint Staff also plays a key role in DOD's pandemic influenza planning. However, neither the Secretary of Defense nor his designee had yet issued guidance fully and clearly stating how NORTHCOM's roles and responsibilities as the lead for the COCOMs' planning efforts differed from the roles and responsibilities of the other lead offices for pandemic influenza preparedness efforts, including the Joint Staff, which led to varying expectations among some COCOM officials. For example, COCOM officials had different expectations about whether NORTHCOM would provide guidance to the COCOMs. Planning officials from two geographic COCOMs noted that the Joint Staff, not NORTHCOM, has the primary authority to provide guidance to the COCOMs. However, planning officials from at least three COCOMs were expecting NORTHCOM to provide guidance on key issues, such as quarantine, social distancing, treatment of DOD beneficiaries, and troop rotation. Additionally, there was confusion among the COCOMs on which organization was responsible for overseeing interagency coordination. Planning officials at one COCOM, as well as officials from the Office of the ASD(HD&ASA), the Office of the ASD for Health Affairs, and the Joint Staff, said offices within the Office of the

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Secretary of Defense and the Joint Staff would remain the points of contact for the actions assigned to DOD in the national implementation plan and would also remain the primary contacts for coordinating with other federal government agencies. However, a planning official from another geographic COCOM said that the global synchronizer role meant that NORTHCOM would coordinate with other federal government agencies for pandemic influenza planning. At the time of our review, officials leading NORTHCOM's planning and preparedness efforts acknowledged that the command's roles and responsibilities relative to the Joint Staff and offices within the Office of the Secretary of Defense were not well-defined, especially concerning direct coordination and sharing information with the other federal agencies, and that the command needed further guidance from the Office of the Secretary of Defense and the Joint Staff to more clearly establish its roles and responsibilities.

Similarly, the roles, responsibilities, and authorities of the individual COCOMs for DOD's pandemic influenza planning and preparedness efforts were not yet fully and clearly defined. While there is guidance—such as the Unified Command Plan and 10 U.S.C. § 164—that describes the overall roles, responsibilities, and authorities of the COCOMs, we found that the COCOMs' roles, responsibilities, and authorities related to DOD's pandemic influenza planning and preparedness efforts were unclear. For example, medical and operational planning officials from three COCOMs said it was not clear to them which of the 31 actions assigned to DOD as a lead agency in the national implementation plan the COCOMs were to help complete. Officials from two of these COCOMs said that officials within the Office of the Secretary of Defense and the Joint Staff had not yet clearly stated which actions assigned to DOD in the national implementation plan should be implemented by COCOMs and which by the military services. Officials from the Office of the ASD(HD&ASA) and the Joint Staff said the COCOMs were responsible for implementing few of the actions assigned to DOD as a lead agency in the national implementation plan. However, in the absence of clear guidance, each of the COCOMs identified the actions they believed they are partly responsible for implementing. COCOM officials told us they determined they were partly responsible for between 12 and 18 of the 31 actions for which DOD is a lead agency, as shown in table 2. We identified some inconsistency in which actions the geographic COCOMs saw as their responsibility to fulfill.

**Table 2: COCOM Perceptions of Responsibility for Actions Assigned to DOD**

Action number	Action assigned to DOD	CENTCOM	EUCOM	NORTHCOM	PACOM	SOUTHCOM
4.1.1.3	Conduct military-to-military assistance planning	X	X	X	X	X
4.1.2.6	Priority country military-to-military infection control training	X	X	X	X	X
4.1.8.4	Open source information sharing		X			
4.2.2.5	Inpatient and outpatient disease surveillance	X	X			X
4.2.2.6	Monitoring health of military forces worldwide	X	X		X	
4.2.2.7	Assist with influenza surveillance in host nations	X	X			X
4.2.3.8	Develop/enhance DOD network of overseas infrastructure <sup>a</sup>					
4.2.3.9	Refinement of DOD laboratory methods				X	X
4.2.3.10	Assess foreign country military laboratory capacity	X	X	X	X	X
4.2.4.2	COCOM public health reports for area personnel	X	X	X	X	X
4.3.2.2	Identify DOD facilities to serve as points of entry from outbreak countries	X	X	X		X
5.1.1.5	Assessment of military support for transportation and borders			X	X	X
5.3.4.8	Strategic military deployment use of airports and seaports	X	X	X		X
5.3.5.5	Monitor and report on military assets requested for border protection			X		
6.1.6.3	Conduct medical materiel requirements gap analysis	X	X			X
6.1.6.4	Maintain antiviral and vaccine stockpiles <sup>a</sup>					
6.1.7.4	Establish stockpiles of vaccine against H5N1 <sup>a</sup>					
6.1.9.3	Procure 2.4 million antiviral medications <sup>a</sup>					
6.1.13.8	Supply military units/bases with influenza medication					X
6.2.2.9	Enhance public health response capabilities	X	X		X	
6.2.3.4	Access to improved rapid diagnostic tests	X	X			
6.2.4.3	Provide health statistics on influenza-like illnesses		X			
6.3.2.4	DOD guidance to personnel on protective measures	X	X	X	X	X
6.3.2.5	Implement infection control campaigns	X		X		
6.3.4.7	Enhance influenza surveillance reporting techniques	X	X			
6.3.7.2	Be prepared to augment state/local government medical response			X	X	

Action number	Action assigned to DOD	CENTCOM	EUCOM	NORTHCOM	PACOM	SOUTHCOM
6.3.7.5	Reserve medical personnel mobilization <sup>a</sup>					
6.3.8.2	Update risk communication material		X		X	
8.1.2.5	National Guard training for state law enforcement <sup>a</sup>					
8.1.2.6	Requests for assistance from states/governors				X	
8.3.2.1	Plans for quarantine enforcement		X	X	X	
<b>Total</b>		<b>15</b>	<b>18</b>	<b>12</b>	<b>13</b>	<b>13</b>

Source: GAO analysis of DOD data.

<sup>a</sup>None of the COCOMs indicated that they were responsible for implementing six of the actions assigned to DOD in the national implementation plan. Therefore, these rows are blank.

COCOM officials' varying interpretations of which actions applied to them could lead to gaps in the completion of actions assigned to DOD or duplications in effort. For example, operational and medical planning officials from the Joint Staff, the Office of the ASD(HD&ASA), and the Office of the ASD for Health Affairs told us that there were no additional force health protection actions assigned to COCOMs, but COCOM medical and planning officials told us they shared responsibility for some of the force health actions, including actions relating to monitoring force health (action 4.2.2.6), analyzing medical materiel needs (action 6.1.6.3), and implementing infection control campaigns (action 6.3.2.5). Officials from the Joint Staff and the Office of the ASD(HD&ASA) told us this confusion was evident in the collection of information on funding needs from COCOMs, as the COCOMs identified funding needs for actions these officials thought the COCOMs were not intended to fulfill.

In addition, we identified that there was little guidance on what constituted fulfillment of the actions, some of which were open to interpretation and potentially were quite broad. For example, one action, which the Joint Staff issued to the geographic COCOMs, calls for DOD to assess the avian and pandemic influenza response plans of partner militaries, develop solutions for national and regional gaps, and develop and execute military-to-military influenza exercises to validate such plans (action 4.1.1.3), by November 2007. The wide scope for interpretation of the actions meant that COCOMs could expend unnecessary effort or fail to complete actions intended for them. Without fully and clearly identifying the roles, responsibilities, and authorities of the COCOMs, including a clear delineation of which actions apply to which organizations and what constitutes fulfillment of an action, DOD's preparation for an influenza pandemic risks gaps in efforts by failing to execute some actions by

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assuming that an action will be fulfilled by other organizations; duplicating efforts, as COCOMs may undertake actions that other DOD organizations are meant to complete; or both.

Furthermore, the roles, responsibilities, and authorities of COCOMs relative to the military services for DOD's pandemic influenza planning and preparedness efforts were also not yet fully and clearly defined. The memorandum that names NORTHCOM the lead for directing, planning, and synchronizing DOD's global response to pandemic influenza is not limited to the efforts of the COCOMs; however, planning officials from one COCOM said it was unclear what authority NORTHCOM had over the military services. The April 2007 planning order directs the military services to coordinate with NORTHCOM to ensure that the services' pandemic influenza plans are synchronized with DOD's global pandemic influenza plan but does not define what this coordination entails. In addition to the need for more information on which actions the COCOMs were to complete compared to the military services discussed above, COCOM medical and planning officials sought clarification on the differences in the roles and responsibilities of the COCOMs and military services in implementing force health protection actions and moving medical assets within the area of responsibility. The November 2005 Joint Staff planning order tasked COCOMs to include force health protection in their plans for pandemic influenza. Planning officials from two of the geographic COCOMs said that, in general, COCOMs set the requirements for force health protection in their areas of responsibility and the military services are responsible for ensuring that their forces meet these requirements. However, medical and planning officials from one COCOM viewed the November 2005 Joint Staff planning order as assigning force health protection activities to the COCOMs and noted that pandemic influenza is the only area where the COCOMs are responsible for medical issues. Moreover, medical and planning officials from one of the COCOM's service subcomponents noted that because the COCOM's plan includes a "shaping" phase, which currently is being implemented, the COCOMs have a greater responsibility for force health protection than in other operations. A medical official from one COCOM noted that COCOMs can identify many of the things needed to prepare for and respond to an influenza pandemic, but the COCOMs lack the day-to-day authority over installations and resources to direct that these measures be taken during the initial phases of the COCOM's plan because force health protection typically is the responsibility of the military services. Similarly, planning officials at two geographic COCOMs reported concerns that they would not have the authority in a pandemic to move medical assets, such as antivirals, from one base in their area of responsibility controlled by one

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military service to another base controlled by a different service. An official from the Office of the ASD for Health Affairs confirmed that this is an issue, particularly within the United States, and noted that the military services and COCOMs will have to resolve this issue on their own because the Office of the ASD for Health Affairs is not part of the COCOMs' or military services' chains-of-command.

The unity and cohesiveness of DOD's pandemic influenza planning, preparation, and response efforts could be hindered by the continued lack of fully and clearly defined roles, responsibilities, authorities, and relationships of organizations throughout DOD involved in these efforts. While the April 2007 planning order outlines NORTHCOM's roles and responsibilities, the lack of clarity of the roles, responsibilities, and authorities of key organizations involved in the COCOMs' planning and preparedness efforts relative to other lead and supporting organizations has created the potential for confusion, gaps, and overlaps in areas such as the actions assigned to DOD in the national implementation plan as well as force health protection measures for DOD's personnel. Without more fully and clearly defined roles and responsibilities, various organizations could fail to carry out certain actions or, alternatively, may perform actions that other organizations were to complete. Additionally, it may be difficult for DOD to accurately capture funding requirements without a clear delineation of which actions are to be executed by which organizations, as well as the scope of the actions. Finally, COCOM planning and response could be less effective if commanders do not have a clear sense of the assets under their control, such as medical materiel at service-controlled installations.

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### DOD Has Not Identified Resources to Complete Planning and Preparedness Activities

We identified a disconnect between the COCOMs' planning and preparedness activities and resources, including funding and personnel, to complete those activities. This disconnect is, in part, because DOD guidance, including DOD's implementation plan for pandemic influenza and the Joint Staff planning order that directed the COCOMs to plan, did not identify the resources required to complete these activities. We have previously reported that information on required resources is critical for making sound analyses of how to pursue goals.<sup>20</sup> Without realistic information on required resources, decision makers cannot determine whether a strategy to achieve those goals is realistic and cost-effective or

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<sup>20</sup>[GAO/GGD/AIMD-10.1.18](#).



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make trade-offs against other funding priorities. In September 2006, we reported that DOD had not yet identified an appropriate funding mechanism or requested funding tied to its departmentwide goals, which could impair the department's overall ability to prepare for a potential pandemic, and recommended that DOD take actions to address this issue.<sup>21</sup> DOD generally concurred with our recommendation, but had not yet taken actions to address this recommendation. The continued lack of a link between the COCOMs' planning and preparedness activities and the resources required for them may limit the COCOMs' ability to effectively prepare for and respond to an influenza pandemic.

DOD did not request dedicated funding for its pandemic influenza preparedness activities in its fiscal year 2007 or fiscal year 2008 budget requests because, according to the Principal Deputy to the ASD(HD&ASA), several baseline plans, including the national implementation plan, DOD's implementation plan, and the geographic COCOMs' plans, needed to be drafted before DOD could assess its potential preparedness costs. Officials from the Office of the ASD(HD&ASA) and the Office of the ASD for Health Affairs were aware of the disconnect between the COCOMs' planning and preparedness activities and resources to accomplish these activities. The officials said that when the Homeland Security Council originally developed the national implementation plan, the officials expected to receive supplemental funding to complete the actions assigned to DOD. However, in the absence of sustained supplemental funding, the officials said they are struggling to find programs from which to divert resources to fund the department's planning and preparedness activities. In December 2005, DOD received \$130 million in supplemental appropriations for pandemic influenza; \$120 million was for expenses, including health-related items for its own personnel, and \$10 million was to provide equipment and assistance to partner nations.<sup>22</sup> However, as the Congressional Research Service reported, tracking federal funds for influenza preparedness is difficult because funds designated for pandemic influenza preparedness

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<sup>21</sup>[GAO-06-1042](#).

<sup>22</sup>Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006, Pub. L. No. 109-148 (2005). The act provided \$120 million for necessary expenses related to vaccine purchases, storage, expanded avian influenza surveillance programs, equipment, essential information management systems, and laboratory diagnostic equipment. Additionally, \$10 million was provided for surveillance, communication equipment, and assistance to military partner nations for procuring protective equipment.

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do not reflect the sum of all relevant activities, including developing the department's pandemic influenza plan.<sup>23</sup> The COCOMs have a certain amount of discretion over their operations and maintenance budgets to fund pandemic influenza-related activities. Although COCOM officials have started to identify funding requirements through multiple Joint Staff inquiries regarding COCOM funding needs, planning, medical, and budget officials from the geographic COCOMs said there is still not an accurate assessment of actual funding needs and DOD has not yet requested funding for the department's planning and preparedness activities. An official from the Office of the ASD(HD&ASA) said obtaining funding to fully establish NORTHCOM as the global synchronizer for the department's efforts is the office's top priority. After NORTHCOM establishes its global synchronizer role, the official said one of NORTHCOM's responsibilities will be to assist the Joint Staff in determining how much funding is required for DOD's pandemic influenza planning and preparedness activities.

Without resources identified for planning and preparedness activities, COCOMs have reallocated resources from other sources to undertake these activities. For example, budget officials at EUCOM said, in the absence of dedicated funding for pandemic influenza-related activities, EUCOM spent about \$145,000 of its Operations and Maintenance funding in fiscal year 2006 for travel to pandemic influenza-related conferences and for its Avian Wind exercise. COCOMs have also diverted planners from other areas to develop pandemic influenza plans. Planning officials from four of the five geographic COCOMs and four of the subcomponents we met with said pandemic influenza planning was one of many responsibilities for the personnel involved in their pandemic influenza planning and preparedness efforts, and often their other responsibilities were a higher priority. For example, planning officials from U.S. Forces Korea stated that they cannot dedicate the level of effort that pandemic influenza planning requires because of other more immediate priorities on the Korean peninsula. Similarly, members of CENTCOM's pandemic influenza planning team said they were distracted by a variety of other tasks calling for immediate action, many of which are related to the wars in Iraq and Afghanistan, and devoted a small percentage of their time to pandemic influenza; only the lead planner in the team was able to devote a significant percentage of time to pandemic influenza planning.

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<sup>23</sup>Congressional Research Service, *Pandemic Influenza: Appropriations for Public Health Preparedness and Response* (Washington, D.C.: Mar. 23, 2007).

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As a result of the lack of identified resources for DOD's pandemic influenza planning and preparedness activities, planning officials from at least three COCOMs said that they will likely be unable to complete some important activities. For example, although the Joint Staff planning order tasked geographic COCOMs to exercise their pandemic influenza plans at least once a year, officials responsible for CENTCOM's planning and PACOM's planning and exercises told us they need additional resources to conduct these exercises. While EUCOM has conducted an exercise, planning officials told us that they have had to reconsider future exercises because of the lack of resources. Additionally, officials from each of the COCOMs said they lack resources to complete some of the actions in the national implementation plan. For example, while the Joint Staff tasked all of the geographic COCOMs to assess the avian and pandemic influenza response plans of partner militaries, develop solutions for national and regional gaps, and develop and execute military-to-military influenza exercises to validate such plans (action 4.1.1.3), planning and medical budget officials from each of the geographic COCOMs said that they may be unable to complete this action by the November 2007 deadline because of the lack of resources, including funding.

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### COCOMs Have Not Yet Developed Options to Mitigate the Effects of Factors beyond Their Control

We identified factors that are beyond the COCOMs' control—such as limited detailed guidance from other federal agencies on the support expected from DOD, lack of control over DOD's antiviral stockpile, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical materiel—that they have not yet fully planned how to mitigate. While we recognize the difficulty of planning for an influenza pandemic, not yet developing options to mitigate the effects of such factors may limit the COCOM commanders' ability to protect their personnel—including military and civilian personnel, contractors, dependents, and beneficiaries—or to perform their missions during an influenza pandemic.

We have recommended a comprehensive risk-management approach as a framework for decision making.<sup>24</sup> Risk involves three elements: (1) threat, which is the probability that a specific event will occur; (2) the vulnerability of people and specific assets to that particular event; and (3) the adverse effects that would result from the particular event should it

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<sup>24</sup>[GAO-07-386T](#) and [GAO-06-442T](#).

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COCOMs Have Not Yet Developed Options to Mitigate the Effects of Limited Detailed Guidance from Other Federal Agencies

occur. We define risk management as a continuous process of assessing risks; taking actions to reduce, where possible, the potential that an adverse event will occur; reducing vulnerabilities as appropriate; and putting steps in place to reduce the effects of any event that does occur. Since it is not possible for the COCOMs to reduce the potential for an influenza pandemic, it is important they reduce their vulnerabilities and put in place steps to mitigate the effects of a potential pandemic.

Planning officials from four of the five COCOMs told us they had received limited detailed guidance from other federal agencies on what support they might be asked to provide during an influenza pandemic or information that could help the COCOMs estimate such potential support. This is one factor that has hindered their ability to plan to provide support to other federal agencies domestically and abroad during an influenza pandemic. DOD was designated as a supporting agency for pandemic influenza response in the national implementation plan. After Hurricane Katrina, we reported that the military has significant and sometimes unique capabilities, but additional actions are needed to ensure that its contributions are clearly understood and well planned and integrated.<sup>25</sup> Additionally, we reported that many challenges faced in the response to Hurricane Katrina point to the need for plans that, among other things, identify capabilities that could be available and provided by the military. Planning officials from each of the geographic COCOMs said they anticipate that, during an influenza pandemic, the COCOM will provide support domestically and abroad as requested by other federal agencies and approved by the Secretary of Defense. However, planning officials from four of the five geographic COCOMs said they had not yet received detailed information from the Department of State on what assistance other nations may request from the United States. Without this information, the officials said they cannot effectively plan to provide support. Department of State officials told us they would not know what specific kinds of support other nations may need until an influenza pandemic occurred, but they had developed a list of priority countries for the U.S. government's pandemic influenza response. Additionally, Department of State officials said they had started to assess what kinds of support may be needed for embassies and they have developed a request for information about the level of assistance DOD may be able to provide

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<sup>25</sup>GAO, *Hurricane Katrina: Better Plans and Exercises Need to Guide the Military's Response to Catastrophic Natural Disasters*, [GAO-06-808T](#) (Washington, D.C.: May 25, 2006).

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at a specific list of posts deemed most vulnerable from a medical and security standpoint should an influenza pandemic emerge. Department of State officials expected that the request for information would be sent to DOD by the end of June 2007. At least one COCOM has taken steps to mitigate the effects of limited information, pending further information from the Department of State. PACOM established multiservice teams to work with nations, territories, possessions, and protectorates in its area of responsibility to identify potential needs during an influenza pandemic. For example, in September 2006 about 15 PACOM officials went to Malaysia to provide an avian and pandemic influenza “train the trainer” workshop, obtain information on the country’s pandemic influenza planning efforts, and identify areas of mutual collaboration to increase the likelihood of a coordinated response to the current threat of avian influenza and a potential influenza pandemic. Planning officials from three COCOMs and two service subcomponents that we met with said planning to provide support at the last minute could lead to a less effective and less efficient use of resources. While identifying what capabilities may be needed and available at an indefinite point in the future is difficult, taking these steps now could allow the COCOMs to be better prepared to provide support to other federal agencies domestically and abroad during an influenza pandemic.

**COCOMs Have Not Yet Developed Options to Mitigate the Effects of a Lack of Control over DOD’s Antiviral Stockpile**

COCOM medical and planning officials have expressed concern about how they would gain access to and use DOD’s stockpile of antivirals. These officials reported that their lack of control over DOD’s stockpile of antivirals has limited their ability to plan to use this resource. The ASD for Health Affairs procured antivirals and prepositioned DOD’s antiviral stockpile in the continental United States, Europe, and the Far East. The ASD for Health Affairs retained the authority to release the antivirals to allow more flexibility to direct these limited resources where they are needed the most, according to an official in the Office of the ASD for Health Affairs. However, according to planning and medical officials at three of the COCOMs, the absence of information about these assets has made it more difficult to plan for their use because the COCOM officials did not know when they would receive the antivirals or how many doses they would receive. For example, EUCOM planning and medical officials said that during a NORTHCOM exercise in 2006, it took 96 hours for the ASD for Health Affairs to authorize the release of antivirals. The EUCOM officials expressed concern that a lengthy release process could impact the effectiveness of antivirals, as they are most effective if given within 48 hours of showing influenza-like symptoms. According to the officials, the lack of information on when the COCOMs might receive antivirals and how many antivirals they may receive limits the COCOMs’ ability to plan

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for how they will use these resources and what steps they may need to take to transport, store, and secure these resources after the ASD for Health Affairs releases the stockpile. To help address this issue, the Office of the ASD for Health Affairs distributed about 470,000 treatment courses of an antiviral to military treatment facilities, which can be administered as determined by the facility's commander. Additionally, at least two service subcomponents purchased their own supply of antivirals to be used for critical personnel during an influenza pandemic. However, by not yet taking steps to mitigate the effect of not having sufficient information to plan to use antivirals in their areas of responsibility, COCOMs may not be prepared to effectively and efficiently use these resources or protect their personnel.

COCOMs Have Not Yet Developed Options to Mitigate the Effects of Limited Information on Other Nations' Decisions

Planning officials at four of the geographic COCOMs and one of the functional COCOMs mentioned the need for information on decisions other nations may make during an influenza pandemic, such as closing borders or restricting transportation into and out of the country, as a factor that has hindered their ability to plan to continue ongoing missions during an influenza pandemic. For example, currently most servicemembers injured in Iraq and Afghanistan, in the CENTCOM area of responsibility, travel to Germany for essential medical care. EUCOM planning officials noted that Germany has reserved the right to close off access to Ramstein Air Base, Germany, which is a key European transit point for EUCOM and CENTCOM. Additionally, CENTCOM planning officials said that the borders of Kuwait and Qatar could be shut down in a pandemic, causing problems for transporting personnel and supplies into Iraq and Afghanistan. EUCOM planning officials said they discussed the need for information on decisions other nations may make with officials from the Department of State to help mitigate the effect of limited information from other countries. However, according to the EUCOM officials, most countries are not at a point in their planning to make decisions on border closures or transportation restrictions. The EUCOM officials said they will assume there will be movement restrictions for the purpose of developing their plan, but will not develop specific plans for addressing the movement restrictions until they receive more information. However, information on other nations' decisions may not be available before an influenza pandemic. Developing plans at the last minute to address other nations' decisions could limit the COCOMs' ability to obtain or use certain assets, placing at risk the COCOMs' ability to effectively protect personnel and continue missions due to potential restrictions by other nations on ground, sea, and air transportation during an influenza pandemic. For example, if a nation decides to close its borders at the start of a pandemic, COCOMs and installations may not be able to obtain

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COCOMs Have Not Yet Developed Options to Mitigate the Effects of Reliance on Civilian Medical Care

needed supplies, such as antivirals. Identifying specific options to mitigate the effects of other nations' possible decisions in advance of an influenza pandemic may help the COCOMs more fully develop their pandemic influenza plans, provide more flexibility in the COCOMs' response to an influenza pandemic, and better allow the COCOMs to continue ongoing missions.

Officials at each of the geographic COCOMs expressed concern that the COCOMs are reliant on civilian medical providers in the United States and abroad to provide medical care for military personnel, dependents, and beneficiaries. This is a factor that has hindered the COCOMs' ability to plan for how personnel will access medical care during an influenza pandemic. In fiscal year 2006, DOD provided health care to more than 9 million active duty personnel, retirees, and their dependents through the department's TRICARE program. TRICARE beneficiaries can obtain health care through DOD's direct care system of military hospitals and clinics or through DOD's purchased care system of civilian providers. We reported that, in fiscal year 2005, an estimated 75 percent of inpatient care and 65 percent of outpatient care for TRICARE beneficiaries was delivered by civilian providers.<sup>26</sup> Medical and planning officials at each of the five geographic COCOMs expressed concern that civilian medical facilities would not be able to meet the medical needs of their military personnel, dependents, and beneficiaries during an influenza pandemic, either because there may not be sufficient capacity in the civilian medical facilities or civilian medical facilities may choose to treat their own citizens ahead of these personnel. While COCOMs realistically cannot reduce their reliance on civilian medical capabilities, at least one COCOM has taken actions to mitigate the effect of the military's reliance on civilian medical care. EUCOM planning officials said they have invited host nation officials to planning conferences and met with at least two medical providers in Germany to coordinate efforts. However, the COCOMs do not control the civilian medical system and, therefore, cannot allocate resources or guarantee treatment for personnel in the civilian medical system during an influenza pandemic. Without options to mitigate the effects of DOD's reliance on the civilian medical system, COCOMs' risk being unable to protect personnel and carry out their missions during an influenza pandemic.

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<sup>26</sup>GAO, *Defense Health Care: Access to Care for Beneficiaries Who Have Not Enrolled in TRICARE's Managed Care Option*, GAO-07-48 (Washington, D.C.: Dec. 22, 2006).

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## COCOMs Have Not Yet Developed Options to Mitigate the Effects of Reliance on Military Services for Medical Materiel

Planning officials from eight of the nine COCOMs expressed concern that their headquarters are tenants on military services' installations and, therefore, are reliant on the military services to distribute medical materiel and other supplies. This is a factor that has hindered the COCOMs' ability to fully address how their headquarters will receive medical materiel and other supplies during an influenza pandemic. Medical and planning officials at two COCOMs expressed concern with the variance among the military services' health-related policies and priorities. For example, the officials said that each military service has a different doctrine or policy on pandemic influenza-related health issues, such as the distribution of vaccines, antivirals, and other drugs.<sup>27</sup> Although guidance from the ASD for Health Affairs is the same for all of the military services, it could be applied differently among the military services. For example, medical and planning officials from four of the COCOMs noted that the military services would determine how vaccines and antivirals would be used because these supplies would be provided through the military services. This variance in policy implementation could lead to different preparedness levels and limit the operational control COCOM commanders have during a pandemic, which could impair the COCOMs' ability to carry out their missions. At least two of the COCOMs—JFCOM and STRATCOM—have taken steps to mitigate the impact of this issue by participating in pandemic influenza planning efforts with the installation where their headquarters are located, according to planning officials. The reliance of COCOMs' headquarters on the military services for plans, decisions, and supplies and the COCOMs' lack of plans to mitigate the impact of that dependence could impact the COCOMs' ability to maintain their own operations and missions during an influenza pandemic.

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## Conclusions

The COCOMs have taken numerous actions to plan and prepare for an influenza pandemic, and their efforts continue. However, the COCOMs have faced some management challenges that have and will continue to impair their ability to plan and prepare for an influenza pandemic in a unified and cohesive manner. Planning in an environment of tremendous

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<sup>27</sup>Because a pandemic strain has not emerged and an effective vaccine needs to be a match to the actual pandemic virus, vaccine production for the pandemic strain cannot begin until a pandemic virus emerges. Vaccine production generally takes at least 6 to 8 months after a virus strain has been identified and will, therefore, likely be in short supply during a pandemic influenza outbreak. Antiviral drugs can also contribute to the prevention and treatment of influenza. However, while antiviral drugs may help prevent or mitigate influenza-related illness or death until an effective vaccine becomes available, these drugs are expected to be in short supply during a pandemic influenza outbreak.



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uncertainty is an extremely difficult and daunting task, but the potential impact of an influenza pandemic on DOD's personnel and operations makes sound planning all the more crucial. Additionally, preparing for a pandemic can be helpful for preparing for and responding to other disasters that may occur. While we recognize that DOD's planning and preparedness efforts departmentwide continue to evolve, failure to address these challenges could affect DOD's ability to protect its personnel, maintain the military's readiness, conduct ongoing operations abroad, carry out day-to-day functions of the department, and provide civil support at home and humanitarian assistance abroad during an influenza pandemic. Clarifying what is expected of COCOMs and other organizations within DOD in planning and preparing for an influenza pandemic, what constitutes fulfillment of planning tasks, and the roles and responsibilities of key organizations involved in DOD's pandemic influenza planning and preparedness efforts could help lessen the potential for confusion among COCOM officials, limit gaps or duplication in DOD's efforts, and increase the likelihood that DOD will be prepared to efficiently and effectively respond to an influenza pandemic. Additionally, linking expectations to resources should help the COCOMs establish appropriate priorities and accomplish the actions assigned to them from the national implementation plan, as well as other planning and preparedness activities. Finally, while the COCOMs cannot control certain factors that have hindered their preparedness efforts, they can take various steps to mitigate their effects on certain aspects of the COCOMs' plans, including developing options to address these factors. Without taking steps to address these challenges, DOD risks being insufficiently prepared to respond in a unified manner to protect its personnel and conduct its missions during an influenza pandemic.

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## Recommendations for Executive Action

To reduce the potential for confusion, gaps, and duplications in the COCOMs' pandemic influenza planning and preparedness efforts and enhance the unity and cohesiveness of DOD's efforts, we recommend that the Secretary of Defense instruct the ASD(HD&ASA) to issue guidance that specifies the following:

- Which of the actions assigned to DOD in the *Implementation Plan for the National Strategy for Pandemic Influenza* and other pandemic influenza-related planning tasks apply to the individual COCOMs, military services, and other organizations within DOD, as well as what constitutes fulfillment of these actions.

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- NORTHCOM's roles and responsibilities as global synchronizer relative to the roles and responsibilities of the various organizations leading and supporting the department's pandemic influenza planning.

To increase the likelihood that the COCOMs can effectively continue their pandemic influenza planning and preparedness activities, including accomplishing actions assigned to DOD in the national implementation plan within established time frames, we recommend that the Secretary of Defense instruct the ASD(HD&ASA) to work with the Under Secretary of Defense (Comptroller) to identify the sources and types of resources that COCOMs need to accomplish their pandemic influenza planning and preparedness activities.

To increase the likelihood that COCOMs are more fully prepared to protect personnel and perform ongoing missions during an influenza pandemic, we recommend that the Secretary of Defense instruct the Joint Staff to work with the COCOMs to develop options to mitigate the effects of factors that are beyond the COCOMs' control, such as limited detailed information from other federal agencies on the support expected from DOD, lack of control over DOD's antiviral stockpile, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical materiel.

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## Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD concurred with all of our recommendations and noted that the department is confident that future plans will adequately address specific roles, resources, and risk mitigation. DOD also provided us with technical comments, which we incorporated in the report, as appropriate. DOD's comments are included in appendix III. We also provided the Department of State an opportunity to comment on a draft of the report, but the department had no comments.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies of this report to the Chairman and Ranking Member of the Senate and House Committees on Appropriations, Subcommittees on Defense; Senate and House Committees on Armed Services; Senate Committee on Homeland Security and Governmental Affairs; House Committee on Homeland Security; and other interested congressional parties. We are also sending copies of this report to the Secretary of Defense; Secretary of State; Director, Office of

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Management and Budget; Chairman of the Joint Chiefs of Staff; Commanders of CENTCOM, EUCOM, JFCOM, NORTHCOM, PACOM, SOCOM, SOUTHCOM, STRATCOM, and TRANSCOM; and the Commander, U.S. Forces Korea. We will also provide copies to others upon request. In addition, this report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-5431 or by e-mail at [dagostinod@gao.gov](mailto:dagostinod@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made contributions to this report are listed in appendix IV.

A handwritten signature in black ink, reading "Davi M. D'Agostino". The signature is written in a cursive style with large, flowing loops.

Davi M. D'Agostino  
Director, Defense Capabilities and  
Management

# Appendix I: Actions Assigned to DOD as a Lead Agency in the National Implementation Plan

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
4.1.1.3	<p>DOD, in coordination with the Department of State and other appropriate federal agencies, host nations, and regional alliance military partners, shall, within 18 months: (1) conduct bilateral and multilateral assessments of the avian and pandemic preparedness and response plans of the militaries in partner nations or regional alliances, such as NATO, focused on preparing for and mitigating the effects of an outbreak on assigned mission accomplishment; (2) develop solutions for identified national and regional military gaps; and (3) develop and execute bilateral and multilateral military-to-military influenza exercises to validate preparedness and response plans.</p> <p>Measure of performance: all countries with endemic avian influenza engaged by U.S. efforts; initial assessment and identification of exercise timeline for the military of each key partner nation completed.</p>	Within 18 months	Joint Staff
4.1.2.6	<p>DOD, in coordination with the Department of State, host nations, and regional alliance military partners, shall assist in developing priority country military infection control and case management capability through training programs, within 18 months.</p> <p>Measure of performance: training programs carried out in all priority countries with increased military infection control and case management capability.</p>	Within 18 months	Joint Staff
4.1.8.4	<p>The Department of Health and Human Services and DOD, in coordination with the Department of State, shall enhance open source information sharing efforts with international organizations and agencies to facilitate the characterization of genetic sequences of circulating strains of novel influenza viruses within 12 months.</p> <p>Measure of performance: publication of all reported novel influenza viruses which are sequenced.</p>	Within 12 months	Assistant Secretary of Defense (ASD) for Health Affairs
4.2.2.5	<p>DOD shall develop active and passive systems for inpatient and outpatient disease surveillance at its institutions worldwide, with an emphasis on index case and cluster identification, and develop mechanisms for utilizing DOD epidemiological investigation experts in international support efforts, to include validation of systems/tools and improved outpatient/inpatient surveillance capabilities, within 18 months.</p> <p>Measure of performance: monitoring system and program to utilize epidemiological investigation experts internationally are in place.</p>	Within 18 months	ASD for Health Affairs

**Appendix I: Actions Assigned to DOD as a  
Lead Agency in the National Implementation  
Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
4.2.2.6	<p>DOD shall monitor the health of military forces worldwide (bases in the continental United States and outside of the continental United States, deployed operational forces, exercises, units, etc.), and in coordination with the Department of State, coordinate with allied, coalition, and host nation public health communities to investigate and respond to confirmed infectious disease outbreaks on DOD installations, within 18 months.</p> <p>Measure of performance: medical surveillance “watchboard” reports show results of routine monitoring, number of validated outbreaks, and results of interventions.</p>	Within 18 months	ASD for Health Affairs
4.2.2.7	<p>DOD, in coordination with the Department of State and with the cooperation of the host nation, shall assist with influenza surveillance of host nation populations in accordance with existing treaties and international agreements, within 24 months.</p> <p>Measure of performance: medical surveillance “watchboard” expanded to include host nations.</p>	Within 24 months	ASD for Health Affairs
4.2.3.8	<p>DOD, in coordination with the Department of Health and Human Services, shall develop and refine its overseas virologic and bacteriologic surveillance infrastructure through Global Emerging Infections Surveillance and Response System and the DOD network of overseas labs, including fully developing and implementing seasonal influenza laboratory surveillance and an animal/vector surveillance plan linked with World Health Organization (WHO) pandemic phases, within 18 months.</p> <p>Measure of performance: animal/vector surveillance plan and DOD overseas virologic surveillance network developed and functional.</p>	Within 18 months	ASD for Health Affairs
4.2.3.9	<p>DOD, in coordination with the Department of Health and Human Services, shall prioritize international DOD laboratory research efforts to develop, refine, and validate diagnostic methods to rapidly identify pathogens, within 18 months.</p> <p>Measure of performance: completion of prioritized research plan, resources identified, and tasks assigned across DOD medical research facilities.</p>	Within 18 months	Joint Staff
4.2.3.10	<p>DOD shall work with priority nations’ military forces to assess existing laboratory capacity, rapid response teams, and portable field assay testing equipment, and fund essential commodities and training necessary to achieve an effective national military diagnostic capability, within 18 months.</p> <p>Measure of performance: assessments completed, proposals accepted, and funding made available to priority countries.</p>	Within 18 months	Joint Staff
4.2.4.2	<p>DOD shall incorporate international public health reporting requirements for exposed or ill military international travelers into the geographic combatant commanders’ pandemic influenza plans within 18 months.</p> <p>Measure of performance: reporting requirements incorporated into geographic combatant commanders’ pandemic influenza plans.</p>	Within 18 months	ASD for Health Affairs

**Appendix I: Actions Assigned to DOD as a  
Lead Agency in the National Implementation  
Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
4.3.2.2	<p>DOD, in coordination with the Department of State, the Department of Health and Human Services, the Department of Transportation, and the Department of Homeland Security, shall limit official DOD military travel between affected areas and the United States.</p> <p>Measure of performance: DOD identifies military facilities in the United States and outside of the continental United States that will serve as the points of entry for all official travelers from affected areas, within 6 months.</p>	Within 6 months	Joint Staff
5.1.1.5	<p>DOD, in coordination with the Department of Homeland Security, the Department of Transportation, the Department of Justice, and the Department of State, shall conduct an assessment of military support related to transportation and borders that may be requested during a pandemic and develop a comprehensive contingency plan for Defense Support of Civil Authorities, within 18 months.</p> <p>Measure of performance: Defense Support of Civil Authorities plan in place that addresses emergency transportation and border support.</p>	Within 18 months	Joint Staff
5.3.4.8	<p>DOD, in coordination with the Department of Homeland Security and the Department of State, shall identify those domestic and foreign airports and seaports that are considered strategic junctures for major military deployments and evaluate whether additional risk-based protective measures are needed, within 18 months.</p> <p>Measure of performance: identification of critical air and seaports and evaluation of additional risk-based procedures, completed.</p>	Within 18 months	Joint Staff
5.3.5.5	<p>DOD, when directed by the Secretary of Defense and in accordance with law, shall monitor and report the status of the military transportation system and those military assets that may be requested to protect the borders, assess impacts (to include operational impacts), and coordinate military services in support of federal agencies and state, local, and tribal entities.</p> <p>Measure of performance: when DOD activated, regular reports provided, impacts assessed, and services coordinated as needed.</p>	In response to an influenza pandemic	Joint Staff
6.1.6.3	<p>DOD, as part of its departmental implementation plan, shall conduct a medical materiel requirements gap analysis and procure necessary materiel to enhance Military Health System surge capacity, within 18 months.</p> <p>Measure of performance: gap analysis completed and necessary materiel procured.</p>	Within 18 months	ASD for Health Affairs

**Appendix I: Actions Assigned to DOD as a  
Lead Agency in the National Implementation  
Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
6.1.6.4	<p>The Department of Health and Human Services, DOD, the Department of Veterans Affairs, and the states shall maintain antiviral and vaccine stockpiles in a manner consistent with the requirements of the Food and Drug Administration’s Shelf Life Extension Program and explore the possibility of broadening the Shelf Life Extension Program to include equivalently maintained state stockpiles, within 6 months.</p> <p>Measure of performance: compliance with the Shelf Life Extension Program requirements documented; decision made on broadening the Shelf Life Extension Program to state stockpiles.</p>	Within 6 months	ASD for Health Affairs
6.1.7.4	<p>DOD shall establish stockpiles of vaccine against H5N1 and other influenza subtypes determined to represent a pandemic threat adequate to immunize approximately 1.35 million persons for military use within 18 months of availability.</p> <p>Measure of performance: sufficient vaccine against each influenza virus determined to represent a pandemic threat in DOD stockpile to vaccinate 1.35 million persons.</p>	Within 18 months of availability	ASD for Health Affairs
6.1.9.3	<p>DOD shall procure 2.4 million treatment courses of antiviral medications and position them at locations worldwide within 18 months. Measure of performance: aggregate 2.4 million treatment courses of antiviral medications in DOD stockpiles.</p>	Within 18 months	ASD for Health Affairs
6.1.13.8	<p>DOD shall supply military units and posts, installations, bases, and stations with vaccine and antiviral medications according to the schedule of priorities listed in the DOD pandemic influenza policy and planning guidance, within 18 months.</p> <p>Measure of performance: vaccine and antiviral medications procured; DOD policy guidance developed on use and release of vaccine and antiviral medications; and worldwide distribution drill completed.</p>	Within 18 months	Joint Staff
6.2.2.9	<p>DOD shall enhance influenza surveillance efforts within 6 months by: (1) ensuring that medical treatment facilities monitor the Electronic Surveillance System for Early Notification of Community-based Epidemics and provide additional information on suspected or confirmed cases of pandemic influenza through their service surveillance activities; (2) ensuring that Public Health Emergency Officers report all suspected or actual cases through appropriate DOD reporting channels, as well as to the Centers for Disease Control and Prevention, state public health authorities, and host nations; and (3) posting results of aggregated surveillance on the DOD Pandemic Influenza Watchboard; all within 18 months.</p> <p>Measure of performance: number of medical treatment facilities performing Electronic Surveillance System for Early Notification of Community-based Epidemics surveillance greater than 80 percent; DOD reporting policy for public health emergencies, including pandemic influenza, completed.</p>	Within 18 months	ASD for Health Affairs

**Appendix I: Actions Assigned to DOD as a  
Lead Agency in the National Implementation  
Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
6.2.3.4	Department of Health and Human Services-, DOD-, and Department of Veterans Affairs-funded hospitals and health facilities shall have access to improved rapid diagnostic tests for influenza A, including influenza with pandemic potential, within 6 months of when tests become available.	Within 6 months of when tests become available	ASD for Health Affairs
6.2.4.3	DOD and the Department of Veterans Affairs shall be prepared to track and provide personnel and beneficiary health statistics and develop enhanced methods to aggregate and analyze data documenting influenza-like illness from their surveillance systems within 12 months.  Measure of performance: influenza tracking systems in place and capturing beneficiary clinical encounters.	Within 12 months	ASD for Health Affairs
6.3.2.4	As appropriate, DOD, in consultation with its combatant commanders, shall implement movement restrictions and individual protection and social distancing strategies (including unit shielding, ship sortie, cancellation of public gatherings, drill, training, etc.) within its posts, installations, bases, and stations. DOD personnel and beneficiaries living off-base should comply with local community containment guidance with respect to activities not directly related to the installation. DOD shall be prepared to initiate within 18 months.  Measure of performance: the policies/procedures are in place for at-risk DOD posts, installations, bases, stations, and for units to conduct an annual training evaluation that includes restriction of movement, shielding, personnel protection measures, health unit isolation, and other measures necessary to prevent influenza transmission.	Within 18 months	Joint Staff
6.3.2.5	All Department of Health and Human Services-, DOD-, and Department of Veterans Affairs-funded hospitals and health facilities shall develop, test, and be prepared to implement infection control campaigns for pandemic influenza, within 3 months.  Measure of performance: guidance materials on infection control developed and disseminated on <a href="http://www.pandemicflu.gov">www.pandemicflu.gov</a> and through other channels.	Within 3 months	ASD for Health Affairs
6.3.4.7	DOD shall enhance its public health response capabilities by: (1) continuing to assign epidemiologists and preventive medicine physicians within key operational settings; (2) expanding ongoing DOD participation in the Centers for Disease Control and Prevention's Epidemic Intelligence Service program; and (3) within 18 months, fielding specific training programs for Public Health Emergency Officers that address their roles and responsibilities during a public health emergency.  Measure of performance: all military Public Health Emergency Officers fully trained within 18 months; increase military trainees in the Centers for Disease Control and Prevention's Epidemic Intelligence Service program by 100 percent within 5 years.	Within 18 months	Joint Staff



**Appendix I: Actions Assigned to DOD as a  
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Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
6.3.7.2	<p>DOD and Department of Veterans Affairs assets and capabilities shall be postured to provide care for military personnel and eligible civilians, contractors, dependants, other beneficiaries, and veterans and shall be prepared to augment the medical response of state, territorial, tribal, or local governments and other federal agencies consistent with their Emergency Support Function #8—Public Health and Medical Services support roles, within 3 months.</p> <p>Measure of performance: DOD and Department of Veterans Affairs' pandemic preparedness plans developed; in a pandemic, adequate health response provided to military and associated personnel.</p>	Within 3 months	Joint Staff
6.3.7.5	<p>DOD shall develop and implement guidelines defining conditions under which Reserve Component medical personnel providing health care in nonmilitary health care facilities should be mobilized and deployed, within 18 months.</p> <p>Measure of performance: guidelines developed and implemented.</p>	Within 18 months	ASD for Health Affairs
6.3.8.2	<p>DOD and the Department of Veterans Affairs, in coordination with the Department of Health and Human Services, shall develop and disseminate educational materials, coordinated with and complementary to messages developed by the Department of Health and Human Services but tailored for their respective departments, within 6 months.</p> <p>Measure of performance: up-to-date risk communication material published on DOD and Department of Veterans Affairs pandemic influenza Web sites, Department of Health and Human Services Web site <a href="http://www.pandemicflu.gov">www.pandemicflu.gov</a>, and in other venues.</p>	Within 6 months	ASD for Health Affairs
8.1.2.5	<p>DOD, in consultation with the Department of Justice and the National Guard Bureau, and in coordination with the states as such training applies to support state law enforcement, shall assess the training needs for National Guard forces in providing operational assistance to state law enforcement under either federal (Title 10) or state (Title 32 or State Active Duty) in a pandemic influenza outbreak and provide appropriate training guidance to the states and territories for units and personnel who will be tasked to provide this support, within 18 months.</p> <p>Measure of performance: guidance provided to all states.</p>	Within 18 months	Joint Staff
8.1.2.6	<p>DOD, in consultation with the Department of Justice, shall advise state governors of the procedures for requesting military equipment and facilities, training, and maintenance support as authorized by 10 U.S.C. §§ 372-74, within 6 months.</p> <p>Measure of performance: all state governors advised.</p>	Within 6 months	Joint Staff

**Appendix I: Actions Assigned to DOD as a  
Lead Agency in the National Implementation  
Plan**

Action number	Action	Deadline to complete action <sup>a</sup>	Lead Department of Defense (DOD) organization responsible for implementing action
8.3.2.1	<p>The Department of Justice, the Department of Homeland Security, and DOD shall engage in contingency planning and related exercises to ensure they are prepared to maintain essential operations and conduct missions, as permitted by law, in support of quarantine enforcement and/or assist state, local, and tribal entities in law enforcement emergencies that may arise in the course of an outbreak, within 6 months.</p> <p>Measure of performance: completed plans (validated by exercise[s]) for supporting quarantine enforcement and/or law enforcement emergencies.</p>	Within 6 months	Joint Staff

Source: Homeland Security Council and DOD.

<sup>a</sup>The deadline to complete these actions is based on the May 2006 issuance date of the national implementation plan. Therefore, actions that were to be completed within 6 months were due in November 2006. The Homeland Security Council issued a report on the federal government's progress on the actions to be completed within 6 months of the issuance of the national implementation plan. For more information, see Homeland Security Council, *National Strategy for Pandemic Influenza Implementation Plan Summary of Progress* (Washington, D.C.: December 2006). Six of the seven actions assigned to DOD as a lead agency were reported to be complete; one action was not included in the report. We did not assess whether DOD met the performance measures listed in the plan for these actions since it was not part of this review.

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# Appendix II: Scope and Methodology

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To determine the actions the combatant commands (COCOM) have taken to date to prepare for an influenza pandemic, we reviewed drafts of the five geographic COCOMs' plans and one functional COCOM's plan that were available at the time of our review. We did not evaluate these plans; rather we used the plans to determine what actions the COCOMs have taken and plan to take to prepare for an influenza pandemic. Additionally we reviewed planning orders issued by the Joint Staff to the COCOMs in November 2005 and April 2007, DOD's implementation plan for pandemic influenza issued in August 2006, the *Implementation Plan for the National Strategy for Pandemic Influenza* issued by the Homeland Security Council in May 2006, DOD's budget requests for fiscal years 2007 and 2008 and appropriations for fiscal year 2007, and after-action reports from exercises related to pandemic influenza. Furthermore, we met with more than 200 officials involved in pandemic influenza planning and preparedness efforts at the nine COCOMs, including operational, medical, logistics, and continuity of operations planners; budget analysts; intelligence analysts and planners; public affairs professionals; humanitarian assistance liaisons; and representatives from the office of the command surgeon, including officials involved in force health protection activities. To better understand the extent of the COCOMs' efforts to plan and prepare for an influenza pandemic, we met with officials or, in one case, received written responses to our questions from the following COCOMs and their subcomponents:

- Headquarters, U.S. Central Command, MacDill Air Force Base, Florida;
- Headquarters, U.S. European Command, Patch Barracks, Germany;
  - Marine Forces Europe, Patch Barracks, Germany;
  - Naval Forces Europe, Patch Barracks, Germany;
  - Special Operations Command Europe, Patch Barracks, Germany;
  - U.S. Air Forces Europe, Ramstein Air Base, Germany;
  - U.S. Army Europe, Campbell Barracks, Germany;
  - Installation Management Command Europe, Campbell Barracks, Germany;
  - European Regional Medical Command, Campbell Barracks, Germany;
  - U.S. Army Medical Materiel Command Europe, Pirmasens, Germany;
- Headquarters, U.S. Joint Forces Command, Norfolk, Virginia;
- Headquarters, U.S. Northern Command, Peterson Air Force Base, Colorado;
- Headquarters, U.S. Pacific Command, Camp H.M. Smith, Hawaii;
  - Marine Forces Pacific, Camp H.M. Smith, Hawaii;
  - Pacific Air Force, Hickam Air Force Base, Hawaii;

- Pacific Fleet, Naval Station Pearl Harbor, Hawaii;
- Special Operations Command Pacific, Camp H.M. Smith, Hawaii;
- U.S. Army Pacific, Fort Shafter, Hawaii;
- U.S. Forces Korea, Yongsan Army Garrison, South Korea;
  - U.S. Naval Forces Korea, Yongsan Army Garrison, South Korea;
  - 7th Air Force, Osan Air Base, South Korea;
  - 18th Medical Command, Yongsan Army Garrison, South Korea;
  - Installation Management Command Korea Regional Office, Yongsan Army Garrison, South Korea;
- Installation Management Command Pacific, Fort Shafter, Hawaii;
- Tripler Army Medical Center, Hawaii;
- Headquarters, U.S. Southern Command, Miami, Florida;
- Headquarters, U.S. Special Operations Command, MacDill Air Force Base, Florida;
- Headquarters, U.S. Strategic Command, Offutt Air Force Base, Nebraska; and
- Headquarters, U.S. Transportation Command, Scott Air Force Base, Illinois;

We elected to meet with officials from the military service and special operations subcomponents at the U.S. European Command and U.S. Pacific Command because these two commands have had to address outbreaks of H5N1 avian influenza in their areas of responsibility. We selected U.S. Forces Korea because of the number of cases of H5N1 avian influenza in South Korea and the large number of U.S. military personnel stationed in U.S. Forces Korea's area of responsibility. Furthermore, to better understand how the COCOMs' planning and preparedness efforts relate to DOD's departmentwide planning efforts, we met in the Washington, D.C., area with officials from the Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, Office of the Assistant Secretary of Defense for Health Affairs, and Joint Staff. We also met with officials from the Department of State to better understand their pandemic influenza planning and preparedness efforts, as they relate to the COCOMs' efforts. We did not assess the efforts of the individual installations to prepare for an influenza pandemic or whether installations' implementation plans supported the COCOM or military services' plans because many installations had not yet completed their implementation plans and because our focus for this report was on the COCOM-level planning and preparedness efforts.

To determine management challenges that COCOMs face as they continue their planning efforts, we compared the COCOMs' actions to date to best practices that we have identified in our prior work. Specifically, we reviewed our previous work on risk management, influenza pandemics,

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**Appendix II: Scope and  
Methodology**

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emergency preparedness, and overall management to determine whether other issues or lessons learned addressed in these reports were applicable to the COCOMs' pandemic influenza planning and preparedness efforts. This work is referenced in the list of Related GAO Products at the end of this report.

We conducted our review from September 2006 through April 2007 in accordance with generally accepted government auditing standards.

# Appendix III: Comments from the Department of Defense



HOMELAND  
DEFENSE

ASSISTANT SECRETARY OF DEFENSE  
2600 DEFENSE PENTAGON  
WASHINGTON, DC 20301-2600

MAY 22 2007

Ms. Davi M. D'Agostino  
Director, Defense Capabilities and Management  
U. S. Government Accountability Office  
441 G. Street, N. W.  
Washington, DC 20548

Dear Ms. D'Agostino:

Thank you for the opportunity to respond to the GAO Draft Report, "INFLUENZA PANDEMIC: DoD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation," dated April 25, 2007, (GAO Code 350786/GAO-07-696). The Department of Defense concurs with comments. Please find the attached matrix and supporting documentation. While it is policy not to release plans outside of the Department, DoD Components have been directed to establish reading rooms to facilitate GAO's review of applicable plans.

The report represents a snapshot in time and much has been accomplished to facilitate the Department's planning efforts. We are confident that future plans will adequately address specific roles, resources, and risk mitigation.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter F. Verga".

Peter F. Verga  
Acting

Enclosure:  
As stated

GAO Draft Report

**“INFLUENZA PANDEMIC: DoD Combatant Commands’ Preparedness Efforts  
Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation,”  
April 25, 2007, (GAO Code 350786/GAO-07-696)**

**DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS**

**RECOMMENDATION 1:** Recommend that the Secretary of Defense instruct the ASD for Homeland Defense and Americas’ Security Affairs to issue guidance that specifies the following:

- Which of the actions assigned to DOD in the *Implementation Plan for the National Strategy for Pandemic Influenza* and other pandemic influenza-related planning tasks apply to the individual COCOMs, military services, and other organizations within DOD, as well as what constitutes fulfillment of these actions.
- NORTHCOM’s roles and responsibilities as global synchronizer relative to the roles and responsibilities of the various organizations leading and supporting the department’s pandemic influenza planning.

**DOD RESPONSE:** DoD concurs.

**RECOMMENDATION 2:** Recommend that the Secretary of Defense instruct the Assistant Secretary of Defense for Homeland Defense and Americas’ Security Affairs to work with the Under Secretary of Defense (Comptroller) to identify the sources and types of resources that COCOMS need to accomplish their pandemic influenza planning and preparedness activities.

**DOD RESPONSE:** DoD concurs.

**RECOMMENDATION 3:** Recommend that the Secretary of Defense instruct the Joint Staff to work with the COCOMs to develop options to mitigate the effects of factors that are beyond the COCOMs’ control, such as limited detailed information from other federal agencies on the support expected from DOD, lack of control over to DOD’s antiviral stockpile, limited information on decisions that other nations may make during an influenza pandemic, reliance on civilian medical providers for medical care, and reliance on military services for medical material.

**DOD RESPONSE:** DoD concurs.

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Davi M. D'Agostino, 202-512-5431, dagostinod@gao.gov

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## Staff Acknowledgments

Mark A. Pross, Assistant Director; Susan Ditto; Nicole Gore; Simon Hirschfeld; Aaron Johnson; and Hilary Murrish made key contributions to this report.



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# Related GAO Products

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*Homeland Security: Observations on DHS and FEMA Efforts to Prepare for and Respond to Major and Catastrophic Disasters and Address Related Recommendations and Legislation.* [GAO-07-835T](#). Washington, D.C.: May 15, 2007.

*Financial Market Preparedness: Significant Progress Has Been Made, but Pandemic Planning and Other Challenges Remain.* [GAO-07-399](#). Washington, D.C.: March 29, 2007.

*Public Health and Hospital Emergency Preparedness Programs: Evolution of Performance Measurement Systems to Measure Progress.* [GAO-07-485R](#). Washington, D.C.: March 23, 2007.

*Homeland Security: Preparing for and Responding to Disasters.* [GAO-07-395T](#). Washington, D.C.: March 9, 2007.

*Homeland Security: Applying Risk Management Principles to Guide Federal Investments.* [GAO-07-386T](#). Washington, D.C.: February 7, 2007.

*Influenza Pandemic: DOD Has Taken Important Actions to Prepare, but Accountability, Funding, and Communications Need to be Clearer and Focused Departmentwide.* [GAO-06-1042](#). Washington, D.C.: September 21, 2006.

*Hurricane Katrina: Better Plans and Exercises Need to Guide the Military's Response to Catastrophic Natural Disasters.* [GAO-06-808T](#). Washington, D.C.: May 25, 2006.

*Hurricane Katrina: Better Plans and Exercises Needed to Guide the Military's Response to Catastrophic Natural Disasters.* [GAO-06-643](#). Washington, D.C.: May 15, 2006.

*Continuity of Operations: Agencies Could Improve Planning for Telework during Disruptions.* [GAO-06-740T](#). Washington, D.C.: May 11, 2006.

*Hurricane Katrina: GAO's Preliminary Observations Regarding Preparedness, Response, and Recovery.* [GAO-06-442T](#). Washington, D.C.: March 8, 2006.

*Emergency Preparedness and Response: Some Issues and Challenges Associated with Major Emergency Incidents.* [GAO-06-467T](#). Washington, D.C.: February 23, 2006.

*Statement by Comptroller General David M. Walker on GAO's Preliminary Observations Regarding Preparedness and Response to Hurricanes Katrina and Rita.* [GAO-06-365R](#). Washington, D.C.: February 1, 2006.

*Influenza Pandemic: Applying Lessons Learned from the 2004-05 Influenza Vaccine Shortage.* [GAO-06-221T](#). Washington, D.C.: November 4, 2005.

*Influenza Vaccine: Shortages in 2004-05 Season Underscore Need for Better Preparation.* [GAO-05-984](#). Washington, D.C.: September 30, 2005.

*Influenza Pandemic: Challenges in Preparedness and Response.* [GAO-05-863T](#). Washington, D.C.: June 30, 2005.

*Influenza Pandemic: Challenges Remain in Preparedness.* [GAO-05-760T](#). Washington, D.C.: May 26, 2005.

*Flu Vaccine: Recent Supply Shortages Underscore Ongoing Challenges.* [GAO-05-177T](#). Washington, D.C.: November 18, 2004.

*Emerging Infectious Diseases: Review of State and Federal Disease Surveillance Efforts.* [GAO-04-877](#). Washington, D.C.: September 30, 2004.

*Infectious Disease Preparedness: Federal Challenges in Responding to Influenza Outbreaks.* [GAO-04-1100T](#). Washington, D.C.: September 28, 2004.

*Emerging Infectious Diseases: Asian SARS Outbreak Challenged International and National Responses.* [GAO-04-564](#). Washington, D.C.: April 28, 2004.

*Public Health Preparedness: Response Capacity Improving but Much Remains to Be Accomplished.* [GAO-04-458T](#). Washington, D.C.: February 12, 2004.

*HHS Bioterrorism Preparedness Programs: States Reported Progress but Fell Short of Program Goals for 2002.* [GAO-04-360R](#). Washington, D.C.: February 10, 2004.

*Hospital Preparedness: Most Urban Hospitals Have Emergency Plans but Lack Certain Capacities for Bioterrorism Response.* [GAO-03-924](#). Washington, D.C.: August 6, 2003.

*Severe Acute Respiratory Syndrome: Established Infectious Disease Control Measures Helped Contain Spread, But a Large-Scale Resurgence May Pose Challenges.* [GAO-03-1058T](#). Washington, D.C.: July 30, 2003.

*SARS Outbreak: Improvements to Public Health Capacity Are Needed for Responding to Bioterrorism and Emerging Infectious Diseases.* [GAO-03-769T](#). Washington, D.C.: May 7, 2003.

*Infectious Disease Outbreaks: Bioterrorism Preparedness Efforts Have Improved Public Health Response Capacity, but Gaps Remain.* [GAO-03-654T](#). Washington, D.C.: April 9, 2003.

*Flu Vaccine: Steps Are Needed to Better Prepare for Possible Future Shortages.* [GAO-01-786T](#). Washington, D.C.: May 30, 2001.

*Flu Vaccine: Supply Problems Heighten Need to Ensure Access for High-Risk People.* [GAO-01-624](#). Washington, D.C.: May 15, 2001.

*Influenza Pandemic: Plan Needed for Federal and State Response.* [GAO-01-4](#). Washington, D.C.: October 27, 2000.

*Global Health: Framework for Infectious Disease Surveillance.* [GAO/NSIAD-00-205R](#). Washington, D.C.: July 20, 2000.

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