



U.S. GLOBAL HEALTH POLICY

THE U.S. DEPARTMENT OF DEFENSE AND GLOBAL HEALTH

September 2012



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EXECUTIVE SUMMARY

The Department of Defense (DoD), the largest and oldest agency of the U.S. government, has a long history of supporting health and medical activities around the world. While DoD itself does not typically define these efforts as part of “global health,” they do indeed have an impact on the health of populations throughout the world, including those in low- and middle-income countries. DoD possesses and utilizes unique and substantial assets for such activities, such as a tremendous geographic reach, long-standing and influential partnerships with foreign governments and militaries, an ability to rapidly mobilize significant resources, and expertise in scientific and technical areas including research and development. In addition, the recent trend in DoD policy of adopting a more balanced approach to its use of military medical assets (so they perform their more traditional support functions of ensuring the health of the warfighter while contributing to its efforts to prevent conflict and promote stability) has made global health-related activities more prominent now than in the past. As a result, DoD has been increasingly seen – both by some within the department as well as those working outside of it – as part of the U.S. government’s larger global health enterprise. This view has been bolstered by the emphasis placed on global health as a tool of soft power and important component of U.S. national security during the post-9/11 era, which has been marked by U.S. government recognition of HIV/AIDS as a national security threat, growing concerns about emerging and pandemic disease threats, and U.S. engagement in nation-building activities in Iraq and Afghanistan.

Even so, DoD is not a development agency, and improving global health is not one of its core objectives; rather, its primary mission has always been, and continues to be, providing the military forces necessary to promote and protect the security of the United States. This has led to some ambiguity and tension regarding the role of DoD in this area, with many in the global health community having reservations about DoD’s efforts but lacking a full understanding of its work, and DoD at times failing to give due consideration to the methods and principles that define successful global health programs even as it has increased its attention to such activities. Adding to misunderstandings and difficulties are differences in approach, organizational culture, and vocabulary between DoD and others working on global health.

To help provide new information on DoD’s work in this area and contribute to the discussion about its role in global health, this report presents the first comprehensive description and analysis of DoD’s organizational structure, activities, strategy, policy, and budget for its activities related to global health. Overall, the report finds:

- DoD’s evolving views on and engagement with global health-related work should be considered within a broader national security context. Over the past decade, DoD has increasingly stressed a balance between maintaining traditional military-to-military warfighting capabilities and developing capabilities that support the prevention, mitigation, and resolution of conflicts, as evidenced by recent policy guidance elevating “stability operations” to the same level of importance as combat operations. In the future, further changes in approach to its health activities may result from ongoing shifts in national security and defense budgets and priorities, such as a move away from large-scale “nation-building” activities and a move toward paying greater attention to Asia.
- DoD’s current global health activities can be categorized into three main, interrelated “focus areas”: *force health protection and readiness* (medical research and development, health surveillance, and training and education in global health), *medical stability operations and partnership engagement* (technical assistance and activities designed to build trust, prevent

conflict and/or increase the capacity of partner governments), and *threat reduction* (activities to detect, contain, and prevent impacts of intentional or natural biological events).

- Oversight and implementation responsibilities for DoD's global health-related activities are spread across a large number of offices across the department, a reflection of the department's size, decentralized structure, and organizational culture.
- There is no overarching policy or strategic document that guides the department's global health-related efforts, but recent changes in DoD policy and guidance (such as a recent policy guidance that for the first time elevates the military health system's role across the phases of conflict and in both combat and non-combat environments) acknowledge a growing role for global health-related activities. This report identifies 67 policy and guidance documents which inform and guide DoD offices with global health-related responsibilities.
- While there is no single DoD "global health budget" line item, this report estimates that the DoD budget for such activities was more than half a billion dollars in FY 2012 (at least \$579.7 million), drawn from multiple accounts and funding streams across DoD. For comparison, this estimated funding "floor" is higher than the global health budgets for either the Centers for Disease Control and Prevention or the National Institutes of Health in FY 2012.

With the removal of U.S. combat troops from Iraq, the planned drawdown in U.S. forces in Afghanistan, looming cuts to the defense budget, and a time of general fiscal constraint, a new U.S. defense strategy has been released that shifts the department away from sustained nation-building efforts while placing a greater emphasis on Asia. Consequently, the policy environment within which decisions about DoD health activities will be taken is changing significantly. Although the full extent of these changes is difficult to anticipate, several policy issues that will be important to consider looking ahead include:

- Further consideration and analysis of DoD's work related to global health may help DoD to develop a clearer vision for how its global health-related programs relate to one another, how these activities can best serve its broader organizational objectives, and whether DoD should place more or less of an emphasis on them going forward, given the benefits and pitfalls. It also might inform debates, such as whether DoD's current approach can help improve health in developing countries, and further discussion about the role DoD should play in U.S. global health engagement more broadly.
- Given the vast budget and influence of DoD, improved coordination with civilian U.S. government partners in global health may promote more effective use of resources and ensure U.S. government efforts in national security and in global health are not working at cross-purposes or duplicative.
- While the department has raised the policy importance of global health-related efforts, a corresponding shift in funding and organizational support is not evident. Greater budgetary and institutional support could help these new priorities to be more broadly and successfully adopted by increasing their integration into routine planning and operations, but increasing budget pressure may complicate such efforts.
- Greater attention to, standardization of, and support for tracking and measuring the effectiveness of DoD's global health-related activities could assist the department in defining benchmarks for success and in determining the contributions such activities make to its broader strategic goals.

- DoD and external groups working on the ground might explore ways to improve meaningful and regular attempts at communication, given concerns among some that DoD's national security objectives at times become prioritized over the objectives of the global health and development community, which may hinder progress toward improving health. Such communication might better support shared objectives and clarify differences and roles.
- Finally, DoD faces a more general communication and public diplomacy challenge due to a lack of external understanding of DoD's work in this area, potentially undermining support from the public, Congress, and other key stakeholders. Increased communication efforts and more transparency about its work in this area may clarify the contribution of, and expectations for, these DoD activities.

The Department of Defense is in the midst of a period of significant transition, and over the next several years, changes in the national defense context and pressures on the department's budget may necessitate tough choices about how to prioritize and most effectively utilize the military's global health-related assets. Against this backdrop, it will be important to consider whether the department's engagement in, approach to, and objectives for its global-health activities should be reexamined or clarified — including the extent to which global health-related activities should be part of its work going forward. Additionally, further efforts to understand how DoD fits into the larger landscape of U.S. and international engagement on global health will be important, particularly since any scaling back in DoD's engagement may create a gap that other organizations might need to fill.

INTRODUCTION

The Department of Defense (DoD) is the oldest and largest U.S. executive branch department. It is currently the nation's largest employer and oversees activities in virtually every country in the world. Since its creation, the core mission of DoD has been to "provide the military forces needed to deter war and protect the security of the United States."¹ Over time, the way the department approaches and carries out its mission has changed along with shifts in national security circumstances and priorities. In recent decades an emphasis on traditional warfighting capabilities and military-to-military combat operations has given way to an approach that emphasizes a balance between warfighting and the prevention, mitigation, and resolution of conflict. While such non-conventional roles have long been a part of DoD's approach, in recent years they have received noticeably greater attention and policy support from the U.S. national security and defense establishment. As a consequence the department now finds itself squarely within the nexus of a more multifaceted, "whole-of-government" approach to national security that by design embraces the tools of diplomacy, development and defense together.^{2,3,4}

As part of the shift toward a more balanced approach and in response to a growing sense among U.S. policymakers that global health is important for U.S. national security, DoD has increasingly emphasized and engaged in global health activities, including medical research and development, technical assistance and capacity building, health infrastructure support, and health service delivery. Yet, because DoD is not a development agency and improving global health is not one of its core objectives, it has not always been clear to those inside and outside the department how global health fits into its mission. In fact, the department itself typically does not define its activities in this area as "global health." Many in the global health community have little knowledge of DoD's work in global health and struggle to understand what the department does in this area and how it intersects with the efforts of other U.S. government agencies and global health actors. Exacerbating the misunderstandings have been differences in approach, organizational culture, and vocabulary between DoD and the global health community at large that have at times made communication and mutual understanding more difficult.

This report helps address these information gaps by providing the first comprehensive assessment of DoD's role in global health, looking across the entire department. It summarizes the history and current policy context of DoD's engagement with global health, identifies the components and elements within DoD involved in global health-related activities, and describes the main types of activities that comprise its work in this area. The report also examines how the department coordinates its activities with other actors, identifies the policy and guidance documents that apply to its global health-related work, and summarizes what is known about its budget for these activities. Finally, the report discusses key issues to consider as policymakers – both inside and outside the department – gauge what steps should be taken to improve the department's efforts related to global health.

METHODS

Data used in this study were collected through a comprehensive desk review of official documents and the literature, combined with semi-structured interviews with key stakeholders at DoD and other organizations. Interviews took place through a two-stage process: an initial set of interviewees was selected using purposeful sampling designed to ensure representation from all major components of the department as well as perspectives from external experts, incorporating viewpoints that span policy, planning and implementation of DoD's global health-related activities; additional interviewees were identified through the initial stakeholders. Overall, 32 stakeholders were interviewed, including 26 DoD

employees (military and civilian) and 6 individuals outside the department. All data were systematically reviewed and analyzed to identify the key offices, functions, and activities of DoD's global health engagement discussed in this report. DoD itself does not define what constitutes a "global health" activity; therefore, for the purposes of this report, we consider the department's "global health-related" activities and policies to be those with actual or potential impacts on the health of populations in low- and middle-income countries. In addition to the main findings presented in this report, an accompanying Technical Volume (with additional detail on the components and elements related to global health as well as guidance and policy documents) is also available.

HISTORY AND CONTEXT

The Department of Defense is the oldest and largest U.S. executive branch department. It traces its roots back to the American Revolution with the formation of the military services of the Army, Navy and Marine Corps in 1775 and the creation of the War Department – DoD's predecessor – in 1789. The military services remained independent until after World War II, but by 1949 Congress had unified the services (including a newly formed Department of the Air Force) within a single Department of Defense overseen by a civilian Secretary of Defense.⁵ According to the department, it is the country's largest employer, with approximately 1.4 million active duty military service members, 700,000 civilian employees, and over 1 million individuals serving in the National Guard and Reserve forces. The department oversees activities in virtually every country in the world, and at any given time, more than 450,000 DoD employees are stationed outside the U.S.⁶ For FY 2012, the base DoD budget was \$531 billion, comprising approximately 20% of the total U.S. federal budget.

Since its creation, the overarching mission of the Department of Defense has been to "provide the military forces needed to deter war and protect the security of the United States."⁷ While its fundamental mission has remained the same, the strategies, available resources, and activities the department implements in pursuit of its mission have changed significantly over time, shaped strongly by changing perceptions of the most critical threats to U.S. national security. For example, prior to and during World War II, the emphasis of the department was on developing and deploying conventional warfare capabilities and working with allies in countering the spread of fascism. In the Cold War period that followed, the department prioritized containment of the Soviet Union, limiting the influence of communism (a prime motivator for engagement in Korea and Vietnam), and nuclear deterrence.

More recently, the events of September 11th, 2001, and their aftermath have given way to yet another period, fundamentally re-shaping the nation's approach to national security, including the way in which DoD carries out its mission. As the 2002 *National Security Strategy* stated: "Defending our Nation against its enemies is the first and fundamental commitment of the Federal Government. Today, that task has changed dramatically."⁸ In the post-9/11 era, non-state actors in weak and failing states have been emphasized as threats to U.S. national security, because "poverty, weak institutions, and corruption can make weak states vulnerable to terrorist networks."⁹ In the years after the 2001 attacks, the U.S. became engaged in long-term, unconventional wars in Iraq and Afghanistan, conflicts that DoD describes as "unlike those that came before,"¹⁰ and over this time period, DoD placed greater emphasis on policies and activities to support counterterrorism, counterinsurgency, homeland defense, and fostering stability in countries and regions around the world. By 2004, it was recognized that such non-conventional operations had already become, and would continue to be, a significant component of DoD's work that required more departmental resources and attention.¹¹

As a reflection of this change in perspective, in 2005, the department issued a new policy directive declaring “stability operations” (defined by DoD as “military activities undertaken to maintain or reestablish a safe and secure environment in areas outside the U.S.”) as a “core military mission” that “shall be given priority comparable to combat operations and be explicitly addressed and integrated across all DoD activities.”¹² This was a notable development, marking the first time the department prioritized activities previously defined as nation-building, such as infrastructure reconstruction and humanitarian relief, on par with traditional combat operations. On the heels of this change, the U.S. Army revised its Field Manual (FM) 3-24 on counterinsurgency in 2006, highlighting the importance of preparing for “full spectrum operations” that explicitly incorporate conflict prevention, reconstruction, and stability operations alongside combat operations — emphases echoed in the Army’s 2008 updated doctrinal guidance of its *Operations* manual (FM 3-0) and *Stability Operations* manual (FM-3-07).^{13,14,15}

While the department remains heavily focused on combating terrorism (the most recent *National Defense Strategy*, from 2008, portrays DoD’s role as “defined by a global struggle against a violent extremist ideology”¹⁶), current domestic political and economic pressures, combined with changing views on the national security environment (influenced by the Arab Spring protests, the U.S. military withdrawal from Iraq and planned reductions in Afghanistan, and growing concerns about China and Iran) have led the White House, Congress and the department to again reevaluate DoD’s strategy, policy, and budgets. In January 2012, the White House and DoD issued a new high-level review of U.S. defense strategy, one which noted an “increasingly complex set of challenges and opportunities” in the global security environment “to which all elements of U.S. national power must be applied” while also recognizing that the “balance between available resources and our security needs has never been more delicate.”¹⁷ These new realities mean the department now faces, for the first time in over a decade, cuts to its budget and personnel at the same time that it attempts to reposition itself to address the country’s preeminent national security concerns.¹⁸

It is within this broader historical context that DoD’s changing role related to global health must be considered.

EVOLUTION OF DOD’S GLOBAL HEALTH-RELATED ACTIVITIES

While attention to DoD’s role in global health has grown in recent years, the department has a long history of involvement in health and medical activities at home and abroad (see Figure 1 and Appendix A). DoD incorporated health projects as part of its overseas military activities at least as far back as a Philippines campaign in the late 19th century, as commanders saw strategic value in implementing health services in local communities in order to foster support for U.S. forces.¹⁹ Through investments in research and development made to protect U.S. personnel from infectious diseases, the department contributed to a number of key medical and public health milestones in the early 1900s, such as identifying the mosquito as the vector of yellow fever and demonstrating the potential health benefits of large-scale malaria and yellow fever prevention campaigns.

Such efforts continued throughout the first half of the 20th century and into the post-World War II period. The U.S. military established its first overseas medical research laboratory in 1945 in Guam (later transitioned to Indonesia), followed shortly thereafter by others in Egypt and Thailand.²⁰ DoD-supported research led to the first vaccines for influenza and Hepatitis A and to new drugs for treating malaria. In the late 1960s and early 1970s the military campaign in Vietnam featured a prominent role for health engagement, including medical civic action programs (MEDCAPs), short-term health care delivery training activities undertaken by military medical personnel overseas.²¹ At the conclusion of the Cold War, DoD also began working with countries on containment of biological threats and dedicated more

resources and attention to disaster assistance and humanitarian aid. More recently, health projects have been a prominent component of the U.S. military campaigns in Iraq and Afghanistan.^{22,23,24}

Despite this long history, attention to DoD’s role in global health has increased in recent years, and DoD itself has linked global health-related activities more often and more explicitly to achievement of its objectives than at any time in the past. Part of the reason for this is that global health overall has been increasingly linked to U.S. national security. There has been a growing perception among policymakers that poor health conditions and lack of health system capacity in other countries can contribute to the development of or be a symptom of weak and failing states that threaten U.S. interests.^{26,27,28} An important turning point in linking health to national security came in the 1990s and early 2000s, when the U.N. Security Council and the U.S. intelligence community declared HIV a national security threat and warned of potential societal and political instability resulting from the expanding HIV/AIDS epidemics in sub-Saharan African countries.^{29,30,31,32} The concept of emerging infectious diseases as a security threat also began to take hold in the 1990s with the 1992 release of an Institute of Medicine report warning about the issue, followed by the 1997 release of a related Presidential Decision Directive by the Clinton Administration, along with other documents.^{33,34} Adding to the mix of concerns and highlighting the links between terrorism, biological threats, and national security were the first deadly bioterrorism attacks ever made on U.S. soil, when mailed anthrax killed 5 people and infected 17 others in 2001.³⁵ The international spread of SARS in 2002-2003, H5N1 avian influenza (“bird flu”) starting in 2003, and the H1N1 influenza pandemic in 2009 helped solidify infectious diseases as a national security issue in policymakers’ minds, as these events illustrated how globalization and poor health conditions abroad could threaten the health and economic security of the U.S. and its allies.^{36,37,38}

FIGURE 1. SELECTED TIMELINE OF DOD GLOBAL HEALTH-RELATED ACTIVITIES AND MILESTONES ²⁵	
Prior to 1946	1898: Philippines military campaign adopts civil-military approach, including health projects
	1900: Army researchers show yellow fever is transmitted by mosquitoes
	1903: Army institutes first successful large-scale malaria prevention program in support of Panama Canal construction
	1909: Army develops first typhoid vaccine
	1940s: Military scientists develop first inactivated influenza vaccines
1946-2000	1945: First Navy overseas laboratory established (in Guam, later moved to Indonesia)
	1959: First Army overseas laboratory established (in Thailand)
	1960s-1970s: Vietnam war operations adopt civil-military approach, including introduction of medical civic action programs (MEDCAPs)
	1985: Military researchers develop prototype Hepatitis A vaccine
	1989: New malaria drug Mefloquine, co-developed by military researchers, licensed in the U.S.
	1991: Cooperative Threat Reduction (CTR) program initiated
2001-Present	1994: Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) funding authority instituted
	2002: Military completes genetic sequencing of <i>P. falciparum</i> malaria parasite
	2003: Army co-initiates largest ever Phase III HIV/AIDS vaccine trial in Thailand
	2005: DoD Instruction 3000.05 raises “stability operations” to same level of priority as combat operations across the military
	2007: International Health Division established within the Pentagon
	2009: Navy lab first in the world to identify human case of emerging H1N1 pandemic influenza
2010: DoD Instruction 6000.16 elevates the military health service support of “stability operations” to same priority as combat operations support role	

These trends have had an impact on how DoD conceives of and implements its global health-related activities, including its medical research and development, technical assistance and partnership building

on health with foreign nations, biosecurity efforts, and use of health in “winning hearts and minds” in both peace and war. Language referencing the strategic importance of global health is now prominently featured in the highest defense policy guidance, from national-level strategies issued by the White House to internal DoD’s strategic guidance documents (see Box 1). DoD’s most recent *National Military Strategy*, for example, highlights the importance of the department’s “theater security cooperation” activities, referring to the country partnership and capacity building exercises that often include global health-related work. In its most recent *Quadrennial Defense Review*, the legislatively mandated review of DoD strategies and priorities that is presented to Congress every four years (last released in 2010), the department references the contributions that its public health work and related efforts make to addressing the root causes of terrorism and also states an intention to increase support for global infectious disease surveillance and response to help address biological threats worldwide.

BOX 1. EXCERPTS FROM NATIONAL SECURITY AND DOD STRATEGY DOCUMENTS RELEVANT TO GLOBAL HEALTH

National Security Strategy (White House, 2010)

- “The United States has a moral and strategic interest in promoting global health...We see it as a fundamental to our own interests to support a just peace around the world...and we are promoting the dignity of all men and women through our support for global health, food security, and cooperative responses to humanitarian crises.”

National Strategy for Countering Biological Threats (White House, 2009)

- “Many nations struggle daily to address the impact of naturally-occurring infectious disease within their borders...We will seek to advance access to and effective use of technologies to mitigate the impact from outbreaks of infectious disease, regardless of their cause.”

National Military Strategy (DoD, 2011)

- “[The military] shall actively partner with other US government agencies to pursue theater security cooperation...humanitarian assistance and disaster relief activities employ the Joint Force to address partner needs and sometimes provide opportunities to build confidence and trust between erstwhile adversaries.”

Quadrennial Defense Review (DoD, 2010)

- “Circumstances are ripe for violent ideologies to spread among a population when governments struggle to provide basic services, justice and security, or the conditions for economic opportunity. Civil affairs forces address these threats by serving as the vanguard of DoD’s support to U.S. government efforts to assist partner governments in the fields of rule of law, economic stability, governance, public health and welfare, infrastructure, and public education and information.”
- “Detecting, diagnosing, and determining the origin of a pathogen will enable U.S. authorities to better respond to future disease outbreaks and identify whether they are natural or man-made. Accordingly, we are expanding the biological threat reduction program...in order to create a global network for surveillance and response.”

The overall trend in departmental policy has been toward adoption of a more balanced approach with its military medical assets, so that they not only perform traditional support functions for ensuring the health of the warfighter but also contribute more concretely to the department’s efforts to prevent conflict and assist in transitioning unstable, conflict-prone environments to more secure “post-conflict” and reconstruction environments.³⁹ This has placed global health-related activities in a more prominent role in military planning and so-called “stability operations” now than in the past. Most recently, this policy change was codified in a 2010 DoD Instruction that declared Military Health System (MHS) assets’

support for stability operations overseas “be given priority comparable to combat operations and be explicitly addressed and integrated across all MHS activities.”⁴⁰ This language represents a marked change from past doctrine and has challenged the department to consider even wider integration of global health-related activities within the context of its overseas operations.

Today, multiple organizational components and elements across DoD are involved in global health-related work. Together their efforts fall into three main categories, or “focus areas,” of global health-related activity: force health protection and readiness, medical stability operations and partnership engagement, and threat reduction. These focus areas are discussed further below, following the description of the organization and structure of DoD presented in the next section.

ORGANIZATIONAL STRUCTURE AND APPROACH

To effectively assess DoD’s engagement in global health, one must first understand the department’s overall organizational structure and approach. This section provides an overview of DoD’s structure and its leadership and planning practices. It identifies the components, offices, agencies, and other elements within the department that have primary responsibility for its global health-related activities as determined through analysis of existing literature and key informant interviews.

Importantly, there is no single DoD entity designated with primary authority over all of DoD’s global health-related activities; rather, these activities are carried out by different offices and agencies across the department, some of which are specifically charged with such efforts and others that carry them out as part of a broader set of responsibilities. Even as DoD plans and carries out many “joint” activities that share resources and personnel across the military departments and other components of the department, organizational oversight and participation in DoD’s global health-related activities remain diffuse and multifaceted. Figure 2 shows in one chart many of the key components and constituent elements within DoD that are engaged in one way or another in global health-related work, offering a sense of the scope and complexity of DoD’s organizational involvement in this area. After a discussion below of how DoD approaches leadership and planning, this section describes the principal components and elements of DoD that are involved in global health-related activities (see Technical Volume for more details).

LEADERSHIP AND PLANNING

As specified in the U.S. Constitution, the President serves as the Commander-in-Chief of the U.S. military, while Congress holds the authority to make declarations of war and controls defense funding. Additionally, under the War Powers Resolution of 1973, Congress reserves the power to authorize the use of armed forces in military action abroad.⁴¹ Under the direction of the President, the Secretary of Defense exercises authority, direction, and control over the Department of Defense. The Secretary, a civilian Cabinet-level official appointed by the President and confirmed by the U.S. Senate, is the principal defense policy adviser to the President. The Chairman of the Joint Chiefs of Staff, the country's senior ranking active duty military member, serves as the principal military adviser to the President and Secretary of Defense.

Although constituted as one department that ultimately requires all components to report to the Secretary of Defense, DoD is perhaps better understood as an interrelated set of constituent organizations, each overseeing a diverse set of activities. Each major organizational component with DoD functions in a semi-independent manner, and each has its own history, purpose, objectives, approach, culture, and personnel. While these DoD components share the same overarching set of strategic and policy objectives as described above, since no single office or service is designated with primary authority over all DoD global health-related efforts each of these components may take their own approach and pursue their own set of activities. These activities may or may not be coordinated with other departmental or external partners' activities.

An iterative process of planning, prioritization, and budgeting is undertaken by the department to identify, develop, and refine its objectives, and to prioritize activities and available resources in order to be able to best meet these objectives.⁴² The role and scope that global health-related activities occupy within this process depends on many factors, from the available budget to the priorities of decision-makers, and the perceived links between such activities and departmental objectives. Where global health-related activities are planned for and carried out, they must be justified and supported internally through their link to national security objectives.

Thus, improvement of population health overseas *in and of itself* is not the central objective of DoD's efforts in this area. Better population health may be desired and seen as a welcome secondary outcome, but DoD (as has been stated by its leaders) is not positioned nor intended to serve as a development agency.⁴³ At times this has meant the department's on-the-ground health activities overseas have had a focus on shorter-term, quick impact health projects aimed to contribute to the more immediate objectives of DoD rather than a longer-term, more sustainable approach to health programs that is more of a hallmark of traditional global health efforts, and decisions on research and development are made with the protection of the U.S. warfighter in mind, not necessarily persons living in developing countries.

KEY COMPONENTS

For the purposes of this report, *component* is used to refer to the broadest organizational level within the department, while *element*, *office*, *unit* and *agency* are used to describe constituent sub-components.* U.S. Code identifies six components of DoD, and all are involved to some extent in overseeing and implementing global health-related activities. However, most of these activities are carried out under the direction of four principal components (see Figure 3):

* While this report uses component as explained here for consistency, the term "component" is sometimes used by the military to refer to a subordinate command, such as at a COCOM (e.g., the Navy "component" of AFRICOM).

1. the Office of the Secretary of Defense (OSD),
2. the Organization of the Joint Chiefs of Staff (Joint Chiefs),
3. the Combatant Commands (COCOMs), and
4. the Military Departments (the Departments of the Air Force, Army, and Navy; the Marine Corps is integrated into the Department of the Navy).⁴⁴

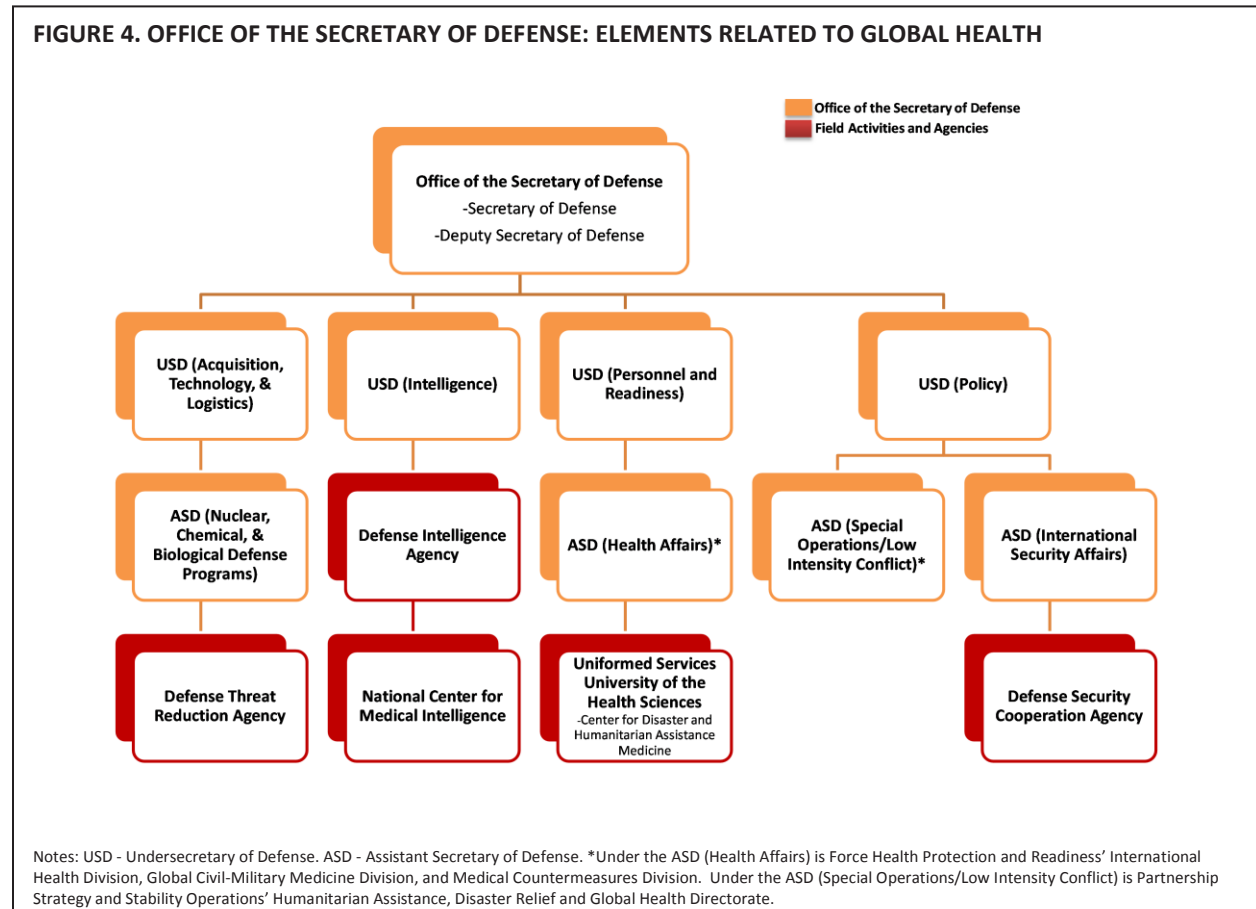
The final two components of DoD, *Field Agencies* and *Field Activities*, serve mostly a support function to the other components, and when referenced in this report they are included under the primary component to which they report (e.g., the Defense Security Cooperation Agency, a DoD field agency, reports to a division of the Office of the Secretary of Defense).



Each of these four primary components has a unique and often complex organizational structure of constituent elements (offices, units, and programs) that are assigned a range of roles and responsibilities for planning, implementing, and collaborating on global health activities.

1. OFFICE OF THE SECRETARY OF DEFENSE

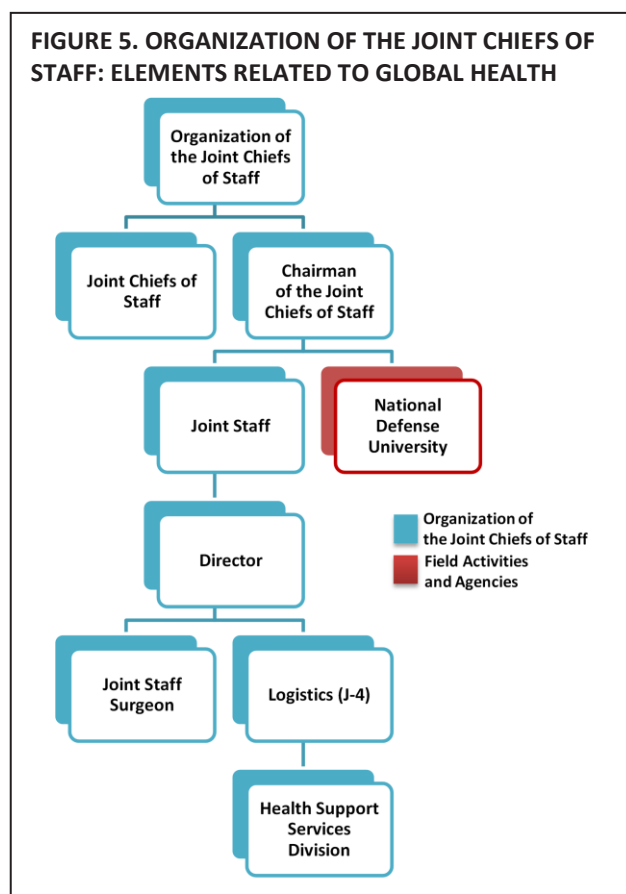
The Office of the Secretary of Defense (OSD) is responsible for policy development, planning, fiscal and



resource management, program evaluation, and overseeing and advising the other components and activities of DoD. Under the guidance of and reporting to the Secretary of Defense are a number of Under Secretaries of Defense (USDs), each of whom has an office and staff and is responsible for a particular set of issues and activities. In turn, elements of the USD offices are overseen by Assistant Secretaries of Defense (ASDs), who also may have Deputy Assistant Secretaries of Defense (DASDs) under them.

Figure 4 provides an organizational overview of the primary OSD elements whose responsibilities include global health-related work. For example, the office of the **USD for Personnel and Readiness** is responsible for policy and programs related to readiness and protection of DoD personnel in general and oversees the activities of the **ASD for Health Affairs (ASD-HA)**, who exercises primary policy oversight responsibilities for the military health system. Under ASD-HA, key global-health related offices and agencies include the **DASD for Force Health Protection and Readiness** (responsible for a variety of health surveillance, international health, humanitarian and health missions including oversight of the International Health Division, an office which develops policies and implements programs for the U.S. military health system’s support of DoD stability operations) and the **Center for Disaster and Humanitarian Assistance Medicine (CDHAM)**, located within the **Uniformed Services University of the Health Sciences (USUHS)**. Under the oversight of the USD for Policy, the **ASD for Special Operations/Low Intensity Conflict (ASD-SO/LIC)** serves as the principal civilian advisor to the Secretary of Defense on counterterrorism, civil affairs, psychological operations, and counterproliferation of weapons of mass destruction (WMDs). Within ASD-SO/LIC is the office of the **DASD for Partnership Strategy and Stability Operations**, which oversees development of DoD capabilities in stability, security, transition, and reconstruction operations and provides policy oversight of the humanitarian and civic assistance funding

authorities managed by the **Defense Security Cooperation Agency (DSCA)**. DSCA, a DoD field agency, reports to the **ASD for International Security Affairs** (under the USD for Policy) and oversees partnership engagement accounts and activities, including several humanitarian and civic assistance funding vehicles used by DoD. Finally, the **Defense Threat Reduction Agency (DTRA)** is a DoD field agency that funds and implements international biological threat reduction programs under the direction of the office of the **ASD for Nuclear, Chemical, and Biological Defense Programs** (itself under the USD for Acquisitions, Technology, and Logistics).



2. ORGANIZATION OF THE JOINT CHIEFS OF STAFF

The Organization of the Joint Chiefs of Staff (Joint Chiefs) represents and coordinates the Military Departments and supports the activities of the Combatant Commands (COCOMs, discussed below). The Joint Chiefs consists of the **Joint Chiefs of Staff** (which is comprised of the Chairman and Vice Chairman of the Joint Chiefs and the leadership of each Military Department—the Army, Navy, Air Force, and Marine Corps) and

the [Joint Staff](#). As outlined in the 1986 Goldwater-Nichols Act, the [Chairman of the Joint Chiefs](#) is considered the nation’s highest ranking military officer and serves as the principal military adviser to the President and his Cabinet, including the Secretary of Defense.

Key elements with global health-related responsibilities within the Joint Chiefs include the office of the [Joint Staff Surgeon](#) and the [Health Services Support \(HSS\) Division](#) (see Figure 5). The Joint Staff Surgeon serves as the chief medical advisor to the Chairman of the Joint Chiefs, the Joint Staff, and Combatant Command Surgeons for issues related to operational medicine and force health protection. The HSS Division, housed within the [Logistics Directorate \(J-4\)](#), is responsible for coordinating international health assistance policies and operations across the military departments and COCOMs.

3. COMBATANT COMMANDS

DoD assigns primary responsibility for planning and conducting military operations around the world to nine Unified Combatant Commands (COCOMs). Each COCOM, led by a Combatant Commander from one of the Military Departments, functions with a high degree of autonomy and authority over all DoD activities that occur within its designated area of responsibility (AOR). There are six COCOMs with geographic AORs: [Africa Command \(AFRICOM\)](#), [Central Command \(CENTCOM\)](#), [European Command \(EUCOM\)](#), [Northern Command \(NORTHCOM\)](#), [Pacific Command \(PACOM\)](#), and [Southern Command \(SOUTHCOM\)](#) (see Figure 6).⁴⁵ The other three COCOMs have functional AORs: [Special Operations Command \(SOCOM\)](#) oversees special operations forces and operations worldwide; [Strategic Command \(STRATCOM\)](#) oversees nuclear, space, and cyber capabilities (among other responsibilities); and [Transportation Command \(TRANSCOM\)](#) coordinates transportation assets and oversees movement of military hardware and personnel.

FIGURE 6. GEOGRAPHIC COCOMS’ AREAS OF RESPONSIBILITY



COCOMs are staffed by active duty military personnel drawn from all Military Departments, alongside DoD civilian personnel. The COCOM staff plans and conducts operations in support of and under the direction of the Combatant Commander. Each Military Department maintains representation within the COCOMs through their respective elements (regional offices) – for example, the U.S. Army’s presence in AFRICOM is called U.S. Army Africa, while the U.S. Navy presence in SOUTHCOM is called U.S. Naval Forces Southern Command (USNAVSO).

Every COCOM designates its own priorities, plans, budget, and set of global health-related activities (with input and guidance provided by OSD, the Military Departments, and Joint Staff). Geographic COCOMs whose AORs include developing countries with significant disease burdens and/or a history of medical engagement with the U.S. military may dedicate more staff and time to global health-related activities compared to others. For example, AFRICOM, PACOM, and SOUTHCOM engage in many exercises and operations every year targeted at health, reflecting the relative priority of such activities

to these COCOMs and their partner countries. In fact, AFRICOM cites prevention and containment of infectious diseases, such as HIV/AIDS and malaria, as one of its key strategic objectives for engagement on the African continent.⁴⁶ Similarly, functional COCOMs may also have a role in global health-related work. For example, TRANSCOM is responsible for developing policy and standardizing procedures for global patient and medical asset movements, SOCOM may develop and help implement health activities in support of counterterrorism efforts or other special operations missions, and STRATCOM is involved in the department’s biosecurity efforts and biological threat reduction programs in other countries.

While the organizational layout of each COCOM may differ, most have distinct offices with responsibilities over global health-related work. For example, each COCOM has an [Office of the Command Surgeon](#) responsible for developing and providing medical and force health protection guidance to the Combatant Commander and senior staff. Geographic COCOMs have offices covering [Operations, Logistics, and Force Protection](#), responsible for ensuring that operations have adequate logistical and force health protection support. Since health support is considered a key logistics element of field operations, military health assets such as medical field units are requested and deployed to support COCOM missions, and the Operations, Logistics, and Force Protection office provides policy and technical support to these deploying health assets. Other relevant COCOM offices are those responsible

for [Strategies, Plans, Programs, and Policy](#), and [Partnership Engagement, Cooperation, and/or Security Assistance](#), which focus on planning and facilitating communications and operations between the COCOM, the service components, countries, and other partners. As an illustrative COCOM example,

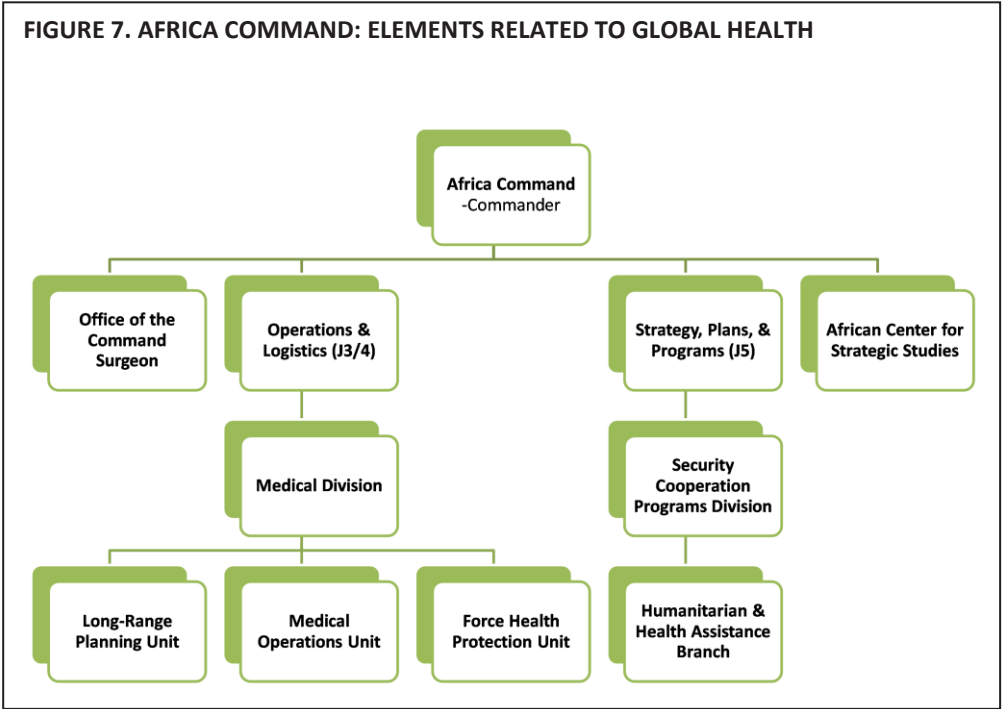


Figure 7 shows AFRICOM’s key elements related to global health; other COCOMs may have slightly different organizational structures. See the Technical Volume for more information on COCOMS’ relevant elements and organization.

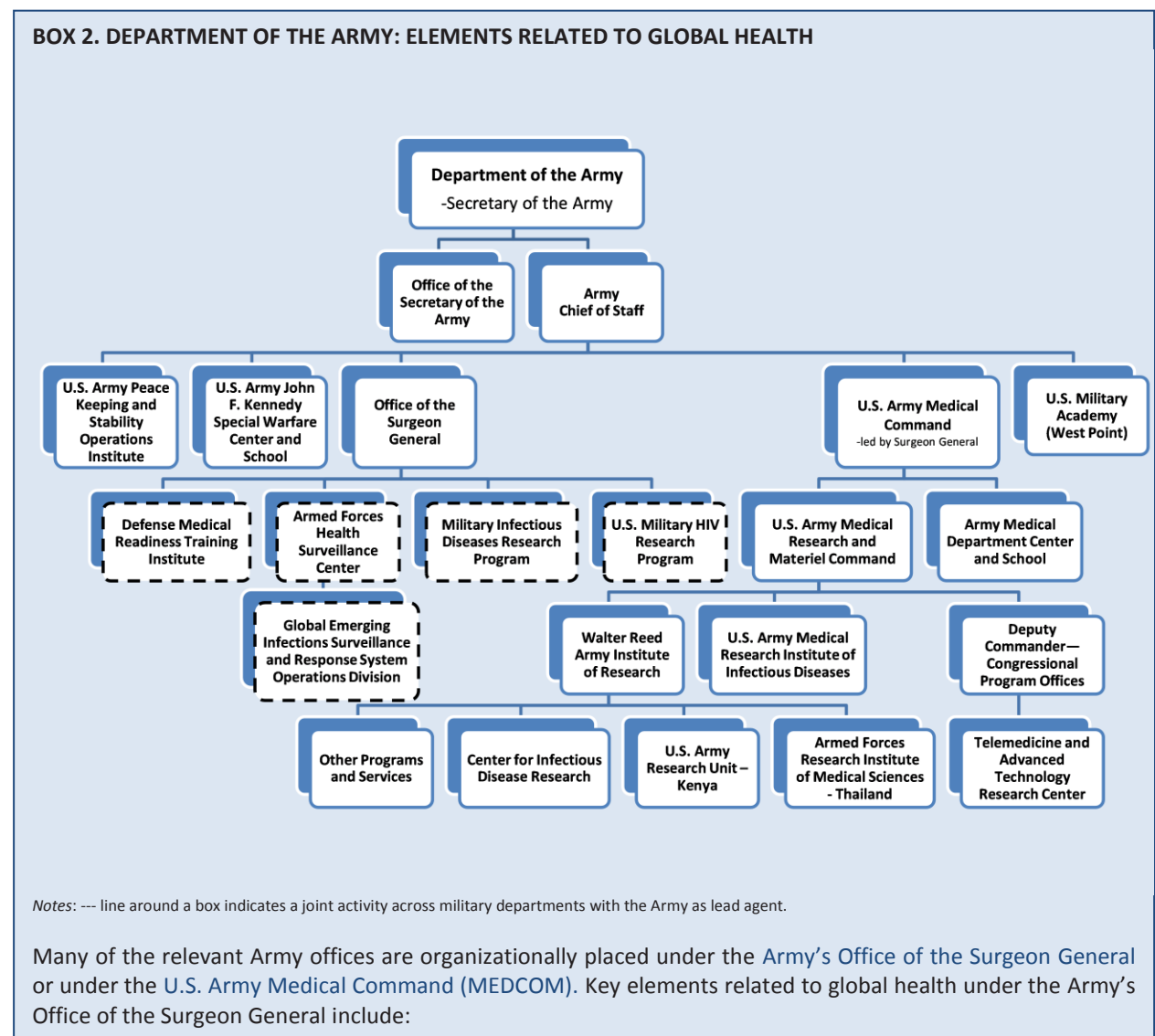
4. MILITARY DEPARTMENTS

As outlined in U.S. Code, there are three Military Departments: the Department of the Air Force, the Department of the Army, and the Department of the Navy (the U.S. Marine Corps is integrated within the Department of the Navy). A brief description of key elements within these departments is presented here, with more detailed information in Boxes 2-4 and in the accompanying Technical Volume.

Each Military Department has a different organizational structure and set of offices that oversee their global health-related work, but there are some similarities. For example, each department has a **Surgeon General** who is responsible for formulating policy and providing advice on force health protection and other medical matters to department leaders.⁴⁷ Staff from all the Military Departments support health operations overseas through personnel assigned to the different COCOMs. Additionally, while the programs and centers highlighted below are placed organizationally under the department exercising official oversight, it is important to note that, in practice, much of the planning and execution of these activities is performed jointly. In other words, DoD programs related to global health often involve the combined resources and personnel of more than one of the Military Departments.

Department of the Army

The Department of the Army’s key elements related to global health (see Box 2) fall largely under the purview of the **Army Surgeon General**, the department’s chief medical officer who oversees both the **Office of the Surgeon General** and the **U.S. Army Medical Command (Army MEDCOM)**. The Office of the Surgeon General is primarily responsible for developing policy and budgets for medical activities, while Army MEDCOM primarily executes activities.



BOX 2. DEPARTMENT OF THE ARMY: ELEMENTS RELATED TO GLOBAL HEALTH

- **Armed Forces Health Surveillance Center (AFHSC):** AFHSC is the central epidemiological resource for the U.S. military, responsible for collecting, providing, and analyzing epidemiologic information on the health status of U.S. personnel as well as overseeing overseas surveillance and health research programs. Incorporated within AFHSC is the **Global Emerging Infections Surveillance and Response System (GEIS) Operations Division**, which supports the department's integrated surveillance and response efforts focused on emerging infectious diseases globally.
- **Defense Medical Readiness Training Institute (DMRTI):** DMRTI offers joint medical readiness training courses as well as professional medical programs for military medical officers. Courses include trauma care, burn care, disaster preparedness, humanitarian assistance, and emergency response to chemical, biological, nuclear, and other events.
- **U.S. Military Infectious Diseases Research Program (MIDRP):** Overseen by the Surgeon General but operated under the aegis of the U.S. Army Medical Research and Materiel Command (USAMRMC), MIDRP directs funding for and provides oversight of a portfolio of infectious disease research projects focused on developing products to protect U.S. forces from diseases such as malaria, dengue, diarrhea, and leishmaniasis.
- **U.S. Military HIV Research Program (MHRP):** MHRP's primary focus is developing an effective HIV vaccine and, in some limited circumstances, providing HIV prevention, treatment, and care services as part of the President's Emergency Plan for AIDS Relief (PEPFAR) at several sites in Africa and Asia. Although overseen by the Army Surgeon General, MHRP's activities are primarily centered at the Walter Reed Army Institute of Research (WRAIR, see below).

Key elements related to global health under Army MEDCOM include:

- **U.S. Army Medical Research and Materiel Command (USAMRMC):** Through USAMRMC, the Army's medical research is unified under a single major subordinate command of MEDCOM. As such, it is the Army's medical materiel developer, with responsibility for medical research, development, and acquisition and medical logistics management.
- **Walter Reed Army Institute of Research (WRAIR):** As part of USAMRMC, WRAIR conducts biomedical research that delivers products to prevent and treat health threats to U.S. Army personnel. WRAIR is the leading military research unit for infectious disease product development and houses the **Center for Infectious Disease Research** (this includes multiple research divisions such as the Division of Retrovirology, which is home to MHRP's efforts and undertakes HIV/AIDS research and vaccine development; the Division of Malaria, which is home to the Military Malaria Research Program (MMRP) and supports the development of malaria diagnostics, drug, and vaccine development efforts; and the Bacterial Diseases Branch, which is home to the Multi-drug Resistant Organism Repository and Surveillance Network (MRSN)). In addition, WRAIR is host to a number of joint military infectious disease research initiatives, including the Joint Military Malaria Vaccine Initiative. WRAIR is also responsible for oversight of the Army's overseas infectious disease laboratories in Kenya (**the U.S. Army Medical Research Unit-Kenya**, or USAMRU-K) and Thailand (**Armed Forces Research Institute of Medical Sciences**, or AFRIMS).
- **U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID):** Also under USAMRMC, this institute conducts basic and applied research on biological threats, with the aim of producing medical prevention and treatment solutions to protect military service members.

Department of the Navy

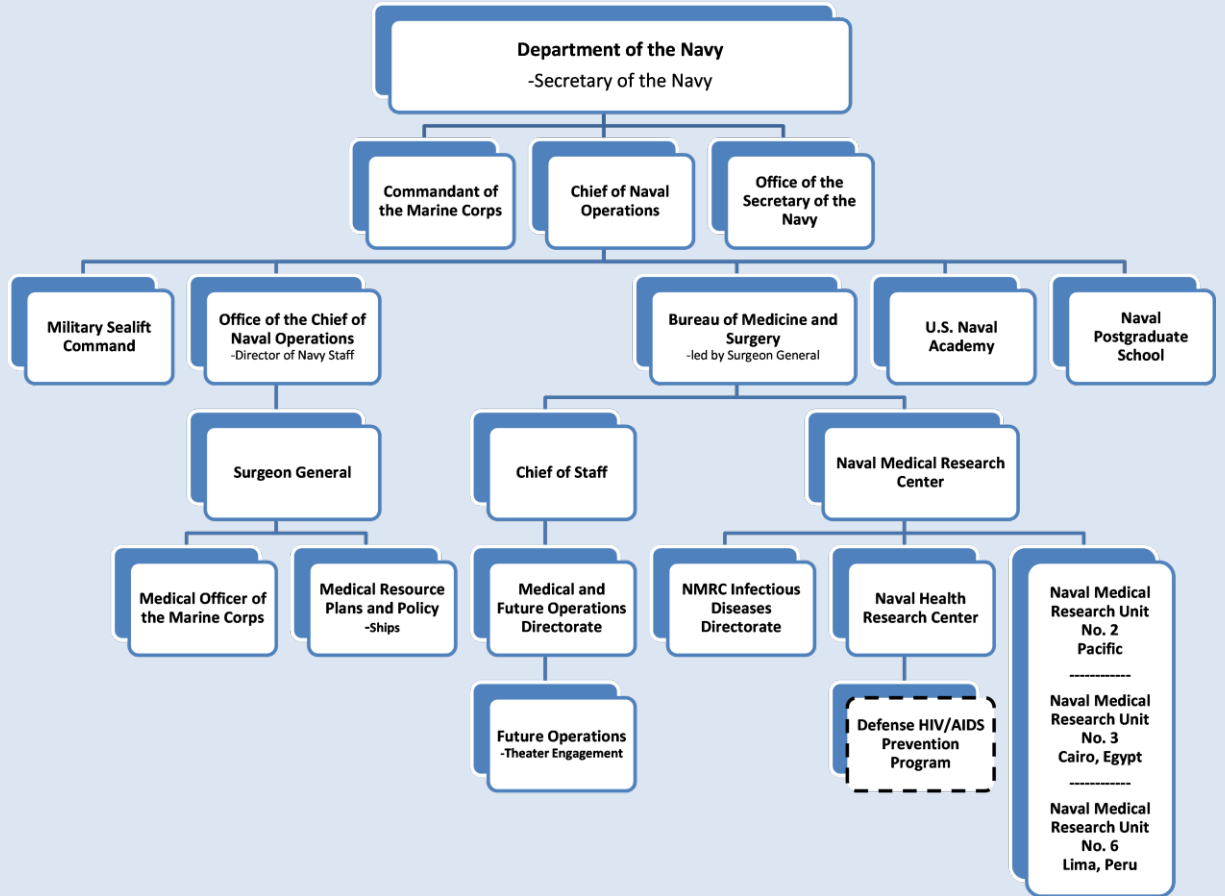
The Department of the Navy incorporates both the U.S. Navy and the U.S. Marine Corps. The Navy's key global health-related elements fall largely under the purview of the **Navy Surgeon General** who oversees the **Office of the Navy Surgeon General** as well as the Navy's **Bureau of Medicine and Surgery (BUMED)**,

which is the headquarters command for medical issues where policies and direction for Navy Medicine are developed and implementation overseen (see Box 3). Many of the relevant offices related to global health are under BUMED. Additionally, the Navy maintains two large hospital ships (the USNS *Mercy* and USNS *Comfort*) and a number of smaller vessels that are often utilized for overseas humanitarian assistance, disaster relief, and “medical diplomacy” missions to developing countries.

Department of the Air Force

As with the other Military Departments, the Air Force has an Office of the Air Force Surgeon General

BOX 3. DEPARTMENT OF THE NAVY: ELEMENTS RELATED TO GLOBAL HEALTH



Notes: --- line around a box indicates a joint activity across military departments with the Navy as lead agent.

Key elements within the Department of the Navy include:

- The **Naval Medical Research Center (NMRC)**, which performs medical research, development, testing, evaluation and surveillance, and also oversees the three laboratories the Navy maintains overseas – known as **Naval Medical Research Units (NAMRUs)**. The Navy laboratories are located currently in Peru, Egypt, and Hawaii (a temporary location for NARMU-2 following the closure of its Indonesia location in 2009). NMRC also oversees DoD’s **Defense HIV/AIDS Prevention Program (DHAPP)**, which works with African militaries to develop and implement HIV prevention and treatment programs among African military personnel.
- The **Future Operations—Theater Engagement Office** (also within BUMED) is involved in helping coordinate the Navy’s involvement in humanitarian assistance and disaster relief missions with other DoD components, other U.S. government agencies, and civil society.

responsible for medical and force health protection matters. The Department of the Air Force also has an [International Health Specialists Program](#), instituted in 2000 to develop a cadre of military medical professionals with skills and knowledge in global health. Unique among the Military Departments, this program trains and places Air Force personnel in global health-related positions across DoD (see Box 4).

COORDINATION WITH USG AGENCIES AND OTHER PARTNERS

A key question regarding DoD’s engagement in global health-related activities is the extent to which the department coordinates its activities with other U.S. government (USG) agencies, multilateral organizations, and non-governmental actors. This section identifies key partners for DoD on global health and describes coordination efforts.

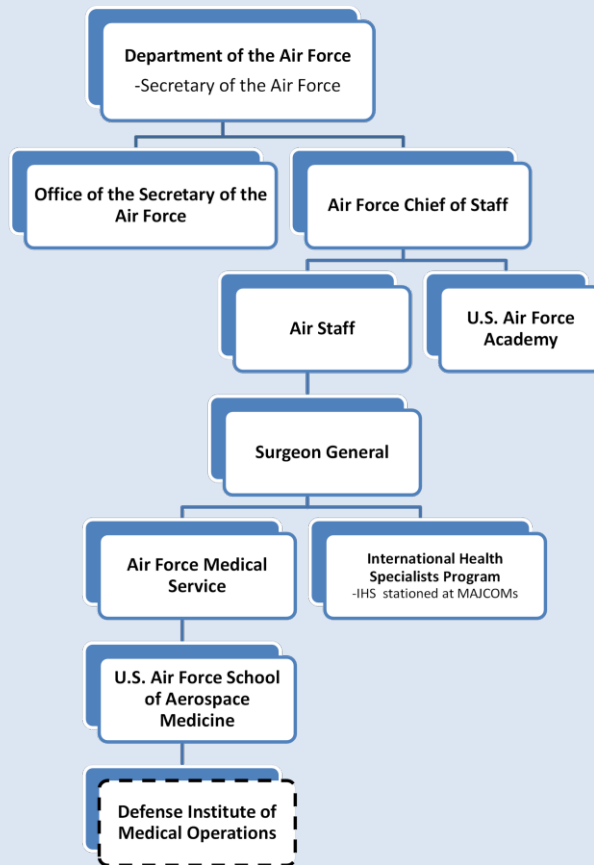
USG INTERAGENCY COORDINATION

DoD coordinates with many different U.S. government agencies and departments working in global health. Interagency partners of particular importance have been the Department of State, the U.S. Agency for International Development (USAID), and the Department of Health and Human Services (HHS) (see Figure 8).

Besides their connections to the headquarters offices of these U.S. agencies and departments, DoD personnel also work in the field with their staff. Procedures and guidelines for such field-level interagency coordination may be facilitated through formal agreements or partnerships between the organizations, but often the work overseas is done in a more informal and *ad hoc* way, depending on country circumstances and the direction of the U.S. Ambassador. The Technical Volume contains further information about DoD’s interagency coordination, including more details about points of contact with USAID.

Department of State: DoD has interacted with the Department of State in several ways. The first way is through DoD’s representation on planning and working committees of the Global Health Initiative (GHI),

BOX 4. DEPARTMENT OF THE AIR FORCE: ELEMENTS RELATED TO GLOBAL HEALTH

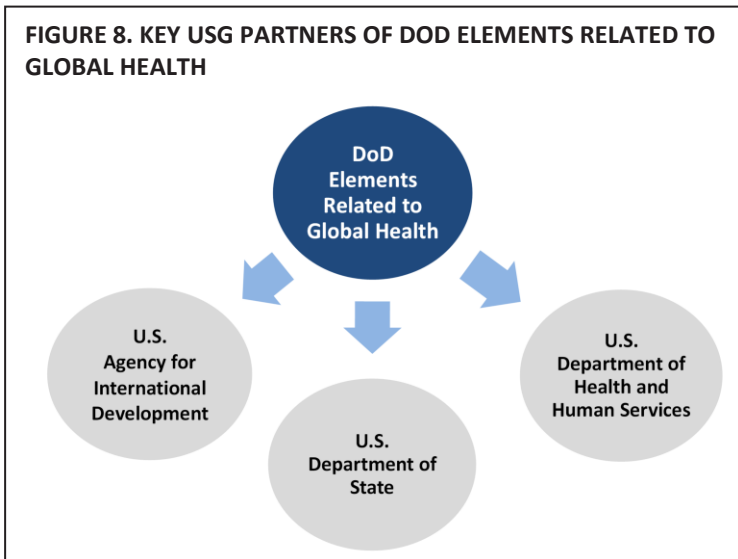


Notes: --- line around a box indicates a joint activity across military departments with the Air Force as lead agent.

Key elements within the Department of the Air Force include:

- The [International Health Specialists](#) program under the Air Force Surgeon General’s office is unique among the Military Departments, selecting and training military personnel for positions related to global health across DoD.
- Falling under the [U.S. Air Force School of Aerospace Medicine \(USAFSAM\)](#), the [Defense Institute for Medical Operations \(DIMO\)](#) helps organize medical training missions and medical courses for military and civilian personnel, which often take place in partner countries.

though with the recent recommendation to close the GHI office at the Department of State, it is unclear whether this method of coordination will continue into the future. DoD representatives to the GHI have typically come from OSD's International Health Division, located within office of the ASD for Health Affairs. Secondly, DoD helps shape the execution and coordination of the President's Emergency Plan for AIDS Relief (PEPFAR, the U.S. government's global HIV/AIDS effort), particularly in relation to activities undertaken in partnership with foreign militaries, and is often represented by staff of the Defense HIV/AIDS Prevention Program (DHAPP) in several PEPFAR working groups convened by the Department of State's Office of the Global AIDS Coordinator (OGAC). Third, the Defense Security Cooperation Agency (DSCA) also works with the Department of State when determining country allocations and humanitarian assistance projects funded through DSCA accounts, as required by the Foreign Assistance Act of 1961. Additionally, the Defense Threat Reduction Agency (DTRA) Cooperative Biological Engagement (CBE) program works in partnership with the Department of State's Office of Cooperative Threat Reduction's Biosecurity Engagement Program in formulating and implementing its biological threat reduction activities worldwide. Finally, the Department of State also supports a number of its representatives at the various COCOM headquarters; according to a 2012 Government Accountability Office (GAO) report, more than 30 Department of State employees are assigned to COCOMs.⁴⁸



U.S. Agency for International Development (USAID): DoD interacts with and collaborates with USAID in a number of ways. One important point of contact is USAID's Office of Civilian-Military Cooperation (CMC), which in the last few years has served as a point of coordination on joint USAID-DoD activities in Afghanistan and Iraq. DoD also interacts often with USAID's Office of Foreign Disaster Assistance (OFDA), especially when preparing for and carrying out interagency overseas disaster response activities. OFDA is the lead U.S. agency for overseas disaster response, but DoD is often involved, especially when there are significant transportation needs or other military assets that need to be mobilized. To assist communication and coordination between the two organizations, the Department of Defense assigns a number of representatives to work at USAID, and USAID sends representatives to serve at various DoD COCOM headquarters. According to GAO, in early 2012 there were a total of 12 USAID representatives serving at five of the six geographic COCOMs (all but NORTHCOM).

Department of Health and Human Services (HHS): DoD's key points of coordination with HHS include: emerging disease surveillance and field epidemiology training program partnerships between the Centers for Disease Control and Prevention's (CDC) Center for Global Health/Global Disease Detection unit and the staff of DoD at its overseas laboratories and within the Global Emerging Infections Surveillance and Response System (GEIS) Operations Division; the development of Memoranda of Understanding (MOUs) and coordinated infectious disease research projects between HHS's National Institutes of Health (NIH) and the Walter Reed Army Institute of Research (WRAIR) and other DoD medical research centers, DoD's overseas laboratories, and the Army-led Military Infectious Disease

Research Program (MIDRP), among others; and interactions on policy issues between HHS's Office of Global Affairs and various DoD offices.

COORDINATION WITH OTHER ORGANIZATIONS

DoD also regularly interacts on global health-related activities with organizations outside the U.S. government, such as multilateral organizations and non-governmental organizations (NGOs). Key multilateral relationships include DoD's participation in the North Atlantic Treaty Organization (NATO) and its interactions with agencies of the United Nations (U.N.). NATO is a "security alliance" of 28 countries from North America and Europe who have agreed to a shared goal of safeguarding the freedom and security of the countries in the alliance through political and military means. Some of the activities that DoD works on with NATO are focused on global health. For example, in Afghanistan, NATO allies formed the International Security Force Afghanistan (ISAF), which has a mission of conducting coordinated operations that "reduce the capability and will of the insurgency, support the growth in capacity and capability of the Afghan National Security Forces, and facilitate improvements in governance and socio-economic development" in that country.⁴⁹ As part of this effort, ISAF members support public health programs in Afghanistan, in partnership with the Afghan government. DoD also participates in NATO's Committee of the Chiefs of Military Medical Services (COMEDS), which acts as "the central point for the development and coordination of military medical matters and for providing medical advice to the NATO Military Committee."⁵⁰ According to NATO, it has sought to develop best practices and communication channels for alliance members related to humanitarian missions.⁵¹

DoD interacts with several health-focused U.N. agencies, including the World Health Organization (WHO). The U.S. Navy, for example, has assigned medical liaisons to be stationed at WHO, responsible for improving coordination on information-sharing on epidemic and pandemic planning and response, among other activities. On international disaster response and humanitarian assistance issues, DoD personnel have worked with the Office for the Coordination of Humanitarian Affairs (OCHA) and other UN agencies when coordinating, planning, and implementing DoD overseas relief operations.

DoD also interacts and coordinates with many non-governmental organizations (NGOs) and civil society groups through its health activities overseas, and has even developed and published a handbook with guidelines for understanding and interacting with NGOs.⁵² At times, the department will work with these organizations when planning and implementing humanitarian and disaster relief operations in the field.⁵³ For example, DoD has worked with a number of NGOs in Afghanistan and Iraq on health-focused projects, and the department has frequently collaborated with NGOs during humanitarian aid missions, such as the 2010 Haiti earthquake and the Indian Ocean tsunami in 2004.^{54,55,56,57}

DOD'S GLOBAL HEALTH FOCUS AREAS

The components of DoD engage in a range of global health-related activities, from scientific research and training, education, and technical assistance, to developing and implementing health programs overseas. The department pursues these activities in support of its broader objectives, such as deterring conflict, winning wars, and protecting U.S. national security. Based on the literature review and key informant interviews, we identified the following three main "focus areas" of DoD global health-related activity:

- **Force health protection and readiness:** activities such as medical research, prevention, surveillance, care, treatment, and other DoD programs that keep its personnel healthy and

prepared for their responsibilities, which also have applications to the health of populations in developing countries;

- **Medical stability operations and partnership engagement:** health-focused programs and technical assistance projects in other countries aimed at building partnerships and trust, preventing conflict, fostering stability, and/or increasing capacities of partner governments, militaries, or other organizations; and
- **Threat reduction:** activities such as laboratory construction, biosecurity training and other support for health surveillance, preparedness, and response capacities overseas that are undertaken to better prevent, detect, contain, and/or ameliorate the impacts of natural and intentional biological events on U.S. national security.

Each of these focus areas is discussed in more detail below. The focus areas are not necessarily mutually exclusive – a particular activity could be considered as fitting in more than one focus area – nor are they meant to comprehensively cover every possible DoD activity related to global health. Instead, the focus areas provide an accessible framework through which to consider how and why DoD engages in such activities. DoD’s components contain elements and offices dedicated to these focus areas (see earlier Key Components section).

FORCE HEALTH PROTECTION AND READINESS

Ever since the creation of an organized U.S. military, the promotion of health and the prevention of illness among its personnel has been of critical importance, and it remains the primary goal of the military medical system today. Because military personnel can and do deploy to any country and to any environment around the world, DoD’s “force health protection and readiness” (FHP&R or FHP) efforts must understand and prepare for a broad range of potential health threats, from diseases that can spread globally (such as influenza) to threats that are endemic only in developing countries (such as malaria and dengue) to injuries, mental health issues, and non-communicable diseases. Many of the efforts and advances made in the name of FHP are relevant to civilian populations, including people in developing countries.

Within FHP, we identified the following key areas of DoD activity that are particularly relevant to global health: 1) *Medical Research and Development*, 2) *Health Surveillance*, and 3) *FHP Education and Training*. These are discussed below (also see examples in Box 5).

MEDICAL RESEARCH AND DEVELOPMENT

DoD has performed a significant amount of medical research and development in support of FHP and, through these efforts, has made discoveries and developed products that have broad public health applications. For example, the military has long been a primary driver of research and development for a number of vaccines, from being the first to develop and test influenza vaccines in the 1940s and 1950s, to (more recently) advancing the science on the first malaria and HIV vaccines shown to be efficacious in late-stage clinical trials.^{58,59,60,61} This work is funded and undertaken by DoD to develop products for the protection of its personnel, but real benefits can accrue to the health of civilian populations as these products are tested, licensed, and made available. In fact, DoD has had a major role in developing or licensing an estimated 40 percent of all currently available vaccines for adults in the United States.⁶²

While its work on vaccines represents a very visible set of products relevant to global health, many other kinds of health technologies have also benefitted from military investments, such as drug treatments for malaria and leishmaniasis, repellents and other vector control tools, and disease diagnostics. Research to support this kind of medical countermeasure development for FHP is a primary justification for Army

and Navy investments in their respective overseas laboratories.⁶³ In addition to its work on infectious disease product development, the military has also funded research and made advances in other areas of medicine and public health, including combat-related health care (such as treatment of injuries and burns) and mental health issues (such as post-traumatic stress disorder).

HEALTH SURVEILLANCE

A key part of FHP is maintaining awareness of the current status of and any potential or ongoing changes to the incidence and prevalence of health threats of concern. To this end (providing early identification of emerging diseases), DoD supports surveillance systems, advanced diagnostic capacities, and communication systems to track the health of its personnel and general population health. The U.S. military, in fact, developed one of the earliest real-time surveillance systems to track respiratory disease epidemics among its personnel due to the threat they pose to force readiness.⁶⁴ The ongoing relevance of the military's infectious disease surveillance was recently underscored when a U.S. Navy laboratory became the first in the world to identify individuals infected with the newly emerging H1N1 pandemic influenza virus in 2009.⁶⁵ As part of its FHP health surveillance efforts, DoD also funds and carries out surveillance projects overseas. Through these, DoD develops systems and shares information in cooperation with other USG agencies and its foreign military and civilian partners.⁶⁶

FHP EDUCATION AND TRAINING FOR U.S. PERSONNEL

DoD devotes time and resources to FHP education and training, including skills and knowledge relevant to global health, for its personnel. The department supports several medical schools, such as the U.S. Army Medical Department Center and School, the Air Force School of Aerospace Medicine, and the joint Uniformed Services University of the Health Sciences, which are among the few institutions in the U.S. to offer courses and degrees in tropical medicine. Many elements within DoD support medical and public health training for personnel, both through internal DoD courses and by subsidizing education pursued by its personnel in civilian universities and other institutions. Often, military medical personnel are assigned to military public health organizations, such as the U.S. Army Public Health Command and the U.S. Navy and Marine Corps Public Health Centers, where these skills are applied and developed. In addition, DoD organizes a number of medical operations in foreign countries for the explicit purpose of providing relevant field experience and a “real-life” training

BOX 5. FORCE HEALTH PROTECTION AND READINESS: EXAMPLE ACTIVITIES

Medical Research and Development

- The U.S. Army cosponsored the Phase III trial of an HIV vaccine in Thailand.
- The Walter Reed Army Institute of Research (WRAIR) and Military Infectious Disease Research Program (MIDRP) fund research projects to help develop vaccines, drugs, and other products to protect against malaria, dengue, and other infectious diseases.

Health Surveillance

- The Global Emerging Infections Surveillance and Response System (GEIS) supports routine infectious disease surveillance and research projects that utilize DoD's network of laboratories at home and abroad.
- The Armed Forces Research Institute of Medical Sciences (AFRIMS) conducts surveillance of drug-resistant malaria along the Thai-Cambodia border with local collaborators.

FHP Education and Training

- The U.S. Air Force oversees the International Health Specialist program, recruiting military personnel for specialized training and specialized global health-focused deployments across DoD.
- DoD's joint Uniformed Services University of the Health Sciences (USUHS) developed and implements a specialized degree track in global health for military health professionals.

environment for its personnel while at the same time providing services to local populations overseas; medical civic action programs (MEDCAPS) are one example of this training.^{67,68,69,70}

MEDICAL STABILITY OPERATIONS AND PARTNERSHIP ENGAGEMENT

DoD engages in a variety of activities intended to promote stability, reduce conflict, and build relationships and trust with foreign partners; a subset of these activities have a health focus. Because this group of activities is so broad and the contexts in which they are used so diverse, the terminology used to describe them and the boundaries around them are not always clear and fixed. Activities falling within this focus area have been referred to at different times, by different DoD elements as “stability operations,” “humanitarian assistance,” “partnership engagement,” “security cooperation,” “civil-military operations,” “low-intensity conflict,” “irregular warfare,” and “hybrid warfare.”⁷¹

These terms overlap with each other to some extent, they are not applied uniformly across DoD, and their use has evolved over time. Recognizing that interpretations about what is included under these various terms may differ, we highlight two categories of activities, *Medical Stability Operations (MSOs)* and *Partnership Engagement*, which encompass most of the activities of interest in this focus area. These are discussed below (also see examples in Box 6).

MEDICAL STABILITY OPERATIONS

DoD currently defines stability operations as “an overarching term encompassing various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.”⁷² According to a DoD Instruction released in 2010, military health system assets are now explicitly required to provide medical support to the department’s broader stability operations efforts, a role termed “medical stability operations” (MSOs).⁷³ MSO efforts are typically undertaken to materially affect the health situation on the ground in the country, which is intended to contribute to greater stability and lessen conflict in the local environment or otherwise help achieve the department’s objectives.

BOX 6. MEDICAL STABILITY OPERATIONS AND PARTNERSHIP ENGAGEMENT: EXAMPLE ACTIVITIES

Medical Stability Operations

- U.S. Central Command (CENTCOM) supports joint civil-military provincial reconstruction teams (PRT) in Afghanistan to engage in health delivery and health system reconstruction activities.
- The Defense Security Cooperation Agency (DSCA) approves health-focused projects in several Asian countries through the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) account.
- The Combined Joint Task Force-Horn of Africa (CJTF-HOA) provides funding and personnel support to build health clinics and provide other health care services in targeted areas of East Africa.
- The U.S. Navy and U.S. Southern Command (SOUTHCOM) deployed the USNS *Comfort* hospital ship to Haiti following the earthquake that strikes the country.

Partnership Engagement

- U.S. Africa Command (AFRICOM) developed a conference and workshop on pandemic influenza preparedness for East African military partners to develop local surveillance and response capacity.
- The U.S. Navy provides outbreak response training seminars to government health officials and military partners through the Naval Medical Research Unit (NAMRU) in Peru.
- The Defense Institute for Medical Operations (DIMO) supports train the trainer programs overseas on topics such as disaster management, FHP, and surveillance.

These efforts take place in conditions that range from highly insecure areas of active conflict to conflict-free environments in friendly countries. In areas where instability or conflict is present, activities in this

focus area may include delivering health care, building health infrastructure, or providing technical assistance in the context of counterinsurgency operations. For example, the Commander's Emergency Response Program (CERP) and Provincial Reconstruction Team (PRT) activities in Iraq and Afghanistan used DoD assets to construct medical clinics and carry out health interventions as a component of combat and counterterrorism operations in those countries.^{74,75,76,77} Similarly (though at a different level of instability and conflict), the work of the Combined Joint Task Force-Horn of Africa (CJTF-HOA) in AFRICOM includes implementing health projects as part of counterterrorism efforts in several East African countries, including in its home base of Djibouti.⁷⁸

In areas free of conflict, MSO operations may include "health diplomacy" efforts (for example, planned deployments of Navy hospital ships to provide health care to underserved populations in foreign countries), military-to-military health training (for example, training African militaries about HIV prevention within their armed forces), joint medical operations in the field with foreign military and civilian partners (such as joint civilian health delivery exercises planned and undertaken with allied militaries), military-to-civilian health engagement (for example, U.S. military health personnel providing health care and training in foreign countries through MEDCAPs, dental civic action programs (DENTCAPs), veterinary civic action programs (VETCAPs), and similar programs), and providing health support during a disaster response (for example, the post-earthquake response in Haiti).^{79,80,81,82,83}

PARTNERSHIP ENGAGEMENT

DoD often conducts activities that are designed to build partnerships with foreign governments and strengthen the U.S. position and influence in countries and regions around the world, with the goal of promoting greater stability and security. These activities are often leveraged to support COCOM country engagement plans within their areas of responsibility. Partnership engagement can take many forms and may include such activities as hosting conferences and technical training sessions in foreign countries, donation of medical supplies and materiel, bringing foreign nationals to the U.S. to receive specialized medical education and training, or conducting joint training sessions and medical operations in the field. It can also take the form of longer-term relationships forged through facilities and institutions built in partnership with host nations. The Army and Navy overseas laboratories, for example, are often touted as anchors for country (and even regional) partnerships, and the relationships developed through such institutions help forge bonds between the U.S. military and key allies.⁸⁴ As local nationals comprise the bulk of the staff at these laboratories, host countries develop ownership and a sense of partnership through the facilities, leading to relatively stable relationships over time. The U.S. Navy laboratory in Egypt, for example, has been in continuous operation and a point of contact between the U.S. and Egypt since the lab's founding in 1946 (and the only official U.S. facility in the country that was not closed during the break in U.S.-Egypt diplomatic relations from 1967-1973).⁸⁵

Working in conjunction with other parts of the U.S. government, DoD is often called upon to assist foreign countries in responding to natural disasters (such as earthquakes, tsunamis, and hurricanes) or other emergencies (such as large scale population and refugee movements),⁸⁶ activities that are encompassed within the Medical Stability Operations and Partnership Engagement focus area. DoD participation in disaster responses are specifically authorized under U.S. Code and other legislation and policy documents; according to Joint Staff policy, DoD may become involved such activities when the need for relief is "gravely urgent" or the humanitarian emergency "dwarfs the ability of normal [non-DoD] relief."^{87,88}

THREAT REDUCTION

DoD contributes to the U.S. government's overall efforts to prevent the proliferation of weapons of mass destruction (WMD), a set of activities often termed "threat reduction" that, particularly in the context of biological nonproliferation, can have implications for global health (see examples in Box 7). While the roots of threat reduction extend to the post-World War II period of nuclear nonproliferation activities, current DoD efforts in this focus area originated principally from the Nunn-Lugar Cooperative Threat Reduction (CTR) program instituted in 1991, which focused on containment and elimination of nuclear and other WMDs in the former Soviet Union through destruction of potentially dangerous materials and supporting infrastructure as well as redirection of scientists from developing WMDs to engaging in other, more beneficial scientific pursuits. The initial geographic focus for CTR was Eastern Europe and Russia, but more recently, DoD has expanded its threat reduction efforts to include Asian, African, and Middle Eastern countries.⁸⁹

BOX 7. THREAT REDUCTION: EXAMPLE ACTIVITIES

- The Defense Threat Reduction Agency (DTRA) funds and oversees the renovation and expansion of the country of Georgia's main infectious disease laboratory.
- DTRA works with partners in East Africa to develop and apply safer laboratory practices to improve biosecurity.

In its engagement with biological threat reduction, DoD seeks to prevent and prepare for biological incidents, such as international and domestic infectious disease outbreaks and epidemics, whether they be due to natural, accidental, or intentional causes. To these ends, the department focuses on identification and containment of dangerous pathogens through improved detection and more secure laboratories and medical practices. A particular emphasis of DoD's biological threat reduction effort has been bolstering foreign countries' capabilities to safely identify and handle pathogens in their laboratories, which DoD supports through training and equipping key governmental and military partners overseas.⁹⁰ For example, DTRA has funded the rehabilitation and expansion of the infectious disease laboratory network in the former Soviet Republic of Georgia and has supported laboratory biosecurity in Kenya and Uganda, among other locations.^{91,92,93}

DOD POLICY AND GUIDANCE DOCUMENTS RELEVANT TO GLOBAL HEALTH

DoD has no single overarching guidance or policy document to tell DoD components how, when, or where to engage in global health-related activities. Rather, planning and implementation of these activities takes place under the guidance of broader, more general departmental policy and planning documents.^{94,95} Global health-related activities are integrated into the overall work of DoD to the extent they are perceived to contribute to its objectives, whether those objectives be longer-term national security or strategic goals or more short-term operational goals of military officers on the ground.

So, while no single global health strategy or authoritative global health guidance document has been released by DoD, there are numerous related and relevant policy and guidance documents available that direct and shape the department's activities in this area. These range from the high-level national security strategy documents that reference the strategic importance of global health (as described in the History and Context section above), to Directives and Instructions issued by OSD, to Military Department-specific handbooks on how to implement health projects on the ground. This study sought to identify and collect information on as many of these key related documents as possible. A brief summary of key documents is presented here, but further information may be found in the

accompanying Technical Volume, which contains a full listing and more complete descriptions of relevant documents.

For the purposes of this study, two main categories of relevant documents were defined: policy documents and guidance documents. *Policy* documents were defined as those documents that assign global health-related responsibilities and/or require action(s) on the part of one or more of DoD's elements related to global health; these policy documents include DoD Directives and Instructions and National Security Presidential policy directives (considered "authoritative and directive").^{96,97} *Guidance* documents were defined as those that lay out strategies, frameworks, and other concepts to guide DoD planners and decision-makers but do not typically require action or assign responsibilities. Examples of guidance documents include national level strategies, Joint Publications from the Joint Staff, and handbooks released by the Military Departments such as Army Field Manuals (considered "authoritative but not directive").

Overall, 67 documents relevant to DoD's global health-related activities were identified. These include 26 policy documents and 41 guidance documents. Of these, we identified the following eleven as key policy and guidance documents for the department:

Policy

- [Military Health Support to Stability Operations](#) (DoD Instruction (DoDI) 6000.16, 2010): This document establishes policies and responsibilities for how military health system assets support DoD's stability operations efforts, for the first time elevating its "non-combat" support role to the same level as that of the "combat" role.
- [Humanitarian and Civic Assistance Activities](#) (DoDI 2205.02, 2008): This document establishes policy and responsibilities for the conduct of humanitarian and civic assistance activities governed by section 401 and 407 of Title 10 of the U.S. Code.
- [Presidential Decision Directive/National Science and Technology Council-7 \(PPD/NSTC-7\) on Emerging Infectious Diseases](#) (1996): This document establishes policies and implementing actions of U.S. agencies, including DoD, regarding support for domestic and international surveillance and response capabilities against emerging infectious disease threats.
- [National Security Presidential Directive-44 \(NSPD-44\) on Management of Interagency Efforts Concerning Reconstruction and Stabilization](#) (2005): This document sets priorities and assigns responsibilities related to U.S. government support for reconstruction and stability operations overseas.
- [Geneva Conventions](#) (1949): A set of international treaties that, among other things, require that militaries of signatory countries (the U.S. is one), when occupying another country, provide minimum levels of protection to local civilians against certain consequences of war, such as disruption of public health services (article 56).

Guidance

- [National Security Strategy](#) (2010): Drafted by the White House and Executive Agencies, this document frames and outlines current U.S. national security priorities, objectives, and approach at the broadest level. In the most recent release of the strategy, global health is emphasized as critical to national security.

- [National Strategy for Countering Biological Threats \(2010\)](#): The White House released this first ever strategy to provide a framework for government support for U.S. biodefense. The strategy includes an emphasis on efforts to improve international infectious disease surveillance and biosecurity in overseas laboratories, to which DoD contributes.
- [DoD Quadrennial Defense Review \(QDR, 2010\)](#): A report submitted by DoD to Congress every four years, this document “establish[es] the Department’s key priority objectives” and “communicate[s] the Secretary’s intent for the next several years of the Department’s work.” Partnership engagement, stability operations, and threat reduction are among the global health-related areas emphasized in the most recent QDR.
- [Joint Publication 3-29: Foreign Humanitarian Assistance \(2009\)](#): This document provides guidance to the U.S. military on “planning, executing, and assessing foreign humanitarian assistance operations.”
- [Army Field Manual \(FM\) 3-07: Stability Operations \(2008\)](#): This document sets guidance for the “identification and development of DoD capabilities to support stability operations.” Public safety and welfare activities, which include public health programs, are cited in the guidance as important components of stability operations and contributors to stability.
- [Military Support for Stabilization, Security, Transition, and Reconstruction \(SSTR\) Operations Joint Operating Concept 2.0 \(2006\)](#): This document provides military commanders guidance on how to plan for and conduct SSTR operations that support national strategic objectives, “to assist governments or regions under serious stress.” Support for health systems and care is included among the relevant types of activities commanders could support.

DOD BUDGET AND FUNDING FOR GLOBAL HEALTH-RELATED ACTIVITIES^{98,99}

DOD BUDGETING AND APPROPRIATION PROCESS

DoD produces its budget request every two years through a process known as the Planning, Programming, Budgeting, and Execution (PPBE) system. Under the PPBE process, many actors within DoD contribute to the development of the DoD budget.¹⁰⁰ In the off-years, DoD conducts a smaller executive budget planning process that focuses mainly on budget execution, reviewing the status of ongoing efforts, and updating budget estimates when needed. Recent DoD budgets have been comprised of a DoD Base Budget (covering most of DoD’s recurring expenses) and a DoD Overseas Contingency Operations (OCO) Fund (used to fund activities related to the global war on terror, including the wars in Iraq and Afghanistan). Together, Base and OCO funding make up the Total DoD Budget requested by the President each spring. The department’s Total Budget request for FY 2013 was \$613.9 billion, which represented a 4.9% decrease from the FY 2012 enacted level of \$645.7 billion. Congress appropriates DoD’s budget through designated appropriation titles, and these can be divided across the four main DoD component budgets (Air Force, Army, Navy, and “Defense-Wide”).¹⁰¹ Table 1 presents a breakdown of FY 2012 enacted funding levels for DoD’s Total Budget across these titles and components. Additionally, DoD supplemental appropriations provide for costs related to an emergency activities (such as disaster relief), contingencies, or other activities in need of more immediate funding that are deemed too urgent to be postponed until the next regular budget cycle.

FUNDING FOR GLOBAL HEALTH-RELATED ACTIVITIES

Specific DoD budget information, particularly for its work on global health-related activities, is complex to compile and analyze. There is no single “global health” budget account within DoD; instead, such

activities at the department are funded through numerous funding streams that fall within the large appropriation titles described above. Of the main appropriations titles, two are of particular relevance to DoD’s global health activities: “Operation and Maintenance (O&M)” and “Research, Development, Test, and Evaluation (RDT&E),” though funding for global health-related activities comprises only a small proportion of each and such activities may also be funded through titles other than these two. Some accounts within DoD’s appropriations titles, such as the Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) account within O&M, are more easily identifiable and the amounts associated with them more transparent. In other cases, global health-related programs are specified as a budget activity or line-item in appropriations bills; such activities often have congressionally-directed funding levels for particular purposes and activities. For example, FY 2012 directed funding amounts may be readily identified for programs such as the Military HIV Research Program (MHRP), which received \$22.8 million for its HIV research activities, and the DoD HIV/AIDS Prevention Program (DHAPP), which received \$8 million for its efforts to prevent the spread of HIV among African militaries’ personnel.

TABLE 1. DOD BUDGET: FY 2012 ENACTED FUNDING BY APPROPRIATIONS TITLE AND COMPONENT¹⁰²

APPROPRIATIONS TITLE	FY 2012 ENACTED FUNDING OVERALL (IN THOUSANDS)	FY 2012 ENACTED FUNDING BY COMPONENT (IN THOUSANDS)			
		Dept. of the Air Force	Dept. of the Army	Dept. of the Navy	Defense-Wide*
Base Budget Funding	530,624,709	144,869,575	133,941,005	156,816,336	94,997,793
Military Personnel	141,818,404	35,354,898	60,141,575	46,321,931	0
Operation and Maintenance (O&M)	197,213,485	44,876,904	40,895,581	45,549,003	65,891,997
Procurement	104,527,376	36,400,921	19,571,678	43,481,596	5,073,181
Research, Development, Test, and Evaluation (RDT&E)	71,375,712	26,222,107	8,385,090	17,673,888	19,094,627
Military Construction	11,366,701	1,459,808	4,175,532	2,256,008	3,475,353
Family Housing	1,682,946	489,565	670,355	468,835	54,191
Revolving and Management Funds	2,640,085	65,372	101,194	1,065,075	1,408,444
OCO Funding	115,082,877	16,796,526	67,445,544	15,693,315	15,147,492
Military Personnel	11,293,469	1,493,046	7,826,623	1,973,800	0
Operation and Maintenance (O&M)	86,775,842	10,594,792	54,436,168	11,166,702	10,578,180
Procurement	16,052,195	4,472,267	5,264,764	2,309,226	4,005,938
Research, Development, Test, and Evaluation (RDT&E)	526,358	259,600	18,513	53,884	194,361
Military Construction	0	-35,179	-154,524	189,703	0
Family Housing	0	0	0	0	0
Revolving and Management Funds	435,013	12,000	54,000	0	369,013
Total DoD Budget Funding	645,707,586	161,666,101	201,386,549	172,509,651	110,145,285

Notes: *The Defense-Wide component encompasses programs that support the entire Pentagon. It is comprised of the OSD, the Unified Combatant Commands, Defense Agencies, and Field Activities. Note: OCO means Overseas Contingency Operations.

However, most global health-related activity budgets are not specified in appropriations bills, and the information is not readily available. This is due to several reasons. First, identifying which DoD activities should be considered “global health” is problematic, given the lack of standardization and absence of a common definition across DoD components for such activities. In addition, support for global health-related activities may comprise only a proportion of the funding in a given budget, and the specific, project-level information needed to fully identify the global health portion is often not available. Furthermore, such activities may be funded through more than one account or title, each of which may be controlled by a different office or Military Department, making the funding picture even more complex. Therefore, identifying, tracking, and arriving at a comprehensive total DoD budget for “global health” is difficult.

While a full and complete analysis of the department’s relevant funding and accounts is not practicable for the reasons described above, there are some identifiable budgets and funding streams. Below, we present information on these that is as comprehensive as possible, given currently available public information. The identified funding streams may be classified into two principal groups:

- funding streams *primarily* used to support global health-related activities, where amounts are specified exactly or can be estimated (see Table 2), and
- funding streams in which a *portion* is used for global health-related activities but where the amounts supporting these health activities cannot be disaggregated, identified, or estimated with currently available information (see Table 3).

In Tables 2 and 3, the funding streams are placed into the most relevant of the three DoD global health “focus areas” defined earlier in this report (Force Health Protection and Readiness, Medical Stability Operations and Partnership Engagement, and Threat Reduction).

In addition to these funding streams, DoD global health-related activities may be supported by funding received from non-DoD organizations, such as the Henry M. Jackson Foundation for the Advancement of Military Medicine, and through interagency transfers between U.S. government agencies and departments, such as the \$148.5 million in FY 2011 PEPFAR funding that was transferred from the Global Health and Child Survival (GHCS)—State Department account (now part of the Global Health Programs account).¹⁰³

As shown in Table 2, DoD dedicated no less than \$579.7 million in identifiable funding to global health-related activities in the FY 2012 budget. The full amount the department dedicated to these activities is likely much higher than this, taking into account the additional funding likely drawn from accounts shown in Table 3, for which the health portion cannot be characterized. In comparison, this DoD global health-related activities funding “floor” of \$579.7 million is greater than both the CDC budget for global health activities and the NIH budget for global health activities in the same year, which amounted to \$348.9 million and \$511.5 million in FY 2012, respectively.¹⁰⁴

Most of these accounts are administered either by COCOMs, Military Departments, or the Defense Security Cooperation Agency (DSCA). The DoD components overseeing these funds are responsible for determining which programs and activities best fulfill the missions ascribed to a specific funding stream and for outlining the program-level objectives of these efforts. The missions, requirements, and project planning and allocation processes for these funding streams may vary, depending on the account and which office(s) has authority over the funding. For example, DSCA-controlled Humanitarian and Civic Assistance (HCA) program funds permit DoD Combatant Commanders to carry out a range of humanitarian projects at their discretion. On the other hand, some of the Army infectious disease research funding is distributed through a peer-reviewed, competitive grant distribution process for military medical researchers, based on prioritization of product requirements in military medical countermeasure product development programs. Likewise, Global Emerging Infections Surveillance and Response System (GEIS) funding reflects DoD’s prioritization of infectious disease surveillance efforts in order to address threats to national security posed by emerging and reemerging diseases. Cooperative Biological Engagement (CBE) program funding, in contrast, supports projects to assist partner countries in meeting their health priorities, including helping them comply with the International Health Regulations and properly manage dangerous pathogens and infectious disease surveillance information.

TABLE 2. DOD FUNDING STREAMS WITH AMOUNTS SPECIFIC TO GLOBAL HEALTH-RELATED ACTIVITIES¹⁰⁵

FOCUS AREA	NAME	DESCRIPTION	FY 2012 FUNDING	AGENCY/OFFICE(S) WITH OVERSIGHT
FORCE HEALTH PROTECTION AND READINESS	Army Overseas Lab Direct Support	Supports the Army medical overseas research laboratories for bio-surveillance and clinical research of investigational products such as drugs and medical devices.	\$3.0m	Army Medical Command
	Army RDT&E Infectious Disease R&D Funding	Funding designated in the Army RDT&E budget supporting laboratory research and development of vaccines, drugs, and prevention tools for infectious diseases of importance to the military, including HIV.	\$60.9m ^a	WRAIR, NMRC, USAMRIID
	Global Emerging Infections System (GEIS)	Supports DoD global infectious disease surveillance efforts to address threats to national security posed by emerging and re-emerging diseases through funding and technical assistance.	\$47.2m	Armed Forces Health Surveillance Center
	Military HIV Research Program (MHRP)	MHRP funds are used to advance HIV vaccine research and development, help protect the military blood supply from HIV, and protect military personnel from HIV infection risks.	\$22.8m	WRAIR and NMRC
	Navy Laboratory Support – Medical Development and Navy RDT&E Infectious Disease Research Funding	Supports U.S. and overseas laboratories for medical research on vaccines for Malaria, Diarrheal Diseases, Dengue Fever, surveillance and outbreak response; and other efforts in support of military medical importance.	\$37.2m ^b	Department of the Navy, NMRC
MEDICAL STABILITY OPERATIONS AND PARTNERSHIP ENGAGEMENT	USUHS In-House Laboratory Independent Research	Supports medical research at Uniformed Services University of the Health Sciences (USUHS) in areas of military medical importance to the Department of Defense such as Combat Casualty Care, Infectious Diseases, Military Operational Medicine, and Biological Defense.	\$0.4m	USUHS
	Afghan Security Forces Fund (ASFF)	Provide the resource foundation needed to Train and Equip the Afghan National Security Force (ANSF) and Afghan Local Police (ALP), including their medical corps.	\$39.7m ^c	Department of the Army
	Commander's Emergency Response Program (CERP)	This program allows the use of Army O&M funds "for the purpose of enabling military commanders in Afghanistan to respond to urgent, small-scale, humanitarian relief and reconstruction requirements within their areas of responsibility."	Estimated \$28.0m ^d	U.S. Military Commanders in Afghanistan
	Defense HIV/AIDS Prevention Program (DHAPP)	Focuses on military-to-military efforts to assist partner militaries in developing and executing an effective HIV prevention strategy as well as treatment and care programs.	\$8.0m	Department of the Navy
THREAT REDUCTION	Overseas Humanitarian, Disaster, and Civic Aid (OHDACA)	Supports military humanitarian efforts overseas, for example through transport of relief supplies and other humanitarian activities worldwide.	Estimated \$73.0m ^e	Defense Security Cooperation Agency
	Cooperative Biological Engagement Program (CBE)	Funds projects to assist partner countries to comply with World Health Organization's (WHO) International Health Regulations (IHR), consolidate dangerous infectious disease research to a minimal number of secure facilities, and enhance awareness of infectious disease outbreaks of natural and/or deliberate origin.	\$259.5m	USD – AT&L and the Defense Threat Reduction Agency

Notes: Many of these funding streams are subject to OSD and Joint Chiefs' guidance and oversight in order to ensure resources are used in appropriate ways that meet major personnel, material, and logistics requirements. "m" means millions. R&D is Research and Development. RDT&E is Research, Development, Test, & Evaluation. O&M is Operations and Management. USUHS is the Uniformed Services University of the Health Sciences. AT&L is Acquisition, Technology, and Logistics. WRAIR is the Walter Reed Army Institute of Research. NMRC is the Naval Medical Research Center. USAMRIID is the U.S. Army Medical Research Institute of Infectious Diseases. USD is Under Secretary of Defense. ^a This row is a consolidation of 7 Army RDT&E Budget lines focused on military medical research focused on HIV, infectious diseases, and laboratory research related to global health, including but not limited to Basic Research – In-House Laboratory Independent Research, Basic Research – Medical Research in Infectious Diseases, Applied Research – DoD Medical Defense Against Infectious Diseases, and Applied Research – HIV Exploratory Research. ^b This row is a consolidation of Defense Health Program funding support for Navy labs and a Navy RDT&E budget line supporting malaria vaccine research. ^c Of \$11.2 billion total for ASFF, health amount is amount designated for medical purposes. ^d Of \$400 million total for CERP, health amount based on proportion found to be dedicated to health in an analysis of prior years' CERP funding by sector; see Johnson G, Ramachandran V, Walz J (2012). CERP In Afghanistan: Refining Military Capabilities in Development Activities. PRISM Vol 3(2):81-98. ^e Of \$107.7 million total for OHDACA, health amount based on proportion found to be dedicated to health in an analysis of prior years' OHDACA funding by sector; see Bourdeaux ME, Lawry L, Bonventre E, Burkle Jr FM (2010). *Disaster Medicine And Public Health Preparedness*; 4: 66-73.

TABLE 3. DOD FUNDING STREAMS USED TO SUPPORT GLOBAL HEALTH-RELATED ACTIVITIES BUT LACKING AMOUNTS SPECIFIC TO SUCH ACTIVITIES¹⁰⁶

FOCUS AREA	NAME	DESCRIPTION	FY 2012 FUNDING*	AGENCY/OFFICE(S) WITH OVERSIGHT
MEDICAL STABILITY OPERATIONS AND PARTNERSHIP ENGAGEMENT	Combatant Commander Initiative Fund (CCIF)	“Enables the Chairman of the Joint Chiefs of Staff to act quickly to support the Combatant Commanders when they lack the flexibility and resources to solve emergent challenges and unforeseen contingency requirements critical to joint war fighting readiness and national security interests.” Funds may be used for humanitarian and civic assistance, to include urgent and unanticipated humanitarian relief and reconstruction assistance.	\$45.9m	Joint Chiefs of Staff
	Exercise Related Minor Construction (ERC)	Funds “unspecified minor military construction outside the United States in support of the Joint Chiefs of Staff Exercise program” (through the COCOMs).	\$8.4m	Joint Chiefs of Staff
	Foreign Military Financing (FMF)	Supports the procurement of defense articles and services to enhance the capacity of foreign security forces.	\$6.3b (inc. OCO)	Secretary of State, Secretary of Defense
	Global Security Contingency Fund (GSCF)	“Pools resources and expertise from the Department of State, DoD, and U.S. Agency for International Development to provide security sector and stabilization assistance for emergent challenges and opportunities.”	\$200.0m	Secretary of State, Secretary of Defense
	Global Train and Equip (“Section 1206” funding)	“Build[s] partnership capacity for time-sensitive, new and emerging counter-terrorist operations, or to participate in or support military and stability operations in which the US armed forces are a participant.”	\$350.0m	Defense Security Cooperation Agency (DSCA)
	Humanitarian and Civic Assistance (HCA)	Permits Combatant Commanders to use Operations and Maintenance (O&M) funds to carry out a range of humanitarian projects that complement but do not duplicate other U.S. social or economic assistance to beneficiary country.	\$14.9m (FY2010)	Joint Chiefs of Staff
	International Military Education (IMET) and Expanded IMET (E-IMET)	“Provides training on a grant basis to students from allied and friendly nations” and “is a key component of U.S. security assistance” that “presents democratic alternatives to key foreign military and civilian leaders.” The E-IMET program “exposes students to the civilian community and its important democratic institutions.”	\$105.8m	DSCA
	Navy RDT&E Defense Research Sciences Funding	Supports defense research sciences’ basic research in medical sciences and biology, including on infectious organisms of military relevance.	\$20.3m	Department of the Navy
	National Guard State Partnership Program (SPP)	“Provides unique partnership capacity-building capabilities to Combatant Commanders and U.S. Ambassadors through partnerships between U.S. states, territories and the District of Columbia and foreign countries. The SPP supports U.S. national interests and security cooperation goals by engaging partner nations via military, socio-political and economic conduits at the local, state and national level.”	\$13.2m (FY2011) ^a	National Guard
	Operation Enduring Freedom-Trans Sahara (OEF-TS)	“Provides military support to the Trans Sahara Counter Terrorism Partnership (TSCTP) program. OEF-TS engagement in TSCTP focuses on overall security and cooperation rather than solely on counterterrorism. The OEF-TS partnership comprises the United States and ten African countries.”	\$52.2m (OCO)	Africa Command (AFRICOM)
	PACOM Asia Pacific Regional Initiative	Supports PACOM security cooperation activities such as humanitarian assistance.	\$15.0m	Pacific Command (PACOM)

Notes: *exceptions in Fiscal Year are noted after funding amounts. “m” means millions, “b” means billions. ^a\$7.1m from COCOMs, \$6.1m from National Guard Bureau. OCO is Overseas Contingency Operations funding.

POLICY ISSUES

DoD is entering a period of transition in the wake of the Iraq war and the imminent drawdown of forces from the war in Afghanistan. In addition, there have been recent changes made to U.S. defense strategy that call for, among other things, less emphasis on large-scale “nation-building” activities and greater attention directed toward the Asia region.¹⁰⁷ At the same time, the department confronts a resource-constrained funding environment unlike any it has faced in the last 10 years, with looming austerity measures that could shrink its budget and lead to further changes to its priorities and operations in the coming years.

These broad trends in the defense policy environment are sure to affect how the department engages in activities related to global health going forward, and it is against this backdrop that a number of key policy issues related to its engagement can be considered. These include a set of issues that are primarily internal to DoD and a set of broader issues related to how the department’s activities fit within and are coordinated with efforts of other global health actors.

Internal DoD policy issues and questions include:

- **Mission and priorities.** Improving global health is not a primary mission for DoD, but the department has increasingly connected its engagement on global health-related activities to achievement of its core national security objectives. In considering the role and contribution of these activities to DoD’s broader mission and strategic plans, some questions that may be considered include: What are the benefits and pitfalls in prioritizing global health-related activities even more explicitly or in shifting away from these types of efforts? Given recent shifts in strategy and looming budget cuts, should the department place more or less emphasis on these kinds of activities going forward? Does DoD’s engagement with global health in fact support its operational and strategic objectives and national security goals? Does its approach improve the health of populations in developing countries, and are these efforts sustainable?
- **Organization and strategy.** Reflecting the size and decentralized structure of department, multiple departments and offices within DoD have authority over the department’s global health-related work, and multiple policy documents guide the department’s work in this areas. This has led to some obstacles in coordinating across military departments, COCOMs, and other components, meaning there is room for additional guidance that would help lay out a clearer vision for how DoD’s various global health-related activities relate to one another and how together they support DoD’s broader mandate and strategic goals.
- **Support and funding.** The department has raised the policy importance of stability operations, conflict prevention, and reconstruction missions that often incorporate global health-related activities, but there has been little evidence of a corresponding shift in funding and organizational support toward these mission sets. This has made it more challenging for DoD components and elements seeking to adopt and integrate these activities into their operations. More concrete support – in terms of budgets and staffing – could aid in this transition. Moreover, the lack of clear information about and tracking of budgets and funding hinders the department itself from a deeper understanding of its own investments in this area. Additional data and analysis on how this funding is derived and how it is used could facilitate more effective use of resources and support efforts to monitor and evaluate the department’s global health-related activities.

- **Measurement and evaluation.** Currently, there is a general lack of monitoring and evaluation data for DoD humanitarian assistance projects overseas,¹⁰⁸ leaving purported links between DoD's global health programs and its national defense mission tenuous and open to subjective judgment of their worth. By supporting greater standardization of and support for tracking and measuring the effectiveness of its global health activities, the department might be able to better define benchmarks for success and identify lessons learned and best practices for its global health-related activities.
- **Internal expertise.** Most DoD personnel who work in or are interested in pursuing global health related work face an unclear training and career path in the department, with training and career development in this area limited to a few programs with low visibility and priority. If global health-related activities are judged important, a better prepared workforce with the necessary skills and knowledge will be important. This could occur through a number of avenues, including systematic incorporation of and greater support for existing global health instruction into personnel development elements, such as the Air Force's International Health Specialists program, as well as regular instruction at military service academies.

Broader policy issues and questions for DoD include:

- **DoD in the context of U.S. global health efforts overall.** As mentioned above, DoD is not a development organization, and improving global health is not its primary mission. Yet the department has shown an increasing interest in this area and brings unique and sizeable contributions to bear, such as an ability to rapidly mobilize significant assets, long-standing relationships with many partner governments and militaries, and a reserve of scientific and medical knowledge and capabilities. While there are a number of examples of successful and productive DoD interagency work on global health efforts (such as HIV prevention programs in PEPFAR countries and collaborative infectious disease research and development), in many cases it remains an open question for policymakers inside and outside the department as to where and when integration of DoD's global health activities with other U.S. global health efforts makes sense and can be additive.
- **Balancing national security and global health objectives.** Global health practitioners outside the department have expressed concerns that given the size and influence of DoD, national security objectives at times become prioritized over the objectives of the global health and development community, which can hinder progress toward health improvements.^{109,110} In certain circumstances, such as Afghanistan and Iraq, NGOs have at times expressed reluctance or refused to work with DoD, because they believe doing so negatively impacts their ability to carry out their work and increases risks to their staff and programs in the field.^{111,112,113} To better outline expectations, roles, and other issues, DoD and external groups working on the ground might explore ways to improve meaningful and regular attempts at communication to better support shared objectives and understand differences.
- **Interagency coordination and communication.** Adequate communication and coordination with U.S. civilian agency partners is necessary to promote the most effective use of resources and ensure that U.S. government efforts are not working at cross-purposes in developing countries. Recent evaluations by GAO of the extent and the quality of DoD's interagency collaboration on humanitarian assistance projects concluded the department needs to improve in this area.¹¹⁴ While DoD has conceded that interagency collaboration could be improved it has also reported progress in addressing these concerns and maintained that at times lack of capacity on the civilian side has contribute to coordination and communication difficulties.^{115,116,117}

- **Public understanding of DoD’s global health efforts.** The department faces an ongoing challenge in publicizing its efforts related to global health among key stakeholders (such as the public, global health colleagues, the U.S. Congress, and the policymakers in countries where DoD works) who may be unaware of or have misconceptions about such efforts. Greater efforts to shed light on and increase transparency surrounding its work in this area could assist in correcting existing external misperceptions and improve dialog with stakeholders.

CONCLUSION

The Department of Defense, the largest and oldest U.S. government agency, has a long history of engaging in activities that can impact global health. Its policies, strategic emphasis, and budget in support of global health-related activities has shifted over time, often in parallel with broader changes in perceptions about U.S. national security threats and the role of the U.S. military in countering those threats. Recently, global health-related programs at the department have received greater attention than in the past: this is partly because global health in general is seen as an increasingly important U.S. national security issue and because the department itself has shifted strategy and policy, emphasizing the importance and role of its global health–related activities to a greater extent.

This report shows that oversight and implementation of the department’s global health-related efforts is complex and diffuse. Responsibilities for such activities are not centralized within a single DoD office, but instead, like many DoD activities, these efforts are overseen by many offices across the department, with all major components of the department (from the Office of the Secretary of Defense, the Combatant Commands, the Military Departments, to the Joint Chiefs of Staff) playing a role. Although the department has not issued an overarching policy to guide these components on global health-related work, a number of policy documents provide some guidance and direction for such efforts. Still, each component has tended to develop and implement global health activities in an independent way, meaning these varied efforts may or may not be well-coordinated, monitored and evaluated, or consistently integrated into the broader DoD strategic and military plans. This diffusion of oversight and activity is a reflection of DoD’s size and overall organizational structure. From the department’s perspective it remains an open question whether more integration and greater consolidation of its global health-related activities would be beneficial to achieving its strategic objectives for these efforts, let alone whether it would contribute to improving the global health impact of these activities.

The Department of Defense is in the midst of a period of significant transition, and over the next several years, changes in the national defense context and pressures on the DoD budget may necessitate tough choices about how to prioritize and most effectively utilize the military’s global health-related assets. Against this backdrop, it will be important to consider whether the department’s engagement in, approach to, and objectives for its global-health activities should be reexamined or clarified — including the extent to which global health-related activities should be part of its work going forward.

For the wider U.S. global health community, examining and understanding DoD’s efforts in this area may prove worthwhile, despite lingering reservations or potential challenges they may encounter in partnering with DoD on global health. Given that the department has tremendous geographic reach, long-standing and influential partnerships with governments and militaries, an ability to rapidly mobilize significant resources, and a well of knowledge and substantial investments in scientific and technical areas such as research and development, further efforts to understand how DoD fits into the larger landscape of U.S. and international engagement on global health will be important, particularly since any scaling back in DoD’s engagement may create a gap that other organizations might need to fill.

APPENDIX A. DETAILED TIMELINE¹¹⁸

TABLE A-1. DETAILED TIMELINE			
TIME PERIOD	DoD MEDICAL RESEARCH MILESTONES	OTHER DoD MILESTONES	OTHER NOTABLE EVENTS
1800s		1818: U.S. Army Medical Department (AMEDD) established	
		1842: U.S. Navy Bureau of Medicine and Surgery (BUMED) established	
	1880: Military scientists discover causative agent for strep pneumonia		
		1893: U.S. Army Medical School and Walter Reed Army Institute of Research (WRAIR) founded 1898: U.S. military campaign in Philippines utilizes civil-military stabilization approach	
1900 –1945	1900: Army researchers show yellow fever transmitted by mosquitoes		
	1900-1903: Army institutes successful malaria prevention program in support of Panama Canal construction		1904: U.S. begins Panama Canal construction
	1909: Army produces first typhoid vaccine		1913: Panama Canal completed
	1940-1945: Army establishes first system for blood banking, storage		
	1940s: Military scientists develop first inactivated influenza vaccines		
		1945: First Navy overseas laboratory established (initially in Guam, later moved to Taiwan, then Indonesia); now termed NAMRU-2	
1946-1980		1946: Naval Medical Research Unit 3 (NAMRU-3) established (Cairo, Egypt)	Late 1940s: Marshall Plan for Reconstruction of Europe; Berlin Airlift
	1957: Military scientists develop first surveillance system for epidemic respiratory disease		
		1959: First Army overseas laboratory, the Armed Forces Research Institute of Medical Sciences (AFRIMS), founded in Bangkok, Thailand	
	1961: Military scientists isolate rubella virus	1961: Foreign Assistance Act assigns State Department the lead role in foreign military assistance programs 1963: Military “Medical Civic Action Programs” (MEDCAPs) implemented in Vietnam	1965-1973: U.S. troop involvement in the Vietnam War
		1967: Army implements the Civil Operations and Revolutionary Development Support (CORDS) approach in Vietnam conflict, introducing integrated civilian-military Provisional Advisory Teams (PATs)	
		1969: U.S. Army Research Unit – Kenya (USAMRU-K) founded	
		1976: Inaugural class at the Uniformed Services University of the Health Sciences (USUHS)	
		1982: U.S. Army designated as lead agent for U.S. military infectious disease research	
1980s		1983: Navy Medical Research Unit 6 (NAMRU-6) founded in Lima, Peru (initially as a detachment, made command level in 2011)	
	1985: Military develops prototype Hepatitis A vaccine		
		1986: Military HIV Research Program (MHRP) created by U.S. Congress	
		1987: Congress enacts Title 10 legislation; provides DoD with authority to provide Humanitarian and Civic Assistance (HCA) 1988: Navy Medical Research Detachment–Cambodia (NAMRU Det-Cambodia) founded (a part of NAMRU-2)	

TABLE A-1. DETAILED TIMELINE

TIME PERIOD	DoD MEDICAL RESEARCH MILESTONES	OTHER DoD MILESTONES	OTHER NOTABLE EVENTS
	1989: New antimalarial drug Mefloquine, co-developed by the military, licensed in the U.S.		1989: Fall of the Berlin Wall
1990s		1991: Congress establishes the Nunn-Lugar Cooperative Threat Reduction (CTR) Program	
		1991: Congress provides DoD authority to support humanitarian assistance and reconstruction through the Commander-in-Chief Initiative fund (CINC), later renamed the Combatant Commander's Initiative Fund (CCIF)	1992-1994: U.S. military intervention in Somalia
	1992: Second generation Japanese Encephalitis vaccine, co-developed by the Army, approved for use in the U.S.		1992-1995: Bosnian War, with U.S. military intervention in 1995
	1994: New typhoid vaccine, co-developed by the Army, approved for use in the U.S.	1994: Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) program established by Congress	1994-1995: U.S. military intervention in Haiti
		1999: Center for Disaster and Humanitarian Medicine (CDHAM) chartered at Uniformed Services University	1999: U.S. military intervention in Kosovo War
2000-Present	2000: New antimalarial drug Malarone, discovered and developed primarily by the military, licensed in the U.S.	2000: Air Force International Health Specialist program established	
		2000: Congress provides funds to Defense Health Program to support military-to-military HIV prevention programs	
			2001: September 11 terrorist attacks; Anthrax mailings; Operation Enduring Freedom (Afghanistan) begins
		2002: Combined Joint Task Force – Horn of Africa (CJTF-HOA) established	
	2002: Military completes genetic sequencing of malaria parasite (<i>P. falciparum</i>)	2002: First Provincial Reconstruction Teams (PRTs) established in Afghanistan	
	2003: Army co-initiates largest Phase III trial of an HIV vaccine candidate in Thailand	2003: Commander's Emergency Response Program (CERP) created by Iraq Provisional Authority using seized Iraqi Funds	2003: Operation Iraqi Freedom begins
	2004: First malaria vaccine candidate demonstrating efficacy, co-developed by military, enters Phase III trials in Africa	2004: Congress provides first appropriated funds to CERP program in Afghanistan and Iraq	2004: Indian Ocean (South Asian) earthquake and tsunami
		2005: DoD(I) 3000.05 states that DoD stability operations are of the same level of importance as DoD combat operations	
		2006: Revised U.S. Army Counterinsurgency Manual published	
		2006: In the National Defense Authorization Act, Congress establishes "Section 1206" mechanism, allowing DoD to use funds to train and equip foreign militaries for counterinsurgency and stability operations	
		2007: DoD International Health Division established within Office of the Assistant Secretary of Defense-Health Affairs	
		2007: U.S. Africa Command (AFRICOM), a new DoD geographic combatant command with responsibility for operations across Africa, is created	
	2009: Thailand HIV vaccine trial, co-sponsored by the military, provides evidence of partial efficacy	2009: Indonesia forces closure of NAMRU-2 in Jakarta	2009: 2009-H1N1 influenza pandemic
	2011: DoD-supported laboratory in Tblisi, Georgia opens	2011: Withdrawal of U.S. combat personnel from Iraq	

APPENDIX B. ACRONYM LIST

TABLE B-1. ACRONYMS	
AFHSC:	Armed Forces Health Surveillance Center
AFRICOM:	U.S. Africa Command
AFRIMS:	Armed Forces Research Institute of Medical Sciences
AOR:	Area of Responsibility
ASD:	Assistant Secretary of Defense
ASD-HA:	Assistant Secretary of Defense for Health Affairs
ASD-SO/LIC:	Assistant Secretary of Defense for Special Operations/Low Intensity Conflict
BUMED:	U.S. Navy Bureau of Medicine and Surgery
CBE:	Cooperative Biological Engagement Program
CDC:	U.S. Centers for Disease Control and Prevention
CDHAM:	Center for Disaster and Humanitarian Assistance Medicine
CENTCOM:	U.S. Central Command
CERP:	Commander's Emergency Response Program
CJTF-HOA:	Combined Joint Task Force-Horn of Africa
CMC:	USAID's Office of Civilian-Military Cooperation
COCOM:	Combatant Command
COMEDS:	Committee of the Chiefs of Military Medical Services, NATO
CTR:	Cooperative Threat Reduction
DASD:	Deputy Assistant Secretary of Defense
DENTCAP:	Dental Civic Action Program
DHAPP:	Defense HIV/AIDS Prevention Program
DIMO:	Defense Institute for Medical Operations
DMRTI:	Defense Medical Readiness Training Institute
DoD:	Department of Defense
DoDI:	Department of Defense Instruction
DSCA:	Defense Security Cooperation Agency
DTRA:	Defense Threat Reduction Agency
EUCOM:	U.S. European Command
FHP(&R):	Force Health Protection (and Readiness)
FM:	Field Manual
FY:	Fiscal Year
GAO:	Government Accountability Office
GEIS:	Global Emerging Infections Surveillance and Response System
GHCS:	Global Health and Child Survival (now Global Health Programs account)
GHI:	U.S. Global Health Initiative
HCA:	Humanitarian and Civic Assistance

TABLE B-1. ACRONYMS

HHS:	U.S. Department of Health and Human Services
HIV/AIDS:	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HSS:	Health Support Services
ISAF:	International Security Force Afghanistan
MEDCAP:	Medical Civic Action Program
MEDCOM:	Medical Command
MEDRETE:	Medical Readiness Training Exercise
MIDRP:	Military Infectious Disease Research Program
MHRP:	Military HIV Research Program
MHS:	Military Health System
MMRP:	Military Malaria Research Program
MOU:	Memorandum of Understanding
MRSN:	Multi-drug Resistant Organism Repository and Surveillance Network
MSO:	Medical Stability Operation
NAMRU:	Naval Medical Research Unit
NATO:	North Atlantic Treaty Organization
NGO:	Non-Governmental Organization
NIH:	National Institutes of Health
NMRC:	Naval Medical Research Center
NORTHCOM:	U.S. Northern Command
NSPD:	National Security Presidential Directive
O&M:	Operations and Maintenance
OCHA:	U.N. Office for the Coordination of Humanitarian Affairs
OFDA:	Office of Foreign Disaster Assistance
OCO:	Overseas Contingency Operations
OGAC:	Office of the Global AIDS Coordinator
OHDACA:	Overseas Humanitarian, Disaster, and Civic Aid
OSD:	Office of the Secretary of Defense
PACOM:	U.S. Pacific Command
PDD/NSTC:	Presidential Decision Directive/National Science and Technology Council
PEPFAR:	The U.S. President’s Emergency Plan for AIDS Relief
PRT:	Provincial Reconstruction Team
QDR:	Quadrennial Defense Review
RDT&E:	Research, Development, Test, and Evaluation
SARS:	Severe Acute Respiratory Syndrome
SOCOM:	U.S. Special Operations Command
SOUTHCOM:	U.S. Southern Command
SSTR:	Stabilization, Security, Transition, and Reconstruction

TABLE B-1. ACRONYMS	
STRATCOM:	U.S. Strategic Command
TRANSCOM:	U.S. Transportation Command
U.N.:	United Nations
U.S.:	United States (of America)
USAFSAM:	U.S. Air Force School of Aerospace Medicine
USAID:	U.S. Agency for International Development
USAMRMC:	U.S. Army Medical Research and Materiel Command
USAMRIID:	U.S. Army Medical Research Institute of Infectious Diseases
USAMRU	U.S. Army Medical Research Unit
USD:	Undersecretary of Defense
USG:	U.S. Government
USNAVSO:	U.S. Naval Forces Southern Command
USNS:	United States Naval Ship
USUHS:	Uniformed Services University of the Health Sciences
VETCAP:	Veterinary Civic Action Program
WHO:	World Health Organization
WMD:	Weapon of Mass Destruction
WRAIR:	Walter Reed Army Institute of Research

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