Abstract Since 2005, the call for the military to conduct “softer” missions, such as humanitarian assistance and partner training, has increased. These “medical stability operations” are in fact to be given comparable priority to combat operations. Military leadership understands their the value of Medical Stability Operations across the range of military operations from shaping through post-disaster or post-conflict operations. Air Force Preventive Medicine (AFPM) teams, given more education, are suited to these medical stability operations and should be tasked.

What is the Air Force Medical Service contribution to the United States military? Many thoughts immediately turn to the Expeditionary Medical Systems and air evacuation deployments directly supporting operations in Afghanistan and Iraq or to medical humanitarian relief in response to natural disasters such as those in Haiti. Similarly, military medical personnel would be critical first responders if the U.S. were attacked with chemical, biological, radiological, nuclear, or conventional explosive (CBRNE) weapons on its own soil or overseas bases. There is, however, a relatively little-known aspect that bears examining: how the United States Air Force (USAF) Medical Service’s Preventive Medicine (AFPM) teams can further combatant commanders’ efforts in building capacity within partner nations. This article analyzes how the AFPM teams are uniquely suited for building partner nation capacity and offers recommendations as to how better structure the units for even greater utility.

Nigeria, a country from which the United States now gets seven percent of its oil, and will get 25 percent of its oil by 2015, is crippled by rampant corruption and organized crime. The central government lacks the ability to control the borders, stop corruption, improve the religious division between the Christians and the Muslims, fairly distribute the country’s oil wealth, or stop organized crime. The citizens in northern Nigeria have little security; it is dangerous for the average person to leave home to go to work or attend school for fear of bandits attacking them or their families who stay home during the day. This is a great example of what happens when governments cannot maintain their capacity—the people are vulnerable to outside extremists instituting shadow governance — thus there is the need to help them build and maintain capacity.

In addition to the Nigerian example, in a broader sense, some extremist actions take on the nature of a global insurgency. This is aimed at “subverting the existing political and social order of both the world of Islam and the broader world,” in order to redefine the global balance of power. This sort of activity is happening in pockets all over the world, including eastern Africa and South America. The United States’ overarching security plan is the National Security Strategy, that states the United States must engage with, build relationships with, and pursue development in our partners. The 2010 Quadrennial Defense Review (QDR) also states the U.S. military must engage with partner nations and build capacity in order to reduce the threat to the United States. The QDR states it may be in the U.S. interest to support civil authorities in providing essential services, restoring emergency infrastructure, and supplying humanitarian relief. The logic is that if governments cannot provide basic services like sanitation, medical care, drinking water, or other public health needs, it is easier for terrorist groups and insurgents to move in and spread violent ideologies. In essence, a weak state may be more of a security threat to the U.S. than a strong state. In support of U.S. National Security Strategy, U.S. Military Civil Affairs personnel conduct capacity-building missions in weak states. The Air Force, either alone or as a joint effort with other services, must prepare to support and conduct medical capacity-building missions.

The U.S. National Strategy for Combating Terrorism, a subordinate document to the National Security Strategy, lists four goals: 1) defeat terrorists and their organizations; 2) deny sponsorship, support, and sanctuary to terrorists; 3) diminish the underlying conditions that terrorists seek to exploit; and 4) defend U.S. citizens and interests at home and abroad. To achieve these objectives, the full complement of diplomatic, informational, military, and economic tools are used by the U.S. government. The U.S. military’s contribution to the effort is explained in the National Military Strategic Plan for the Global
War on Terrorism, which lists as its goals:
- Deny terrorists what they need to operate and survive.
- Enable partner nations to counter terrorism.
- Deny Weapons of Mass Destruction/Effects (WMD/E) proliferation.
- Defeat terrorists and their organizations.
- Contribute to the establishment of conditions that counter ideological support for terrorism:
  - Security
  - Humanitarian assistance
  - Military-to-military contacts
  - Conduct of operations
  - Military information operations

Regarding the military contributions to the global counterinsurgency (COIN) for preventive medicine (PM) personnel, some of these such as “denying WMD/E proliferation” (part of which entails being prepared to sample for WMD agents after an attack) are somewhat familiar to military personnel. Others, like “enabling partner nations to counter terrorism” may not at first seem to be a capability PM staffs possess. However, as outlined below if PM personnel increase involvement in enabling partner nations, the global COIN can be conducted more effectively.

To “enable partner nations to counter terrorism” encompasses U.S. forces training partner nation (PN) military forces to conduct combat and internal security missions more effectively. The U.S. government sees this successfully carried out in the Operation Enduring Freedom-Philippines (OEF-P), where Joint Task Force (JTF)-510 forces train Philippine forces to counter the Abu Sayyaf insurgency. The Abu Sayyaf group’s goal is to “establish an Islamic state based on Sharia law on the islands of Mindanao and the Sulu Archipelago.” U.S. forces advise and assist the Philippine military but are not involved in direct action. The U.S. teaches the Philippine military new tactics, techniques, and procedures to fight more effectively and provide better medical care. JTF-510 personnel also dig wells, build clinics and schools, and improve the infrastructure and government presence in order to deny terrorists as base of operations. Part of this effort includes improving the government’s ability to prevent infectious and hygiene-related disease and water-borne illnesses. Ideally, this enhances the local populations’ view of the central government and allows its citizens to see a better future for themselves. It brings credibility to the government in the eyes of the citizens while wearing down terrorists. According to Peter Brooks, former deputy assistant secretary of defense responsible for OEF-P policy, as a result of these efforts, the radical insurgency is all but dead. Operation Enduring Freedom-Philippines is a successful model for conducting a counterinsurgency strategy. It will not work everywhere, but elements of it can work in many places where an extremist threat exists.

Another example in the category of “enabling partner nations to counter terrorism” is the deployment of Air Force Special Operations Command’s (AFSOC) 6th Special Operations Squadron (SOS) to partner nations. The mission of the 6th SOS is Foreign Internal Defense (FID), which is defined as “participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency.” The 6th SOS does this by training and advising PN air forces on how to conduct more effective operations. The PN air force can then better help their government maintain security, halt extremists, and be a more capable ally to the U.S. Another military mission in the global COIN is “contributing to the establishment of conditions that counter ideological support for terrorism,” – a mission where PM personnel will excel. An example is the medical work U.S. military Civil Affairs units perform. Civil affairs supports “both conventional and Special Operations missions, and are capable of assisting and supporting the local government” of the country in which the CA works. Medical, Dental, and Engineering Civil Action Programs (MEDCAPS, DENTCAPS, and ENGCAPS) are missions many Air Force Medical Service (AFMS) personnel are familiar with. By teaching partner nation health authorities how to set up medical infrastructure and plan for medical emergencies (to include hazardous materials mishap, natural disaster, and pandemic flu planning), the partner nation government is better able to care for its people, thus taking steps in preventing terrorists from gaining a foothold in that country or region.

Another military function in the global COIN is conducting humanitarian assistance, which has both short and long-term benefits for America’s security. The Indonesian tsunami relief operation of 2005 is an example. PM personnel contributed significantly to this operation by identifying harmful insects and other disease spreading animals, sampling drinking water for potability, and teaching Indonesians other methods to remain healthy during the tsunami’s aftermath. After the U.S. assisted Indonesia for tsunami relief, the favorable rating of Indonesians toward the U.S. went from 15 percent to 39 percent, with 59 percent of the Indonesian population agreeing with the statement that “the United States paid a great deal or fair amount of attention to their country’s interest.” The operation definitively furthered the goals of the global war on terror and regional cooperation, especially since Indonesia is the country with the largest Muslim population in the world. Due to these and other similar successes, the U.S. Navy is increasing emphasis on humanitarian missions and improving international cooperation as a way to prevent conflicts. During the summer of 2010, the Naval hospital ship USNS Mercy (T-AH 19) conducted Pacific Partnership, the fifth in a series of annual U.S. Pacific Fleet humanitarian and civic assistance endeavors aimed at strengthening regional relationships with host nations and partner nations. AFPM teams should be involved in missions like these. Bioenvironmental engineers (BEs) and public health (PH) personnel can assist in planning operations to identify health threats before personnel deploy and assist with site selection to ensure forces remain healthy on the ground. BEs conduct occupational and environmental health site assessments to ensure U.S. forces remain healthy. They also conduct water sampling for bacteria, pesticides, volatile organic compounds,
and metals after engineers drill wells in local villages. PH personnel advise allied forces on disease prevention, sanitation, personal hygiene, and veterinary issues.

In addition to helping plan COIN operations, BEs, and PH personnel can establish direct contact with the partner nation and its citizens, interacting with the partner nation medical community and officials (both military and civilian) to promote and train on basic community and industrial health exposure assessments. These include assessing noise, radiation, and chemical exposures, developing vector control and disease prophylaxis recommendations, providing clean water, and assisting local public health agencies to develop occupational health, disaster preparedness, and other preventive medicine programs. These fit perfectly with FID and COIN doctrine, which explicitly state FID and COIN can comprise training across the range of military operations. It also meshes with humanitarian assistance doctrine and two AF deployment teams mission capability: 1) the Preventive Aerospace Medicine (PAM) Team (a deployment team comprising a flight surgeon, Public Health officer, and Bioenvironmental Engineer), and 2) the AF Special Operations Command Medical Stability Operations team. These types of missions will teach partner nations ways to provide for themselves, providing better long-term results than providing the typical one-time care associated with most medical exercises.

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One must understand most of our PNIs are generally not as well-equipped as the U.S., so high-tech environmental health solutions must boil down to basics like building fences around well heads to keep livestock away, washing hands, boiling water, standing upwind while painting, shooting x-rays away from other people, isolating or staying away from loud noise sources, and not exposing people to heavy metals, and teaching small business operators safe industrial operations (e.g., it is common practice in developing nations to work out of the home, so teaching people to not melting lead in living quarters and then cook with the pan just used for lead melting would go a long way in improving health). Other examples where, PH personnel can make a lasting impact may include: administering vaccines, advising local leaders on vector control, teaching citizens about good hygiene and sanitation, and advising local farmers on animal herd health issues. Conducting PM operations outside of traditional Air Force thinking would immensely benefit the global COIN.

Is the preventive medicine community ready for these missions? Partially, if one conducts a Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities analysis.

**AIR FORCE DOCTRINE**

The current AF COIN doctrine, AF Doctrine Document 2-3, covers the value of civil engineering and emergency management well, but falls short from a medical perspective. It allows for PMs as part of larger efforts in building partner nations but inadequately addresses PMs unique contributions. The AFMS needs to incorporate changes to this (AFDD) upon revision.

**ORGANIZATION**

There are two main shortfalls in the PM organization. One is in the International Health Specialist (IHS) program which is designed to “support the geographic combatant commander’s medical surveillance, planning, coordination, and execution of Military Operations Other Than War (MOOTW) missions.” Only a fraction of PM personnel with language skills have self-identified and/or applied to the IHS program. In addition the IHS has not consistently incorporated PM into its operations. The IHS program needs to have a robust pool of PM personnel with the appropriate language training from which to draw. For example, the Air Force’s small PAM deployment teams and equipment are well suited to deploy with a small footprint and accomplish a lot with few people. The second is that while FID units are more than doubling in size, the complimentary medical elements are remaining virtually the same. Ideally, designated PM personnel would be adjunct for these missions to engage with and assist partner nation militaries.

The PAM Unit Type Code and AF Special Operations Command Medical Stability Operations deployment teams are perfect for building partner capacity “outreach” missions. A three-person package of a Public Health Officer, Flight Surgeon, and Bioenvironmental Engineer provides a robust public health, epidemiology, field hygiene, industrial hygiene, environmental science, disease vector control, medical intelligence, disaster preparedness, and primary care skill set unmatched for interacting with partner nations. The complementary equipment package allows the team to train and educate partner nation personnel at an effective level.

**TRAINING**

The technical training the PM community receives is robust and thorough, but may need to be improved in some areas. For instance, BE personnel do not get much training in intelligence analysis to determine industrial hazards or other community health hazards in a region. This is important because a team needs to tailor training and education for a particular audience. If a team knows an area has specific industries and/or has a propensity for certain natural disasters, it can prepare for and teach to the health issues of those specific associated hazards. Another shortfall is in culture and language training. If PM personnel are to interact with host nation personnel, PM specialists must be able to speak some of the language and know the culture. Like the 6th SOS, PM personnel should be earmarked for a global region and receive language and culture immersion for that region, so when a humanitarian, military-to-military, or Civil Affairs assistance deployment occurs in that region, those PM people are taken from that given list of personnel.
MATERIEL

AF PM has the most of the materiel needed to perform the full spectrum of missions. On one hand, the Hapsite, a portable gas chromatograph, is a powerful tool that is not used to its full potential; for instance, one can use it to search for volatile organic chemicals in groundwater after drilling a well or in air near an industrial plant or operation. On the other hand, the Hapsite or other sampling equipment may be too complicated for tasks such as educating partner nation health officials. The AF has a shortfall in items like pictorial flash cards and small posters or flip charts that tell a story or educate about keeping water clean and keeping healthy (with captions in the native language(s)) are beneficial and needed.

LEADERSHIP AND EDUCATION

Theater surgeons should be educated on PM capabilities and what these medical professionals bring to the table. PM personnel are well-suited to MEDCAPs, ENGCAPS, and similar missions. An additional education gap is the field of COIN. PM (and all AFMS) personnel should have a standard reference library and teach themselves basic COIN principles if one cannot attend formal courses. AFDD 2-3 and FM 3-24, Counterinsurgency, are good places to start. Additionally, line leadership should be educated on what preventive medicine teams can do to help further larger operations and achieve the strategic goals for a nation or region.

PERSONNEL

The AF PM community does not have extra manning for additional humanitarian, military-to-military, Civil Affairs, or exchange missions. However, conducting these missions is important enough to find ways to do all the missions required. PM personnel at home station have to prioritize to ensure they do what is really important. PM leadership must develop methods to assist BE personnel in the field accomplish all their missions. Plus, since many global COIN missions like MEDCAPS are shorter than the typical 4-6 month AF deployment, National Guard and Reserve Component personnel might be considered.

The U.S. strategy to prevent and defeat extremists from gaining ground entails a whole of government approach, whether diplomatic, military, or economic. In many cases, direct military action is necessary, but sometimes a softer touch is needed.19 The AFMS and preventive medicine personnel play an important role in countering the CBRNE threat at home and abroad and in preventing illnesses among the U.S. and its allies. Interacting with partner nations and their people in need of assistance, though, is an ever-increasing role in the military strategy to prevent extremism from forming. The AFMS and PM career field should seek out opportunities for these “non-traditional” or “irregular warfare” missions, welcome these roles, and prepare for them.

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Air Force Preventive Medicine’s Role in the War Against Terrorism: 
New Missions for the Global Counterinsurgency