A Greater Mekong Health Security Partnership

COCHAIRS
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JULY 2013

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We believe that our report reflects a broad consensus, but it is the authors, and the authors alone, who are accountable for the final analysis and recommendations.

A Greater Mekong Health Security Partnership

Executive Summary

The CSIS Task Force on Health and Smart Power in Asia has concluded that a unique opportunity exists to advance U.S. interests in the Asia-Pacific while addressing major regional health issues. We recommend expanded health engagement, focusing on the Greater Mekong River sub region of Southeast Asia. Timely implementation of this initiative could take advantage of unique geo political and resource opportunities while advancing health security in the region.

The CSIS Task Force recommends that the White House and Department of State initiate a *Greater Mekong Health Security Partnership.* Its goal is to build health security, with special focus on Myanmar, expanded engagement in Vietnam, Cambodia and Laos, and active collaboration with China and Thailand. It will concentrate on pandemic preparedness, malaria control, non-communicable diseases, and women's health and child survival.

Implementation will require sustained high-level civilian leadership, targeted money, smart collaboration, engagement of the private sector, and better integrated U.S. civilian and military health approaches. We propose a five-year time-line to initiate and establish sustainability of the initiative.

The president should ask the secretary of state to oversee and guide this initiative. In turn, the secretary should appoint an ambassador-level senior director for the Partnership, based within the region.

The Obama administration should establish a core funding pool that consolidates existing funds, transcends current stove-piping to achieve better outcomes through integrated efforts, and operates within a five-year framework. Pooled funding will incentivize interagency collaboration.

U.S. investment should leverage partner countries' plans and their political and financial commitments. The Partnership should integrate its efforts with those of key multilateral instruments and measure progress annually.

Pragmatic steps can strengthen U.S. military-to-military cooperation as well as Department of Defense support to U.S. and partner-country civilian health agencies.

The Partnership is a new form of U.S. humanitarian engagement in Asia. It can be tailored to local and national realities, advance the strategic rebalance, and lay the foundation for future enlarged partnerships across Asia. It can build institutional capacities in the partner countries and help deliver better concrete health outcomes. At a foreign policy and strategic level, it can strengthen existing U.S. relations with Vietnam, Laos, and Cambodia; accelerate the evolution of bilateral relations with Myanmar; and put ties with China and our treaty ally Thailand onto a new collaborative footing. Now is the time for expanded U.S. health engagement in Southeast Asia.

Introduction

The U.S. strategic rebalance to the Asia-Pacific region reflects a cumulative historic shift in U.S. foreign policy priorities that has evolved steadily over recent decades. At its center is the search for an effective, long-term strategy for the United States' relationship with a rising China; the need for stability and prosperity in a vast geographic region that will be the engine of global economic

growth; and the imperative to cope with threats to U.S. national security such as North Korea, rising tensions in the South China Sea, and potential disruptions to maritime traffic through the Strait of Malacca.

Not surprisingly, most discussion of the strategic rebalance has focused on hard-power considerations. In August 2012, for example, David Berteau and Michael Green released an impressive CSIS study, examining ongoing and projected future changes in the deployment of U.S. troops and equipment to meet revised, strategic security goals.[1] The study had been mandated by Congress and commissioned by the Department of Defense (DoD).

Beyond hard power, however, the United States has a long history of utilizing the strength of its ideas and ideals, and the generosity and good will of its people—particularly through its humanitarian tools—to advance its global interests and influence. The unanswered questions in regard to the strategic rebalance and these humanitarian tools are: where specifically, to what concrete purpose, and how?

With these questions in mind, the CSIS Global Health Policy Center launched in November 2012 a Task Force on Health and Smart Power in Asia, cochaired by Admiral William Fallon (USN, Ret.) and Lieutenant General James Peake (MC USA, Ret.); coordinated by Captain Christopher Daniel (MC USN, Ret.); and supported by Rear Admiral Thomas Cullison (MC USN, Ret.), with the participation of a diverse group of regional, health, and security experts, drawn from within and outside government. J. Stephen Morrison, CSIS senior vice president and director, CSIS Global Health Policy Center (GHPC), played a lead role in carrying out the Task Force's work.[2] The initiative builds on the GHPC's three-year exploration of the intersection between health and security and the work of the CSIS Sumitro Chair for Southeast Asia Studies.[3]

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[1] David J. Berteau, Michael J. Green, Gregory Kiley, and Nicholas Szechenyi, *U.S. Force Posture Strategy in the Asia Pacific Region: An Independent Assessment* (Washington, DC: CSIS, August 2013), http://csis.org/files/publication/120814_FINAL_PACOM_optimized.pdf.

[2] Special thanks are owed to Lindsey Hammergren, program manager and research assistant, for her careful coordination of meetings, travel, and the editing of drafts.

[3] The CSIS Global Health Policy Center produced in early 2013 an analysis of the Obama administration's policies in global health security—Julie Fischer and Rebecca Katz, "U.S. Priorities for Global Health Security," in *Global Health Policy in the Second Obama Term*, ed. J. Stephen Morrison (Washington, DC: CSIS, February 2013), 85–95, http://csis.org/files/publication/130214_Morrison_GHTransitionVolume_Web_FINAL.pdf; a study of U.S. Navy hospital ship humanitarian missions—Admiral Gary Roughead (USN Ret.), Rear Admiral Thomas Cullison (USN Ret.), J. Stephen Morrison, and Seth Gannon, *U.S. Naval Humanitarian Assistance in an Era of Austerity* (Washington, DC: CSIS, March 2013), http://csis.org/files/publication/130226_Roughead_NavyHumanitarianAssist_Web.pdf; oral histories by senior military and civilian leaders of how health figured at key decision points—Richard Downie, ed., *Global Health as a Bridge to Security: Interviews with U.S. Leaders* (Washington, DC: CSIS, September 2012), http://csis.org/files/publication/120920_Downie_GlobalHealthSecurity_Web.pdf; and a year-long review of the Department of Defense's overseas medical research laboratories—Lt. General James Peake (USA Ret.), J. Stephen Morrison, Michèle Ledgerwood, and Seth Gannon, *The Defense Department's Enduring Contributions to Global Health: The Future of the U.S. Army and Navy Overseas Medical Research Laboratories* (Washington, DC: CSIS, June 2011), http://csis.org/files/publication/110615_Peake_DoDOverseasLabs_Web_0.pdf.

The Task Force also builds on the considerable body of work undertaken by the CSIS Sumitro Chair for Southeast Asia Studies. The chair released a study on the opportunities in Southeast Asia for the United States presented by the rebalance toward Asia—Ernest Z. Bower and Murray Hiebert, *Developing an Enduring Strategy for ASEAN* (Washington, DC: CSIS, January 2012), http://csis.org/files/publication/120105_Bower_DevelopEndurStratASEAN_Web.pdf. Over the past year, the chair has also completed a study on U.S. relations with Malaysia—Murray Hiebert, Elina Noor, Gregory Polling, and Tham Siew Yean, *From Strength to Empowerment: The Future of U.S.-Malaysia Relations*, (Washington, DC: CSIS, May 2012), http://csis.org/files/publication/120515_Hiebert_StrengthEmpowerment_Web.pdf. In addition, the chair has hosted conferences over the past year on U.S. relations with Singapore, Myanmar, the Philippines, and Indonesia—The Singapore Conference @ CSIS, http://csis.org/program/singapore-conference-csis; The Myanmar Conference @ CSIS, http://csis.org/event/myanmar-conference-csis; The Philippines Conference @

The Task Force explored whether a targeted U.S. humanitarian initiative might advance the strategic rebalance in Asia. It has emphasized the central importance of U.S. civilian leadership—starting at the White House and the secretary of state's office—and the considerable potential for strengthening U.S. engagement in the region *across the entirety of U.S. health activities.* It has put a spotlight on the foundation created by the U.S. Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC) and other civilian agencies, U.S. military health capacities in Asia, and the opportunity for U.S. military-to-military health partnerships and better integration of U.S. military health programs to support U.S. civilian agency-led efforts.

On both geopolitical and health security grounds, the Task Force found the strongest arguments for a targeted, integrated humanitarian initiative pointed to Southeast Asia, specifically the Greater Mekong subregion. This is not to understate the value of expanded U.S. direct health engagement in other areas of Asia, be it China, India, Indonesia, or the Philippines, for example. Rather, this priority stems from the exceptional set of interlocking interests and circumstances that converge in the Mekong in a powerful and compelling way. If this opportunity is seized effectively, it will be possible to achieve significant near-term and medium-term results.

Recurrent public health threats endemic to the region, combined with the considerable unmet health needs concentrated within the poorest populations of the least-developed states, continue to put U.S. interests at risk. At the same time, there are timely and promising opportunities for deepening U.S. health partnerships in Myanmar, Cambodia, Laos, and Vietnam that can save and enhance lives, measurably add to the stability of communities, and strengthen prospects for a prosperous future. Moreover, U.S. expanded leadership in health in the region would likely be welcomed and appreciated by the citizens and leaders of these partner countries, as we saw in Indonesia following the U.S. response to the 2004 tsunami. There is the opportunity to move opinion of the United States—through health—in favorable directions, while accomplishing tangible, measurable health gains.

Southeast Asia offers concrete opportunities for enhanced U.S.-Chinese collaboration centered on pandemic preparedness and the threat of artemisinin-resistant malaria. A joint initiative could demonstrate a mutual U.S.-Sino commitment to act together in the service of shared interests. Such cooperation would build on several recent positive health developments between U.S. and Chinese civilian agencies as well as military medical institutions.[4]

There are at the same time important timely opportunities for expanded U.S.-Thai collaboration in health. Civilian and military health experts in Thailand have acquired exceptional capacities over the past decades and more recently have taken on an increasing regional leadership role that draws upon years of close U.S.-Thai health partnership.

In sum, the Task Force believes that now is an optimal moment to advance an expanded U.S. health engagement initiative—centered in the Greater Mekong subregion of Southeast Asia—that is led at a high level by U.S. civilian authorities, that draws systematically on both U.S. civilian and military health capacities, and that results in an integral new component of the U.S. strategic rebalance in Asia.

CSIS, http://csis.org/event/philippines-conference-csis; and The Indonesia Conference @ CSIS, http://csis.org/event/indonesia-conference-csis.

[4] In regard to military-to-military cooperation, in 2009 four Chinese Navy (PLAN) observers visited the hospital ship USNS COMFORT in Central American waters. A reciprocal visit for U.S. military members to the Chinese hospital ship PEACE ARK took place in June 2013 during exercises in Brunei. A U.S. military delegation that included medical personnel concluded a productive series of meetings with the People's Liberation Army (PLA) in December 2012. Several similar events are planned for 2013 and 2014 to further strengthen a cooperative, compatible working relationship.

A Guide to Action: A Greater Mekong Health Security Partnership

In the course of its work, the Task Force found a striking dynamism and determination by the United States to do more—and better—in strengthening health security in Southeast Asia. This forward outlook became apparent as Task Force members held extensive consultations in Washington in January 2013 and Hawaii in February 2013 with U.S. Pacific Command (PACOM) leadership, including the PACOM deputy commander, Lieutenant General Thomas Conant (USMC), and the PACOM surgeon, Rear Admiral Raquel Bono (MC USN). It also became apparent during the CSIS delegation's travels to Southeast Asia in March 2013 for extensive discussions with the U.S. missions and partner country officials in Jakarta, Indonesia; Bangkok, Thailand; and Phnom Penh, Cambodia. The delegation met with representatives of highly active U.S. interagency working groups on health (encompassing USAID, CDC, DoD, and the Department of State), led by committed ambassadors and other senior U.S. officials. The delegation also consulted with the combined Royal Thai Army and U.S. Army Armed Forces Research Institute of Medical Sciences (AFRIMS) laboratory in Thailand and at the Navy's Naval Medical Research Unit (NAMRU) facility embedded within the National Institutes of Public Health in Cambodia. The leaders at each made clear their desire to more closely tie their exceptional technical and research capacities to the evolving public health challenges that matter most to U.S. foreign policy and to partner nations.

Capitalizing on this promising energy and focus on health security in the region, however, will require high-level U.S. civilian leadership and vision.

To that end, the Task Force recommends that the White House and Department of State, coincident with President Obama and Secretary Kerry's trip to the East Asian and Association of Southeast Asian Nations (ASEAN) Summits in October 2013, initiate a Greater Mekong Health Security Partnership.

The Partnership's overarching goal would be to build health security, with greatest intensity and priority in Myanmar, combined with expanded engagement in Vietnam, Cambodia, and Laos, and active collaborations with China and Thailand, where appropriate.

The proposed Partnership would have four tracks:

1. Pandemic preparedness: Accelerate the strengthening of capacities to detect, assess, report, and respond to public health emergencies, in accordance with the International Health Regulations.
2. Malaria control: Expand the use of bed nets, therapy, and spraying to reduce the overall incidence of malaria and ultimately contribute to artemisinin-resistant malaria eradication in the subregion.
3. Noncommunicable diseases: Equip partners to better address rising noncommunicable diseases—through training, technical expertise, better data, best practices, and research collaborations.
4. Women's health and child survival: Better integrate the multiple U.S. investments that reduce preventable childhood deaths and maternal mortality/morbidity.

Why Southeast Asia? The Geostrategic Case

The United States' expanding engagement with Southeast Asia in recent years reflects the growing recognition that U.S. security and well-being are integrally tied to developments in this region of 620 million people.

The countries of Southeast Asia are to varying degrees achieving rapid economic growth, giving rise to a growing middle class and an energized young work force. The region has plentiful natural resources, ranging from oil and gas to fertile farmland, forests, and minerals, and sits alongside the Strait of Malacca, one of the world's busiest and most vital shipping lanes, through which flows critical energy important to China, Japan, Korea, and Taiwan.

Indeed, Southeast Asia is located at the center of the U.S.-China competition for influence. As frontline states to China's economic rise, several of the region's countries, particularly the Philippines and Vietnam, are in the midst of volatile sovereignty disputes with China over properties in the strategically important South China Sea.

With a $2.2 trillion gross domestic product, Southeast Asia's two-way trade with the United States has been roughly $200 billion a year in recent years, making it the United States' fifth-largest overseas market. U.S. companies have invested over $160 billion in the region, substantially higher than U.S. private investment in China and India. This includes substantial U.S. private-sector investment and trade in the health sector in Southeast Asia: in the development and marketing of drugs and medical products. Brunei, Malaysia, Singapore, and Vietnam have entered into negotiations with the United States, Japan, and five other countries on the potentially groundbreaking Trans-Pacific Partnership trade agreement.

Many of the region's countries are evolving from autocratic political systems to nascent democracies. Indonesia's remarkable journey toward democracy led to the launch of the U.S-Indonesia Comprehensive Partnership Agreement in 2010, which in turn facilitated the normalization of military ties between the two countries that same year.

Myanmar (Burma) has recently entered a historic, complex, and accelerated process of internal reform. While serious risks and instability persist, evinced by the rise of sectarian violence and continuing tensions with ethnic groups along the country's borders, Washington has acted on this extraordinary moment by normalizing diplomatic relations, lifting economic sanctions, and resuming economic assistance. Incremental, low-level military-to-military exchanges and targeted cooperation are under consideration. In late May 2013, Myanmar President Thein Sein visited Washington—the first such visit by a sitting president of that country since the mid-1960s—where he met with President Obama and key members of Congress, signed a Trade and Investment Framework Agreement, and reaffirmed his government's commitment to reform.

Perhaps most importantly, Vietnam, Indonesia, and now Myanmar each proactively seek a stronger bilateral relationship with the United States. A renewal of U.S.-Thai relations has accelerated over the past year following a visit by President Obama in late 2012. Thailand and our other Asian treaty allies—Philippines, Korea, Japan, and Australia—each recognize, like the United States, the need to address the region's special challenges of poverty, disease, and weak governance, and each seeks collaborative opportunities with the United States in these endeavors.

In recent years, the United States has sought to pursue these opportunities through high-level U.S. diplomacy. In 2009, then-Secretary of State Hillary Clinton launched the Lower Mekong Initiative to step up U.S. cooperation with Thailand and the poorest countries of the region—Cambodia, Laos, Vietnam, and now Myanmar—across six development pillars: health (which has been the most active and successful), education, environment and water, agriculture and food security, energy security, and connectivity.

Similar progress is seen in the Department of Defense. In May 2013, the secretary of defense issued detailed policy guidance for DoD global health engagement. A major step forward, the guidance succinctly spells out the responsibility of the undersecretary of defense for policy for global health engagement and clarifies key definitions, the strategic rationale for health activities, and the universe of concrete activities and funding streams. It also lays out the core principles to guide action: for example, planning carefully to integrate and coordinate across military services and with U.S. civilian agencies; ensuring concurrence with U.S. country teams, specifically USAID and the Department of State; building local capacities that can sustain themselves; taking account

of local humanitarian needs along with operational and strategic considerations; and investing in evaluation.[5]

PACOM has generated a regional health strategy for Asia that has already resulted in wide-ranging consultations to better integrate U.S. military services' health activities, better understand partner-country health priorities, and ensure the Department of Defense most effectively supports partner-country priorities and the health programs of USAID, CDC, and other civilian agencies. Importantly, that strategy has been integrated into PACOM's Theater Campaign Plan.

President Obama has held a summit with the leaders of Southeast Asia each year since 2009, and visited Indonesia, Singapore, Thailand, Cambodia, and Myanmar in his first term. In 2011, the United States joined the 18-nation East Asia Summit, which includes the countries of Southeast Asia at its core. In June 2013, Secretary of Health and Human Services Kathleen Sebelius, in response to a request from the president to visit Asia in support of the strategic rebalance, traveled to Vietnam and Thailand, with a special focus upon H7N9 influenza and artemisinin-resistant malaria and steps to build health security capacity. In October 2013, the president is slated to visit Brunei for the ASEAN and East Asia Summits, and possibly Malaysia for a global entrepreneurship summit. There is also the possibility of a visit to Vietnam during that trip.

What do all of these multiple developments mean? One single answer jumps forward. There is a remarkable level of positive, dynamic energy focused upon—and within—Southeast Asia, elevating U.S. interests and engagement in this vital region. The challenge before the United States is how to translate that energy into meaningful action—how to seize the moment, before these timely, historical opportunities dissipate.

Why Now? The Health Security Case

Pandemic Threats

Southeast Asia is home to almost every global emerging disease threat, including potential pandemic influenza strains. The recent outbreak of H7N9 influenza in China has renewed the longstanding debate across Southeast Asia, and within the U.S. government, the World Health Organization (WHO), China, and beyond over how to strengthen surveillance, laboratory, and communications capacities; as well as how to coordinate the production and dissemination of vaccines and antivirals in the face of new and reemerging pathogens.

China's handling of the spring 2013 H7N9 outbreak has been markedly superior to its response to the SARS (severe acute respiratory syndrome) and H5N1 and H1N1 outbreaks in recent years. After the first H7N9 cases were reported, China made rapid use of impressive new genetic-sequencing capacities, shared specimens with WHO-designated reference laboratories, and arguably most striking, deliberated actively with the United States, WHO, the European Union, and others over what the evolving data suggested about the transmissibility of H7N9.[6] The U.S.-China dialogue built upon the impressive, close collaboration developed over the previous decade between CDC and its Chinese counterpart.

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[5] See the related news article, which states: "The Defense Department supports U.S. global health activities because such efforts as preventing and containing lethal outbreaks align with DOD's mission to help ensure geopolitical stability and security, a senior defense official said here today." Cheryl Pellerin, "DOD Plays Supporting Role in U.S. Global Health Efforts," American Forces Press Service, May 16, 2013, http://www.defense.gov/News/NewsArticle.aspx?ID=120064.

[6] See "An ounce of prevention," *Economist,* April 20, 2013, http://www.economist.com/news/science-and-technology/21576375-new-viruses-emerge-china-and-middle-east-world-poorly-prepared?fsrc=rss|sct; and "From SARS to H7N9: will history repeat itself?" *Lancet,* 381, issue 9875 (April 20, 2013): 1333, http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2960865-X/fulltext?rss=yes.

Obama administration recent actions back in Washington demonstrated just how relevant these pandemic threats actively link to U.S. national interests. In mid-May 2013, the White House convened a cabinet-level principals' meeting focused on global health security and the evolving response to H7N9 and MERS-CoV, the highly lethal coronavirus that has recently emerged in the Middle East. Officials debated whether preparations at home were adequate, in terms of vaccination and antiviral production and stockpiles, what intensified efforts are warranted to build better capacities within Asia and elsewhere to prevent, detect, and respond to present and future threats, and by what metrics the United States should define goals and evaluate future progress.

There are common, powerful interests shared between the United States and China in addressing emerging pathogens. And now is the moment to deepen cooperation with China on meeting these threats—including the threat they pose to the global economy as well as the special threat they pose to countries of common shared interest in the Mekong subregion, namely, Myanmar, Cambodia, Laos, and Vietnam. It is worth recalling that the estimated economic impact of SARS across Asia in 2003–04 was $30 billion. As of the end of May 2013, the estimated economic impact of H7N9 in China alone exceeded $6.5 billion.

Malaria

Long a source of traditional health threats, Myanmar, Vietnam, Cambodia, Thailand, Laos, and likely also the southwestern provinces of China are now experiencing the rapid spread of *plasmodium falciparum* malaria resistant to artemisinin combination therapy (ACT), which, over the past decade, has become the standard therapy for this type of malaria around the world. At present, there is no alternative to ACT on the horizon, which means that should resistance continue to spread, the substantial progress made over the past decade in controlling malaria in Africa and Asia could be reversed.

The CSIS delegation that visited Southeast Asia was told that artemisinin-resistant malaria jumped in 2012 from the Thai-Cambodia and Thai-Myanmar borders to central Vietnam (around Kontum and Pleiku) and northern Myanmar (just south of Kachin state). Within the Greater Mekong subregion, Myanmar accounts for 75 percent of malaria deaths and an even greater percentage of malaria cases, yet its public health capacities, both civilian and military, are exceptionally weak; and access to sensitive, remote, often conflict-ridden areas is difficult. Expanding military-to-military cooperation with Myanmar, while essential to effectively addressing artemisinin-resistant malaria in the greater Mekong subregion, will require special care, given the promising but turbulent transition under way, ongoing internal conflicts, and the Myanmar military's history of repression and abuse.[7]

Encouragingly, national malaria control agencies within the Greater Mekong subregion are banding together to contain and eliminate resistant strains. Their efforts are supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria, which announced in February 2013 a three-year $100 million emergency malaria resistance program for the Mekong region; the U.S. President's Malaria Initiative (PMI); WHO; the Bill & Melinda Gates Foundation; Australia; the United Kingdom; and the Association of Southeast Asian Nations (ASEAN).

Success is achievable, but only if individual national governments maintain this challenge as a true national priority and coordinate at a level unprecedented in terms of public health initiatives. Additionally, it is critical that steps be taken to reduce the high levels of falsified and substandard drugs in Southeast Asia that stoke artemisinin resistance.[8-9] It is also essential that

[7] Military troops with limited immunity frequently deploy from home garrisons to remote, often-contested border areas, where resistant organisms are prevalent.
[8] Gillian J. Buckley and Lawrence O. Gostin, eds., *Countering the Problem of Falsified and Substandard Drugs* (Washington, DC: National Academies Press, February 2013), 65.

the region's militaries be fully engaged and able to collaborate fruitfully with external military partners—the United States and others—that possess special expertise to control malaria and help eradicate the resistant strains. A very positive recent sign is the participation of scientists and policy experts from Myanmar, Cambodia, Vietnam, and Laos, as well as the United States, China, Singapore, and Australia, in a June 2013 malaria workshop sponsored by PACOM and the U.S. Armed Forces Health Surveillance Center (AFHSC) and hosted by the Thai military.

Child Survival, Women's Health, Noncommunicable Diseases, and Expansion of Health Services

Southeast Asia as a region presents a decidedly mixed picture. It continues to see strong economic growth (6.8 percent growth in GDP per capita in 2010), significant overall gains in access to improved water sources, contraceptive use, access to skilled birth attendants, literacy rates, and primary school enrollment. However, significant challenges remain to improve health. Under-five child mortality for the region stands at 32 child deaths per 1,000 live births, compared to East Asia with 18 child deaths per 1,000 live births. The percentage of children under the age of 5 who are moderately or severely stunted is 27.4 percent, compared to 8.5 percent in East Asia. A similar pattern is observed with maternal mortality: the maternal mortality ratio in Southeast Asia is 150 per 100,000 live births as compared to 37 in East Asia. Despite gains in recent years, the Southeast region continues to account for one-third of all global maternal and child deaths. At the same time, noncommunicable diseases such as cancer, diabetes, hypertension, stroke, and trauma impose a swiftly rising health burden.

There are stark enduring inequities within the Southeast region, especially when the focus narrows to the poorest Mekong countries of Cambodia, Laos, and Myanmar. The situation in Myanmar is most pronounced. Though the government quadrupled health care spending in its 2012–2013 budgets, public expenditure on health care remains at 2 percent of GDP—a paltry $28 per capita. Thirty-two percent of the country's population lives in poverty, and the same percentage of children under five are malnourished. The incidence of malaria, tuberculosis, and maternal and child mortality are among the region's highest. At 62 deaths per 1,000 live births, under-five mortality in Myanmar is more similar to South Asia, a region not on track to reach 2015 Millennium Development Goals (MDGs). Cambodia and Laos also have rates much higher than the Southeast region's average.[10] Stunting in the Southeast Asia region is 27.4 percent,[11] but again, Myanmar, Cambodia, and Laos bear a much larger burden.[12] Maternal mortality also is unacceptably high. Maternal mortality ratios for Myanmar, Cambodia, and Laos are 200, 250, and 470 per 100,000 live births, respectively,[13] compared with the region's average of 150.[14]

Across the region, there are efforts under way to upgrade health systems to meet new demands, in part driven by the rise of noncommunicable diseases (NCDs). Thailand has made dramatic progress through sustained investments over two decades. As the poorest countries in the Mekong confront grave needs vis-à-vis infectious diseases, maternal health, and child survival, they also face rising internal pressures to expand basic health services and address NCDs. That will only

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[9] The most significant other factors that contribute to artemisinin-resistant malaria: cross-border movements of military personnel and undocumented migrant workers who operate altogether outside health systems; the use of single drug instead of combination therapy; inaccurate diagnosis; overtreatment of feverish patients; and the mutational proclivity of the malaria pathogen.

[10] United Nations, *The Millennium Development Goals Report 2012* (New York: United Nations, 2012), http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf.

[11] UNICEF, WHO, and World Bank, *Levels and Trends in Child Malnutrition: UNICEF-WHO-The World Bank Joint Child Malnutrition Estimates* (New York: UNICEF/WHO/World Bank, 2012), http://www.who.int/nutgrowthdb/jme_unicef_who_wb.pdf.

[12] Stunting prevalence for Myanmar, Cambodia, and Laos is 35 percent, 40 percent, and 48 percent, respectively. See UNICEF, "Country statistics," http://www.unicef.org/statistics/index_countrystats.html.

[13] World Bank, "Maternal mortality ratio," http://data.worldbank.org/indicator/SH.STA.MMRT.

[14] United Nations, *The Millennium Development Goals Report*.

begin to be feasible if there are sustainable insurance schemes, an adequately equipped and trained health workforce, smart pricing and use of private-sector providers, and effective controls over corruption. Into the future, the Mekong countries can be expected to turn increasingly to the United States, as well as WHO, the World Bank, and others for technical expertise, training, and best practices in reaching for universal health coverage and affordable approaches to NCDs. Hence the designation of this area as a priority focus of the proposed Greater Mekong Health Security Partnership.

A Foundation of U.S. Health Programs

The United States has, over the years, built impressive civilian and military health programs in Southeast Asia; in combination, these provide a solid foundation for a targeted health initiative to advance the goals of the U.S. strategic rebalance.

USAID and CDC

USAID's involvement in the Southeast Asia region has grown considerably in the past decade. In Fiscal Year (FY) 2012, USAID spent approximately $200 million in the region on public health programs, including technical support for HIV/AIDS prevention, care, and treatment; multidrug-resistant tuberculosis prevention and management; malaria control and eradication, including containment of artemisinin-resistant malaria; maternal and child health; and health-systems strengthening through improved disease surveillance, health-workers training, and increased laboratory capacity. Of its bilateral health programs, USAID/Cambodia invests approximately half of its $70 million annual budget in the health program: it is the broadest U.S. health portfolio among the Mekong countries, encompassing programs in maternal and child health and nutrition, family planning, HIV, tuberculosis, and malaria. USAID returned to Laos in 2011 after a 35-year absence, with a modest budget of $7 million in FY 2011, of which $1 million is dedicated to HIV/AIDS. In Vietnam, USAID at present spends approximately $67 million annually on HIV/AIDS; its second priority is avian influenza. HIV/AIDS funding levels are expected to drop steadily in coming years.

In 2003, USAID established the Regional Development Mission for Asia (RDMA), headquartered in Bangkok, to manage region-wide development programs, as well as to support bilateral initiatives and programs in countries without USAID missions. RDMA played a leading role in the design and early implementation of U.S. development programs, including health, leading up to the 2012 launch of the USAID mission in Burma. It has had an annual budget of approximately $65 million, about $25 million dedicated to health programs concentrated on HIV/AIDs, tuberculosis, and malaria. RDMA also manages around $12.5 million from Washington to address pandemic influenza and other emerging threats. These budgets are decreasing starting in FY 2013 with the movement of funds to the mission in Myanmar.

The CDC/DHHS has a longstanding presence in Southeast Asia providing short- and long-term technical assistance. It invested $62.4 million in the region in FY 2012 to address infectious diseases (most notably HIV/AIDS, malaria, and tuberculosis), NCDs, and trauma and injuries; to train local professionals in field epidemiology; and to strengthen disease surveillance and laboratory capacity. As in other parts of the world, CDC serves as the counterpart to Ministries of Health. One of CDC's key goals in Southeast Asia is to assist countries in fulfilling their goals under the International Health Regulations (IHR) primarily through CDC's regional Global Disease (GDD) centers. WHO designated GDD centers are key partners to help implement IHR goals for its 194 member states. GDD centers are presently located in Thailand and China, in addition to eight other international sites. GDD works directly with Ministries of Health, WHO, and established CDC programs in the region to develop the critical core capacities to reduce the timeline for both the identification and control of emerging infectious diseases.

In 2012, CDC began working with Vietnam (as well as Uganda) to develop a national laboratory system capable of safely and accurately conducting the full range of tests necessary to detect and characterize new threats in any part of the country; establish an interconnected, appropriately scaled public health Emergency Operations Center able to mobilize within two hours; and launch a real-time information center that can securely store and present outbreak data.

The U.S. Military

The U.S. military has developed active health partnerships with Thailand, Cambodia, Singapore, Vietnam, and Indonesia, which offer a possible model to engage the long-isolated Myanmar military and to expand engagement with others, including China.

Fifty years ago, in response to an outbreak of cholera, the U.S. Army established a laboratory in Bangkok, Thailand. Now known as the Armed Forces Research Institute of Medical Sciences (AFRIMS), this joint U.S.-Thai enterprise has been at the forefront in developing vaccines, therapies, and diagnostic tools for the infectious diseases of greatest impact in the region. Stretching back to World War II, the Navy's Naval Medical Research Unit (NAMRU) has a similar history. Originally located in Guam and later in Taiwan, NAMRU has maintained a major presence in Southeast Asia for over 45 years, operating in Vietnam from 1966 until 1970, the Philippines from 1979 to 1994, Indonesia from 1970 to 2010, and continuing today with a detachment in Cambodia. In June 2013, the Naval Medical Research Center-Asia opened in Singapore, underscoring the Navy's continued commitment to health engagement in the region.

In the 1990s, the reintroduction of U.S. military health activities in Vietnam, most notably the search for the remains of Americans missing in action, was pivotal to normalizing relations with the Vietnamese government. Following the December 2004 tsunami that devastated Aceh and other islands in Indonesia and across the region, the U.S. military deployed the aircraft carrier USS ABRAHAM LINCOLN, C–130 and C–5 cargo planes, transport helicopters, and the hospital ship USNS MERCY to deliver emergency relief. This response significantly improved U.S. standing in the region and contributed to the normalization of U.S.-Indonesian military-to-military relations.[15]

The U.S. Defense Threat Reduction Agency (DTRA) has recently inaugurated significant health-engagement activities in Asia, with a particular emphasis on health security.[16] Globally, DTRA spends over $270 million per year under the Cooperative Biological Engagement Program (CBEP) to specifically address biological threats associated with weapons of mass destruction (WMD). A September 2012 study by the Kaiser Family Foundation found CBEP to be the single-largest component of DoD's estimated $580 million in annual global health-related activities.[17]

Since 2011, DTRA has proposed programs with partner governments in Southeast Asia to improve safety in the collection, identification, and transfer of biological agents and other threats by

[15] The U.S. Department of Defense also carries out other valuable medical activities in the region, ranging from humanitarian missions like Pacific Partnership and Pacific Angel to capacity-building efforts like Subject Matter Expert Exchanges (SMEEs) and the Asia-Pacific Military Medical Conference. Recent decades have seen engagement on many other topics of military significance, including undersea and aerospace medicine, aeronautical evacuation, blood banking, combat trauma treatment from initial response to rehabilitation, occupational, and environmental medicine, and medical aspects of disaster preparation and response.

[16] Established in 1998, the agency's core mission is nonproliferation, including deterrence, detection, and countermeasures. It conducts scientific research, provides operational support to U.S. troops overseas, has an in-house center that focuses on anticipating and mitigating future WMD threats to the United States, and invests in international partnerships.

[17] Josh Michaud, Kellie Moss, and Jen Kates, *U.S. Global Health Policy: The U.S. Department of Defense and Global Health* (Washington, DC: Henry J. Kaiser Family Foundation, September 2012), http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8358.pdf.

training staff and deepening laboratory capabilities. These investments aim to strengthen disease surveillance and generate new research and data of broad value to health security throughout the region. In October 2012, Senator Richard Lugar, a senior DTRA official, and Senate Foreign Relations Committee staff members traveled to Indonesia, the Philippines, and Thailand "to encourage expanded bilateral relationships of the Nunn-Lugar Cooperative Threat Reduction Program (CTR) as part of the renewed strategic emphasis by the United States on relations with the countries of the region."[18]

Obstacles to Expanded Engagement

Despite this promising foundation, there are a number of obstacles that will need to be overcome in order for a Greater Mekong Health Security Partnership to succeed.

First, we found no coherent vision for integrating U.S. health investments in Southeast Asia, setting priorities, tying them to strategic foreign policy goals, and ensuring their sustainability. No senior official, in Washington or the region, has been charged with devising and executing an integrated regional soft-power health strategy. As a consequence, many worthy U.S. health activities, across military and civilian agencies, remain stove-piped. Despite improvements, interagency and intraregional U.S. coordination is still patchy.

Second, considerable uncertainty hangs over future U.S. budgets, which contributes to regional skepticism that U.S. commitment to the strategic rebalance will win long-term funding. In turn, of course, this hinders the ability of the United States to enlist regional states as active partners. The Defense Department's Asia budgets in health and other humanitarian engagement are particularly vulnerable to cuts.

Third, the Lower Mekong Initiative, while potentially valuable as an integrated diplomatic platform, lacks senior leadership, an empowered coordination mechanism, and a core funding pool to shape programmatic outcomes and incentivize interagency collaborations. Beyond facilitating dialogue, its mission is unclear. Unless systematic action is taken to sharpen its vision and strengthen its mandate, it will likely languish.

Fourth, the mission set and structure of the military do not presently align sufficiently to advance the type of integrated civilian-military effort envisioned in the Partnership.

For example, time-sensitive opportunities for U.S. military health cooperation with Myanmar and China will likely encounter resistance at high levels in Washington, in both the executive and Congress, unless there is sustained high-level U.S. civilian leadership and a clear rationale for that collaboration, as part of a whole-of-government U.S. approach, laid out in a unified regional initiative.

At times U.S. embassies have questioned DTRA's security focus, wondering if it is at odds with DoD and U.S. civilian agencies' existing (and often longstanding) scientific and humanitarian cooperation with partner governments. Recent improvements in communications, consultations, and planning are encouraging. Going forward, DTRA's valuable contributions to health system strengthening in Southeast Asia and elsewhere will need to be closely integrated with ongoing DoD and U.S. civilian agency health activities.

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[18] See Committee on Foreign Relations of the United States Senate, *The Nunn-Lugar CTR Program's Role in the Administration's Asia-Pacific "Rebalancing" Initiative* (A Minority Staff Report), 112th Cong. 2nd sess., December 17, 2012, p. 2, http://www.gpo.gov/fdsys/pkg/CPRT-112SPRT77807/pdf/CPRT-112SPRT77807.pdf. The report specifically highlights infectious diseases: "In addition to the hub of Southeast Asia serving as a potential nexus for the transport of WMD and related materials, the interconnectivity of the region makes the spread of infectious disease a major threat to the region. The detection, diagnosis, and response to infectious diseases all have significant similarities to a deliberate biological threat and therefore fall within the scope of countering WMD."

The military is constrained in the career path for global health, long-term staffing opportunities and adequate flexibility in the use of civilian experts. There is insufficient knowledge within DoD of nongovernmental organizations (NGOs), USAID, and CDC, including their respective cultures and how to most effectively partner with each in delivering health services, training, and capacity-building.

Implementation of a Greater Mekong Health Security Partnership

Successful implementation of a Greater Mekong Health Security Partnership will require a vision to direct and enable action; it will require sustained high-level civilian leadership, targeted money, smart collaboration, including engagement with the U.S. and Southeast Asian private sector, and better integrated U.S. civilian and military health approaches. It will need a five-year timeline to guide efforts, as was successfully done in the launch of the President's Emergency Plan for AIDS Relief (PEPFAR) in 2003.

- *Leadership:* The president should ask the secretary of state to oversee and guide this initiative, building upon the existing base of the Lower Mekong Initiative. In turn, the secretary should appoint an ambassador-level senior director for the Partnership, based within the region. The most logical site is Bangkok, Thailand, where it will be possible to enlist the existing, active U.S. regional interagency health team as its core secretariat.
- *Pooled funding:* The Obama administration should establish a core funding pool that consolidates existing funds, transcends current stove-piping to achieve better outcomes through integrated efforts, and operates within a five-year framework. Additional funds, while difficult under present budgetary constraints, are nonetheless important to expedite a new interagency approach to the urgent health security needs in the Mekong subregion. The target should be to assemble an initial package of resources of at least $250 million per year, and at a minimum double that level of effort in the next funding cycle. Active consultations with Congress will be essential.

  Pooled funding will be key to incentivizing interagency collaboration: across USAID, CDC, PEPFAR, and PMI, and as a means to leverage and integrate DoD's exceptional assets into U.S. civilian agency-led efforts: its special ability to initiate military-to-military health collaborations; its research laboratories and their longstanding relationships throughout the region; its planning logistics and lift capacities; its subject expertise and training capacities.

  Priority should be given to funding programs in Myanmar during the initial five-year period, with special attention to the country's absorptive capacity.
- *Smart collaboration:* U.S. investment should be built on partner countries generating national plans, entering partnership agreements, and demonstrating strong political and financial commitments.

  Winning the active cooperation of Thai and Chinese health authorities, civilian and military, as appropriate, should be prioritized.

  The Partnership should have an annual scorecard that summarizes progress across countries and across the subgoals, and defines outstanding challenges and the next line of top priorities.

  A priority should be engagement with the U.S. and regional private-sector interests to reduce substandard and falsified drugs and strengthen the ethics of medical research field trials.

  Wherever feasible and appropriate, the Partnership should integrate its investments with those of key multilateral instruments: the Global Fund, the GAVI Alliance, the World Bank, the Asian Development Bank, and WHO. It should do the same with relevant health system strengthening efforts under way by other regional nations and multilateral institutions:

Australia, Japan, Korea, ASEAN, ASEAN Defense Ministers' Meeting Plus (ADDM+), and the Asia-Pacific Economic Cooperation (APEC) and ASEAN Regional Forums.

- *Strengthened U.S. military health programs:* Four pragmatic steps can strengthen military-to-military cooperation as well as DoD support to U.S. and partner-country civilian health agencies. It will be important to designate lead implementation responsibilities.

  Health-engagement planning should begin early, ideally up to two years for major programs such as Pacific Partnership; and should feature far more systematic outreach to the host-country ministries and host communities, the U.S. country team (especially the Department of State and USAID), and regional bodies and multilateral institutions. This step will need to take account of the complexities of DoD planning, budgeting, and implementation practices, and competing demands beyond the health sector.

  More can be done to better understand partner nations' evolving health capacities and needs. This information will enhance collaboration among partners to design programs that effectively address and align with partner countries' priorities as they move forward with strengthening their health systems. This could be particularly valuable in the Mekong regional states.

  There is a strong argument for systematically cultivating the small cadre of military officers and civilian personnel who lead military global health engagement, identifying opportunities to develop the unique competencies required to optimize success in these critical roles. Ideally this cadre would include medical representatives from a broad spectrum of clinical and administrative backgrounds representing all U.S. military services. In addition to proven competence in core specialties, specialized professional development can include a common educational foundation in global health and international relations as well as significant experience within U.S. civilian assistance agencies, nongovernmental partners, and multilateral institutions. This step should not require additional personnel, but rather rely on more systematic and thorough professional development of those personnel involved in health-engagement activities.

  Finally, it will be valuable to develop and field a DoD global health-engagement monitoring and evaluation system to assess whether health investments are indeed achieving the desired health outcome goals, and whether at a broader level they advance U.S. foreign policy goals and national interests. A truly effective tool will establish baselines that strengthen planning for subsequent missions.

Conclusion

The Greater Mekong Health Security Partnership is a dynamic proposal for a new form of U.S. humanitarian engagement in Asia that could creatively combine civilian and military capacities to meet a quickly evolving moment of opportunity and address real threats to health security. With high-level civilian leadership, the Partnership would be feasible, timely, affordable, and focused. It can be tailored to local and national realities while at the same time it can advance U.S. foreign policy interests, as part of the strategic rebalance in the Asia-Pacific region, and lay the foundation for future enlarged partnerships across Asia. Expected outcomes take two forms. The Partnership can build institutional capacities in the partner countries and help deliver better concrete health outcomes in four focal areas: pandemic preparedness, malaria control, NCDs, and vulnerable mothers and children. At a foreign policy and strategic level, the Partnership, while helping improve productivity, stability, and economic development with the Mekong region, can strengthen existing U.S. relations with Vietnam, Laos, and Cambodia; accelerate the evolution of bilateral relations with Myanmar; and put ties with China and our treaty ally Thailand onto a new collaborative footing.

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