

# US Department of Health and Human Services: A Need for Global Health Leadership in Preparedness and Health Diplomacy

More than ever before, the US Department of Health and Human Services (DHHS) needs to be a global health agency, working to protect the health, economic, and security interests of US citizens through global collaboration and commitment to the public good. Public health preparedness extends beyond public health surveillance, preparation for bioterrorism, and political policy.<sup>1</sup> Preparedness involves understanding the 21st-century world—its changing disease burden, its changing demographics, and its changing political and environmental substrata.

It is the moral responsibility of the US government, particularly through its lead health entity, to address the high-disease-burden global health challenges. DHHS agencies must work within multinational and bilateral structures to build consensus, respond to global health threats, and cultivate science to build a strong global public health infrastructure. Global health is both an economic priority and a security priority of the United States.<sup>2</sup> Therefore, the collective expertise of multiple disciplines must be harnessed to support the best approaches to the major global health challenges. The disciplines of epidemiology, health policy, economics, law, environmental science, and, certainly, bioethics can make essential contributions to a comprehensive global health strategy.

In June 2005, at the Global Health Summit for the US Public Health Service, US Surgeon General Richard Carmona declared

that global health is a fundamental moral, practical, and strategic issue of importance to the United States and all other nations in the effort to sustain peace, prosperity, and well-being.<sup>3</sup> He asserted that the US Public Health Service needs to be a global response corps, responding not only to emergencies but to emerging health problems throughout the world. Given the continued domestic threat of bioterrorism, the health threats to the US economy created by globalization of goods and services, and the concern for the health of the millions of US citizens who travel abroad each year, global health is now a critical topic of concern for the US DHHS.

### THE CHANGING WORLD

The world's population is growing; more important, it is aging. Life expectancy is increasing (with some notable exceptions<sup>4</sup>), and advances in biomedical science have reduced communicable diseases such that the proportion of global mortality caused by noncommunicable diseases is increasing. Alarming, the majority of this burden is in developing countries. The dissemination of risk factors for noncommunicable diseases is also increasing, with smoking and childhood obesity rates increasing so much that diabetes, cancer, and, especially, coronary heart disease rates will grow dramatically in both the developed and developing world.<sup>5</sup> These risk factors fly under the radar of US foreign aid, especially in developing

countries, where communicable diseases still attract the most attention.

Injuries are a neglected area of concern, but they are a major contributor to the global burden of disease, especially for children in developing countries. More than 90% of the world's deaths from injuries occur in low- and middle-income countries.<sup>6</sup> The World Health Organization (WHO) has estimated that by 2020, road traffic injuries will displace other diseases and conditions as the second leading cause of disability-adjusted life years lost in these countries.<sup>7</sup>

The unfinished agenda for communicable diseases (which account for 43% of the global burden of disease), particularly diseases that are treatable or preventable through public health interventions, requires increased investment, especially from developed countries such as the United States. The "10/90 gap" in health, in which 90% of the global burden of disease receives only 10% of the global research investment,<sup>8</sup> should cause us as a society, and DHHS as an agency, to rethink priorities. Organizations such as the Bill and Melinda Gates Foundation and multilateral organizations such as WHO have heeded this message. Nevertheless, government commitment is critical.

Poverty is a determining factor in health disparities, and more than 1 billion of the 6 billion people on Earth live on less than \$1 per day. Another 2.7 billion survive on less than \$2 per day. Poverty not only affects economic stability but

also food security, sanitation, the environment, women's health, and literacy. Therefore, foreign aid is a health mandate. It has been suggested that developed countries should invest 0.7% of their gross domestic product (GDP) in foreign aid. Currently, only Denmark, Luxembourg, the Netherlands, Norway, and Sweden do so, but several other countries have committed to this level of investment over the next 5 years.<sup>9</sup> The United States, which is not among those countries, invests less than 0.1% of its GDP in foreign aid for health and economic development.

Political, social, and economic transitions that occurred as a result of political change in the former Soviet Union and the Russian Federation in the early 1990s led to a sudden increase in mortality across the region, with more than 80% of deaths attributable to preventable causes, especially cardiovascular disease, alcoholism, and injuries. As a result, Russia experienced some of the most dramatic population declines observed in recent history. Health reforms have been implemented, but provide too few resources to the noncommunicable disease epidemic as well as to HIV/AIDS and multidrug-resistant tuberculosis.<sup>10</sup> These problems are real global threats in a critically important nation with nuclear security, bioweapons, and terrorism concerns; these threats must concern us both as a sovereign nation and as an ally. Researchers and health professionals in the United States and Russia can reduce the impact of noncommunicable diseases and improve the global response to HIV/AIDS and tuberculosis if they are encouraged to cooperate in



**Without access to generic antiretroviral drugs, treatment for most HIV-positive South Africans would likely be unaffordable. The *Siyaphila La* [We are living here] HIV-treatment program in the Eastern Cape Province's Lusikisiki district provides patients with the generic fixed-dose combination drug Triomune. Nozamile Ndarah, age 22, is seen here in 2004 shortly after she has been prescribed the drug. Photo courtesy of Gideon Mendel/Corbis.**

scientific and health diplomacy. Currently, such cooperation is lacking.

### INDEPENDENCE OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES AT RISK

The DHHS is a global agency. It is the source of a large majority of global biomedical research support and also much of the science base for global health improvement. Yet now the scientific base for DHHS is under attack as well. In 2004, the Union of Concerned Scientists issued a heavily cited report criticizing the interference of political processes in the scientific practices of various federal agencies.<sup>11</sup> This interference extends to international health diplomacy; DHHS agencies have

been limited in their scientific independence and participation through political restrictions on travel, scientific input, and collaboration.<sup>12</sup> Independence among DHHS scientists is critical to maintaining the integrity of the governmental scientific establishment. Moreover, preparedness involves attracting the very best scientists and professionals into government. Without assurances of integrity and independence, who will be attracted to government service? Even now, morale and vacancies at various DHHS agencies are of real concern. In addition, independence also needs to be assured for academic institutions that implement DHHS programs. DHHS and academia share the same imperatives for intellectual freedom, scientific integrity, and pursuit of the public good.

Recently, the Institute of Medicine researched the options for establishing (with support from the Presidential Emergency Plan for AIDS Relief) a global health service corps to respond to human resource deficiencies in countries deeply affected by HIV/AIDS, analogous to the formation of the Peace Corps a generation before.<sup>13</sup> This is an important idea that could serve many purposes. First, it would provide a highly desirable opportunity for fully trained, early-career US health professionals to contribute to the global public good through government service. Second, it would provide desperately needed expertise to make use of the rapidly increasing global resources for HIV/AIDS from the US government; the Global Fund to Fight AIDS, Tuberculosis, and Malaria; the

World Bank; WHO; and others. Third, it would give a positive, human face to the US presence abroad, much as the Peace Corps has done for the last 4 decades. Finally, it would stimulate training and educational responses to global health challenges within US health sciences schools. The DHHS needs to support this initiative, as it is one of the best ideas yet to arise from the current political landscape.

## GLOBAL GOVERNANCE IS A NECESSITY

Global governance—collaborative efforts among sovereign nations to solve transborder problems—should be not feared but embraced by the DHHS. Recently, the World Health Assembly approved revisions to the International Health Regulations. These revisions will markedly expand efforts to control disease outbreaks, reduce the impact of false alarms, and improve responses to emerging global health threats. The International Health Regulations ensure maximum protection against the international spread of diseases while minimizing interference with world travel and commerce.<sup>14</sup> Global threats require nations to work together and build consensus through such agreements.

In another example of global governance efforts, WHO enacted the Framework Convention on Tobacco Control (FCTC), the first international health treaty negotiated under WHO bylaws. The increasingly global nature of the tobacco industry and the risks it poses to public health require a transnational approach to regulation. To create a governance mechanism that can effectively counter the global tobacco epidemic, WHO involved a

broad range of interest groups in negotiating the FCTC. As implemented, the convention requires countries to impose restrictions on tobacco advertising, sponsorship, and promotion; establish new packaging and labeling of tobacco products; establish clean indoor air controls; and strengthen legislation to reduce tobacco smuggling. To date, 93 states have ratified the FCTC, causing it to come into force as of February 28, 2005; unfortunately, the United States is not among these countries.<sup>15</sup> As former surgeon general David Satcher stated, “Many countries are looking to us for leadership in combating the global tobacco epidemic. Now is the time to work with these countries by ratifying and supporting the tobacco treaty.”<sup>16</sup> Given that the FCTC builds on evidence for successful tobacco control cited in many reports of the surgeon general, it is ethically unconscionable that the United States does not provide the leadership, support, technical assistance, and funding to implement this treaty globally.<sup>17</sup>

## CONCLUSION

The DHHS, the Office of the Surgeon General, and the US Public Health Service are uniquely positioned to contribute to global health, prosperity, and security through leadership and collaboration with other nations, multinational organizations, civil society, and the scientific community. Preparedness is not only surveillance and vigilance for bioterrorism but a broader response involving reassertion of scientific integrity, commitment to public service, and expanded global health education within the health sciences. The resources available to the DHHS, both financially and by

virtue of “the bully pulpit,” are considerable. History will judge how well our health leaders use these gifts. ■

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### References

- Public health preparedness requires more than surveillance. *Lancet*. 2004;364:1639–1640.
- Institute of Medicine. *America's Vital Interest in Global Health*. Washington, DC: National Academy Press; 1997.
- Michael JM. Highlights: Global Health Summit 2005. *COA Frontline*. 2005;42(5):15–17. Available at: <http://www.coausphs.org/frontline/frontline.asp>. Accessed October 12, 2005.
- Shkolnikov V, McKee M, Leon DA. Changes in life expectancy in Russia in the mid-1990s. *Lancet*. 2001;357:917–921.
- Yach D, Hawkes C, Gould CL, Hoffman KJ. The global burden of chronic diseases—overcoming impediments to prevention and control. *JAMA*. 2004;291:2616–2622.
- The Injury Chart Book: A graphical overview of the global burden of injuries. Department of Injuries and Violence Prevention, Noncommunicable Diseases and Mental Health Cluster, World Health Organization. 2002. Available at: <http://whqlibdoc.who.int/publications/924156220X.pdf>. Accessed October 3, 2005.
- World Health Organization. The World Report on Road Traffic Injury Prevention. 2004. Available at: [http://www.who.int/world-health-day/2004/infomaterials/world\\_report/en/index.html](http://www.who.int/world-health-day/2004/infomaterials/world_report/en/index.html). Accessed October 23, 2005.
- Stevens P. Diseases of Poverty and the 10/90 Gap. November 2004. Available at: [http://www.fightingdiseases.org/pdf/Diseases\\_of\\_Poverty\\_FINAL.pdf](http://www.fightingdiseases.org/pdf/Diseases_of_Poverty_FINAL.pdf). Accessed May 25, 2005.
- Sachs JD. The End of Poverty. Economic Possibilities for Our Time. Available at: <http://www.earthinstitute.columbia.edu/endofpoverty/oda.html>. Accessed May 25, 2005.
- Levintova M, Novotny T. Noncommunicable disease mortality in the Russian Federation: from legislation to policy. *Bull World Health Organ*. 2004;82:875–880.
- Scientific Integrity in Policymaking*. Cambridge, Mass: Union of Concerned Scientists; February 2004.
- Kaiser J. Science policy. The man behind the memos. *Science*. 2004;305:1552–1553.
- Board on Global Health, Institute of Medicine. *Healers Abroad: Americans Responding to the Human Resource Crisis in HIV/AIDS*. Washington, DC: National Academy Press; April 19, 2005.
- World Health Organization. Third report of Committee A. A58/55. May 23, 2005. Available at: [http://www.who.int/gb/ebwha/pdf\\_files/WHA58/A58\\_55-en.pdf](http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_55-en.pdf). Accessed October 17, 2005.
- Updated status of the WHO Framework Convention on Tobacco Control. Available at: <http://www.who.int/tobacco/framework/countrylist/en>. Accessed October 29, 2005.
- Satcher D. U.S. tobacco war too low-key [opinion]. *Atlanta Journal Constitution*. March 2, 2005. Available at: <http://www.ajc.com/opinion/content/opinion/0305/02edsatcher.html> (free registration required). Accessed October 17, 2005.
- Novotny T, Carlin D. Ethical and legal aspects of global tobacco control. *Tob Control*. 2005;14(suppl 2):ii26–ii30.