Center for Global Development

Affordable Interventions to Prevent Noncommunicable Diseases Worldwide

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Noncommunicable diseases (NCDs) such as cancer, diabetes, respiratory and cardiovascular diseases, and mental illnesses are the leading cause of death and disability worldwide. Surprisingly, the burden is especially high in developing countries, which bear 80 percent of deaths due to NCDs. Four main factors are at fault: tobacco use, physical inactivity, unhealthy diets, and alcohol use.[1] The good news is that much of the NCD burden can be prevented through interventions that are affordable in most countries. The United States can help now by taking five low-cost or no-cost steps:

- End tariff-reducing trade practices for tobacco.
- Partner with public and private donors.
- Leverage U.S. influence in multilateral development institutions.
- Exploit synergies between disease control and other development projects.
- Encourage evidence-informed budget allocation.

A Growing, Reversible Burden

Noncommunicable diseases, long considered to be "rich-world diseases," are the leading causes of death worldwide and now take an especially heavy toll on developing countries. Tobacco use, physical inactivity, unhealthy diets, and alcohol use lead the growing burden. Tobacco-related diseases alone kill over five million people annually, more than AIDS, tuberculosis, and malaria combined.[2] The causes are known and the needed response is clear. The Lancet's NCD Action Group and the NCD Alliance advocate for improvements in five key areas: tobacco control, salt reduction, promotion of healthy diets and activity, reduction of harmful alcohol consumption, and improved access to essential drugs and technologies. The necessary interventions would be affordable in most countries and would cheaply and effectively save lives and improve the health of millions.

Beyond the health benefits, NCD prevention can help reduce poverty and grow economies, not least by avoiding the high cost of treatment that far exceeds the economic capacity of poor households in developing countries. In India, for example, diabetes treatment costs

1. WHO, *Global Status Report on Noncommunicable Diseases 2010* (World Health Organization, 2011), www.who.int/nmh/publications/ncd_report2010/en/.
2. WHO, *Report on the Global Tobacco Epidemic, 2009: Implementing Smoke-Free Environments* (World Health Organization, 2009), www.who.int/tobacco/mpower/2009/gtcr_download/en/index.html.

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15 to 25 percent of an average household's earnings.[3] A study of 23 developing nations estimated that diabetes, heart disease, and stroke will cost the countries $84 billion of economic production between 2006 and 2015 if current trends persist.[4] A joint report by the WHO and World Economic Forum found that projected losses of national income attributed to heart disease, stroke, and diabetes would total over $30 billion in Pakistan, $7.6 billion in Nigeria, and $2.5 billion in Tanzania between 2005 and 2015.[5] The economy-wide benefits of early prevention and treatment would be substantial.

How the United States Can Help Turn the Tide

The United States will be called to report on its NCD work in the developing world when the United Nations General Assembly holds a summit on noncommunicable diseases in September 2011. In spite of its strong track record on infectious disease, the United States has done little to combat NCDs in developing nations; in some cases, its policies have actually supported the growth of NCD risk factors among the world's poorest.

From the Center for Global Development's work on global health, we identify five no- or low-cost steps that the U.S. government could take today and announce at the summit in September:

1. ***End tariff-reducing trade practices for tobacco.*** The United States has taken progressive measures to reduce domestic tobacco consumption, including high tobacco taxes and mandating graphic warning labels on cigarettes. But nearly every trade agreement the United States has negotiated in the last 10 years lowers tobacco tariffs and helps protect tobacco investments abroad. Under these agreements, U.S. corporations are able to sell their products at prices competitive with local cigarette companies while engaging in more aggressive marketing that sometimes targets children. Low- and middle-income countries do not have the regulatory capacity to counter these sophisticated marketing strategies and stem rapidly increasing tobacco use. Former CGD research fellow Tom Bollyky recommends that the U.S. Trade Representative end negotiation practices that reduce tobacco tariffs in developing countries and prevent countries from requiring warning labels.[6]

2. ***Partner with public and private donors.*** CGD's former deputy director for global health Rachel Nugent reports that funding for NCDs accounted for just 3 percent of all development aid for health in 2007.[7] While prospects for further growth in aid are bleak, public-private partnerships are growing in importance; the recently launched Saving Lives at Birth initiative, co-financed by USAID, the Bill and Melinda Gates Foundation, the Government of Norway, and Grand Challenges Canada is a prime example. The U.S. government could follow this experience, partnering with other governments, philanthropists, and U.S. companies to apply a Cash on Delivery Aid model to the problem of increasing tobacco use in low-income countries.[8] The U.S. Centers for Disease Control tobacco surveillance surveys are powerful tools that could be used to measure and reward progress on tobacco control. Tom Bollyky estimates that a pilot of COD Aid could reduce youth tobacco use in one or more African countries.[9] COD Aid is considered sustainable because of its decreased implementation and administrative costs.

3. ***Leverage U.S. influence in multilateral development institutions.*** Most of the highly cost-effective measures to reduce risk factors and prevent NCDs are in the domain of policies—tobacco taxes, salt reduction, nonsmoking workplaces, labeling, and so on—that are usually set by agencies other than ministries of health. Multilateral development banks work across ministries in developing countries and have a direct relationship with ministries of finance. Since the United States sits on the boards of the World Bank, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank, it can help them raise awareness of the NCD challenge among policymakers inside and outside the multilaterals while supporting greater policy dialogue

3. Robert Beaglehole et al., "UN High-Level Meeting on Non-Communicable Diseases: Addressing Four Questions," *The Lancet* 378(9789): 449–55.

4. Dele O. Abegunde et al., "The Burden and Costs of Chronic Diseases in Low-Income and Middle-Income Countries," *The Lancet* 370(9603): 1929–1938.

5. WHO and the World Economic Forum, "Preventing Noncommunicable Diseases in the Workplace through Diet and Physical Activity" (2008), www.who.int/dietphysicalactivity/workplace/en/index.html.

6. Thomas Bollyky, "Developing-World Lung Cancer: Made in the USA," *The Atlantic*, May 24, 2011, www.theatlantic.com/life/archive/2011/05/developing-world-lung-cancer-made-in-the-usa/239398/.

7. Rachel Nugent and Andrea Feigl, "Where Have All the Donors Gone? Scarce Funding for Non-Communicable Diseases," CGD Working Paper 228 (Washington: Center for Global Development, 2010), www.cgdev.org/content/publications/detail/1424546.

8. See Center for Global Development, "Cash on Delivery: A New Approach to Foreign Aid," www.cgdev.org/section/initiatives/_active/codaid.

9. Thomas Bollyky, *Beyond Ratification: The Future for the U.S. Engagement on International Tobacco Control* (Washington: CSIS, 2010), http://csis.org/files/publication/111210_Bollyky_ByndRatifica_WEB.pdf.

and lending operations on NCD prevention. Increasing tobacco taxes should be a particular area of focus to reduce smoking prevalence and related cardiovascular disease burden; this measure alone could cut tobacco-related deaths by 115 million by 2050.[10] CGD director of global health policy and research fellow Amanda Glassman sets out the reasons why leveraging bank operations makes sense for tobacco-control policy and how it could work in a recent note.

4. *Exploit synergies between disease control and other development projects.* Because NCDs are often linked to socioeconomic determinants of health, collaboration between health and other development programs can help reduce NCD risk factors as they relate to lifestyle behaviors. A study examining the causes of NCDs in Peru found that lowered socioeconomic status was routinely associated with high NCD prevalence.[11] Similarly, higher levels of education are often correlated with lower levels of smoking, alcohol consumption, and obesity.[12] USAID and PEPFAR can better address the origins of NCDs by linking their health-related programs with other U.S.-funded programs relating to food security and education. Even within traditional uses of health aid, such as maternal and child health care, there are opportunities to offer synergistic interventions to prevent and manage NCDs, such as offering testing for hypertension in conjunction with prenatal care.

5. *Encourage evidence-informed budget allocation.* Much of U.S. health aid directly funds vital public health services abroad such as antiretroviral therapy, family planning, and deworming, among others. Given U.S. budget pressures, a key goal of these programs must be to gradually shift their costs to recipient governments. Yet as populations age and the NCD burden grows, recipient-country health systems are under increased pressure to fund NCD treatments that may—if poorly managed—compete with prevention and displace vital spending on antiretroviral treatment, family planning, and related priorities. Although public budgets are growing, their coverage of cost-effective NCD prevention, screening, and management is low, while many ineffective or extremely expensive services are sometimes subsidized.[13] As the United States supports countries' efforts to allocate their own funding for infectious disease control and cost-effective maternal and child health interventions that U.S. aid supports, USAID—along with the Global Fund and the GAVI Alliance—can encourage recipients to apply cost-effectiveness analyses to their budget decision making. The U.S. Institute of Medicine has already identified the issue as a key theme,[14] while a Center for Global Development working group is developing concrete recommendations for priority-setting institutions for health.[15]

Foreign aid funding has become increasingly controversial in light of the current economic and political climate. The actions detailed in this paper can be implemented at small cost to the U.S. government, while maintaining the country's commitment to improving global health. CGD offers attractive and economical solutions to the United States that will save money and lives—starting today.

10. Prabhat Jha, "Avoidable Global Cancer Deaths and Total Deaths from Smoking," *Nature Reviews Cancer* 9(9): 655–664.

11. Juli Goldstein et al., "Poverty Is a Predictor of Non-Communicable Disease among Adults in Peruvian Cities," *Preventive Medicine* 41(3–4): 800–6.

12. Christina Schnohr et al., "Does Educational Level Influence the Effects of Smoking, Alcohol, Physical Activity, and Obesity on Mortality? A Prospective Population Study," *Scandinavian Journal of Public Health*32(4): 250–6.

13. Sarah White et al., "How Can We Achieve Global Equity in Provision of Renal Replacement Therapy?" *Bulletin of the World Health Organization* 86(3): 229–37.

14. Institute of Medicine, webpage for the Workshop on Country-Level Decision-Making for Control of Chronic Diseases, accessed August 29, 2011, www.iom.edu/Activities/Global/ControlChronicDiseases/2011-JUL-19.aspx.

15. See Center for Global Development, "Priority-Setting Institutions for Global Health," www.cgdev.org/section/topics/global_health/priority_setting_institutions.

The Center for Global Development works to reduce global poverty and inequality through rigorous research and active engagement with the policy community to make the world a more prosperous, just, and safe place for us all. The policies and practices of the United States and other rich countries, the emerging powers, and international institutions and corporations have significant impacts on the developing world's poor people. We aim to improve these policies and practices through research and policy engagement to expand opportunities, reduce inequalities, and improve lives everywhere.

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