

Preventing and Controlling Pandemic Flu and Other Infectious Diseases

WHY ARE INFECTIOUS DISEASES A THREAT TO OUR NATION'S HEALTH?

Infectious Diseases Are Spreading:

Emerging or resurging infectious diseases, such as dengue fever; yellow fever; and malaria are of growing concern to health professionals² because there is no specific medication for prevention or treatment of the diseases.³

One third of the world's population is infected with tuberculosis (TB), which kills nearly two million people each year.⁴ Of the estimated 9.4 million new TB cases each year, nearly half-a-million are resistant to at least two of the most effective anti-TB drugs.⁵

An estimated 1.1 million persons in the United States are living with human immunodeficiency virus (HIV) infection. Nearly one-quarter of them (21 percent) are undiagnosed,⁶ and, each year, more than 56,000 people are newly infected. More than half (53 percent) of these new infections occur in men who have sex with men (MSM).⁷

- An estimated 1.4 million people in the United States live with chronic hepatitis B⁸, and up to 3.9 million people live with chronic hepatitis C.⁹ Many do not know they are infected.
- Nearly two million people acquire infections while in U.S. hospitals each year and almost 100,000 of them die as a result. The estimated health care costs associated with health

care-acquired infections ranges from \$28 billion to \$45 billion (in 2007 dollars).¹⁰

Pandemic Flu Poses a Particularly Alarming Threat:

- The 2009 novel Influenza A (H1N1) virus infected an estimated 61 million people in the United States, and resulted in 274,000 hospitalizations and approximately 12,000 deaths.¹¹
- The regular seasonal flu kills 36,000 Americans and hospitalizes 200,000 yearly.¹³
- A severe pandemic flu outbreak could result in 90 million Americans becoming sick, 2.2 million deaths, and major economic losses.¹⁴

Measures for Preventing and Controlling Infectious Disease Are Antiquated and Inadequate:

- The Institute of Medicine (IOM), Government Accountability Office (GAO), and the Office of the Assistant Secretary for Preparedness and Response (ASPR) have found America's public health system to be fundamentally unprepared to respond to major modern health threats.^{15,16,17}
- The federal and state governments should continue to improve public evaluations of preparedness and pandemic planning on a state-by-state basis.

WHAT CAN BE DONE TO BETTER PREVENT AND CONTROL INFECTIOUS DISEASES?

- **Increase and Better Coordinate Federal-State-Local Government and Private Planning and Preparedness.** The government should take the lead on preventing disease, and all jurisdictions should work together to create policies that follow best infection-control practices. Government at all levels should engage the private health care system and communities in their plans and efforts. Government should be transparent about their actions and held accountable for protecting the public.
- **Prepare for Mass Emergencies.** Before a disaster occurs, measures must be established to care for a potential surge of patients, including creating alternative care sites, building regional health care coalitions, and recruiting additional health care personnel.
- **Emphasize Prevention, Care, and Treatment for Chronic Viral Diseases, Including HIV/AIDS and Hepatitis.** Addressing the HIV/AIDS epidemic, hepatitis, and other

“THE [H1N1 PANDEMIC] IS THE MOST VISIBLE REMINDER THAT HEALTH ISSUES CAN SUDDENLY EMERGE FROM ANYWHERE IN THE GLOBE AND THREATEN AMERICAN LIVES AND U.S. STRATEGIC OBJECTIVES.”

-- Dennis Blair, former U.S. Director of National Intelligence¹

SEPTEMBER 2010

PREVENTING
EPIDEMICS.
PROTECTING
PEOPLE.

chronic viral diseases must include increased funding for research, treatment and care, as well as investing in proven prevention methods.

■ **Enhance Research and Development of Vaccines and Public Health Technologies.**

Our country's research and development of new medical countermeasures must be modernized. We need to form public-private partnerships to attract investment, clear hurdles to approval of new products, and build the science base for future innovation.

■ **Increase Childhood and Adult Vaccinations.**

Vaccines are responsible for the control of many infectious diseases.¹⁸ Public health professionals and health care providers should utilize the new vaccine-coverage provisions in the Affordable Care Act and the development of electronic health records to ensure everyone receives vaccines on time, at no cost. All health care workers must receive recommended vaccines.

■ **Modernize Disease Surveillance Systems.**

Every health department and agency should be part of a surveillance system that is interoperable between jurisdictions and agencies.

Plans should ensure adequate laboratory surveillance of influenza and other infectious diseases. The U.S. should take the lead on improving global disease surveillance.

■ **Replenish and Augment the Strategic National Stockpile (SNS).**

The government should ensure the SNS contains sufficient vaccines, antiviral medications, and supplies to respond to public health crises, and states must be better prepared to distribute and administer medications to the public.

■ **Prevent Antimicrobial Resistant Infections.**

Years of overuse of antibiotics have led to a growing resistance of infectious organisms to traditional antibiotics, costing the U.S. health system billions of dollars each year^{19,20} and resulting in the loss of thousands of human lives.²¹ The federal government, agricultural industry, health care providers, and public must begin to eliminate the inappropriate use of antibiotics. HHS should update their plan for addressing antimicrobial resistance to improve federal coordination across agencies and begin development of new antibiotics.

ENDNOTES

- 1 Blair DC. *Annual Threat Assessment of the U.S. Intelligence Community for the Senate Select Committee on Intelligence. Testimony before the Senate Select Committee on Intelligence*, February 2, 2010. http://www.dni.gov/testimonies/20100202_testimony.pdf (accessed July 15, 2010).
- 2 Trust for America's Health. *Germs Go Global: Why Emerging Infectious Diseases Are a Threat to America*. Washington, D.C.: Trust for America's Health, 2008.
- 3 U.S. Centers for Disease Control and Prevention. "Dengue – Frequently Asked Questions." <http://www.cdc.gov/dengue/FAQFacts/index.html> (accessed July 19, 2010).
- 4 U.S. Centers for Disease Control and Prevention. "A Global Perspective on Tuberculosis." http://www.cdc.gov/tb/events/WorldTBDay/resources_global.htm (accessed July 19, 2010).
- 5 World Health Organization. "Drug-resistant Tuberculosis Now at Record Levels." News Release, March 18, 2010. http://www.who.int/mediacentre/news/releases/2010/drug_resistant_tb_20100318/en/index.html (accessed July 19, 2010).
- 6 U.S. Centers for Disease Control and Prevention. "HIV and AIDS in the United States." July 2010. <http://www.cdc.gov/hiv/resources/factsheets/us.htm> (accessed August 2010).
- 7 Ibid.
- 8 U.S. Centers for Disease Control and Prevention. "Recommendations for Identification and Public Health Management of Persons with Chronic Hepatitis B Virus Infection." *MMWR*, 57(RR-8):1-20; 2008.
- 9 Armstrong GL, Wasley A, Simard EP, et al. "The Prevalence of Hepatitis C Virus Infection in the United States, 1999 through 2002." *Annals of Internal Medicine*; 144(10):705-14; 2006.
- 10 Scott RD. *The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention*. Atlanta, GA: Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, 2009. http://www.cdc.gov/ncidod/dhqp/pdf/Scott_CostPaper.pdf (accessed July 19, 2010).
- 11 U.S. Centers for Disease Control and Prevention. "Updated CDC Estimates of 2009 H1N1 Influenza Cases, Hospitalizations and Deaths in the United States, April 2009 – April 10, 2010." http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm#Table%20Cumulative (accessed July 19, 2010).
- 12 U.S. Centers for Disease Control and Prevention. "Updated CDC Estimates of 2009 H1N1 Influenza Cases, Hospitalizations and Deaths in the United States, April 2009 – April 10, 2010." http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm#Table%20Cumulative (accessed July 19, 2010).
- 13 U.S. Centers for Disease Control and Prevention. "Seasonal Influenza (Flu)." <http://www.cdc.gov/flu/about/qa/disease.htm> (accessed July 19, 2010).
- 14 Trust for America's Health. *Pandemic Fu and the Potential for U.S. Economic Recession: A State-by-State Analysis*. Washington, D.C.: Trust for America's Health, 2007. <<http://healthyamericans.org/reports/flurecession/>>
- 15 Institute of Medicine. *The Future of the Public's Health in the 21st Century*. Washington, D.C.: National Academies Press for the Institute of Medicine, 2003.
- 16 U.S. Government Accountability Office (GAO). *Influenza Pandemic: Monitoring and Assessing the Status of the National Pandemic Implementation Plan Needs Improvement*. Washington, D.C.: GAO, 2009.
- 17 U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. *National Health Security Strategy of the United States of America*. Washington, D.C.: U.S. Department of Health and Human Services, 2009.
- 18 U.S. Centers for Disease Control and Prevention. "The Importance of Childhood Immunizations." U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006. <http://www.cdc.gov/vaccines/vac-gen/importance.htm> (accessed January 23, 2008)
- 19 Institute of Medicine. *Antimicrobial drug resistance: issues and options. Workshop report*. Washington: National Academy Press, 1998.
- 20 Roberts, R.R., et al. 2009. "Hospital and Societal Costs of Antimicrobial-Resistant Infections in a Chicago Teaching Hospital: Implications for Antibiotic Stewardship." *Clinical Infectious Diseases* 49:1175–84.
- 21 Infectious Diseases Society of America (IDSA). 2004. *Bad Bugs, No Drugs: As Antibiotic Discovery Stagnates... a Public Health Crisis Brews*. <http://www.idsociety.org/WorkArea/showcontent.aspx?id=5554> (accessed July 29, 2010).

FIND OUT MORE AT
HEALTHYAMERICANS.ORG
OR CONTACT
ANNIE TORO,
TFAH'S DIRECTOR
OF GOVERNMENT
RELATIONS, AT
ATORO@TFAH.ORG OR
202-223-9870 x25.



1730 M Street NW
Suite 900
Washington, DC 20036
(t) 202-223-9870
(f) 202-223-9871
www.healthyamericans.org