ISSUE REPORT

Blueprint FOR A Healthier America

MODERNIZING THE FEDERAL PUBLIC HEALTH SYSTEM TO FOCUS ON PREVENTION AND PREPAREDNESS

Trust for America's Health

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PREVENTING EPIDEMICS. PROTECTING PEOPLE.

TRUST FOR AMERICA'S HEALTH IS A NON-PROFIT, NON-PARTISAN ORGANIZATION DEDICATED TO SAVING LIVES AND MAKING DISEASE PREVENTION A NATIONAL PRIORITY.

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Section 1

INTRODUCTION

SECTION 1

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SECTION 1

Blueprint for a Healthier America:

MODERNIZING THE FEDERAL PUBLIC HEALTH SYSTEM TO FOCUS ON PREVENTION AND PREPAREDNESS

America is facing a health crisis. Even though America spends more than $2 trillion annually on health care -- more than any other nation in the world -- tens of millions of Americans suffer every day from preventable diseases like type 2 diabetes, heart disease, and some forms of cancer that rob them of their health and quality of life.[1] In addition, major vulnerabilities remain in our preparedness to respond to health emergencies, including bioterrorism, natural disasters, and emerging infectious diseases.

The current public health system is broken. It is chronically underfunded and outdated. Modernizing public health is urgently needed to protect and improve the health of Americans. Prevention, preparedness, and public health are vital to the wellbeing of families, communities, workplace productivity, U.S. competitiveness, and national security. The U.S. is falling behind as Americans become more unhealthy and unprotected, and health care costs skyrocket.

This *Blueprint for a Healthier America* is a federal policy guide for the next President, Administration, and Congress with expert recommendations to revitalize the nation's ability to protect the health of all Americans.

Trust for America's Health (TFAH) undertook a year-long consensus-building process, consulting more than 150 leading health experts and organizations to assemble recommendations for effective ways to modernize the federal public health system to meet the range of health challenges we face. TFAH expresses its gratitude to everyone who was a part of this process.

The Blueprint contains:

- A vision statement signed by more than 140 leading health organizations that outlines principles to make disease and injury prevention a cornerstone of America's health policies.
- Recommendations to improve the infrastructure of America's public health system -- funding, structure of agencies, accountability systems, workforce recruitment and retention, and integrating public health with health care -- which are all needed to support the foundation of all public health programs and services.
- Recommendations from TFAH's ongoing initiatives and projects. TFAH issues a series of policy reports each year to bring special attention to some of the nation's most serious public health problems. A number of these issues reflect some of the top health concerns Americans have based on public opinion research conducted by Greenberg Rosner Quinlan Research and Public Opinion Strategies for TFAH, including reducing health care costs through improved disease prevention, the obesity epidemic, food safety, and preparedness for health emergencies. TFAH has also focused attention on infant health, which is a leading indicator for how healthy a nation is, and addressing "social determinants" of health, which looks at why some communities are healthier than others and ways to ensure all Americans have the opportunity to be as healthy as they can be.
- An *Agenda for Modernizing Public Health* paper that defines the need and scope for a policy agenda to modernize public health. This paper is the result of a series of consensus meetings with more than 35 experts and national organizations.

The *Blueprint for a Healthier America* is supported by the Robert Wood Johnson Foundation, The California Endowment, and other philanthropies.

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A. OUR VISION FOR A HEALTHIER AMERICA

America should strive to be the healthiest nation in the world. Every American should have the opportunity to be as healthy as he or she can be. Every community should be safe from threats to its health. And all individuals and families should have a high level of services that protect, promote, and preserve their health, regardless of who they are or where they live.

To realize these goals, the nation must strengthen America's public health system in order to: 1) provide people with the information, resources, and environment they need to make healthier choices and live healthier lives, and 2) protect people from health threats beyond their control, such as bioterrorism, natural disasters, infectious disease outbreaks, and environmental hazards. Achieving this vision will require the combined efforts of federal, state, and local governments in partnership with businesses, communities, and citizens.

The Problem and Need for Action

Today, serious gaps exist in the nation's ability to safeguard health, putting our families, communities, states, and nation at risk.

- Seven years after September 11, 2001, and three years after Hurricane Katrina, major problems remain in our readiness to respond to large-scale health emergencies. The country is still insufficiently prepared to protect people from disease outbreaks, natural disasters, or acts of bioterrorism, leaving Americans unnecessarily vulnerable to these threats.
- Even though America spends more than $2 trillion annually on health care -- more than any other nation in the world -- tens of millions of Americans suffer every day from preventable illnesses and chronic diseases like cancer, diabetes, and Alzheimer's that rob them of health and quality of life. Racial, ethnic and economic disparities exacerbate the burden of disease. Baby boomers may be the first generation to live less healthy lives than their parents. And, the obesity crisis is putting millions of adults and children at risk for unprecedented levels of major diseases like diabetes and heart disease.
- Poor health is putting the nation's economic security in jeopardy. The skyrocketing costs of health care threaten to bankrupt American businesses, causing some companies to send jobs to other countries where costs are lower. Helping people to stay healthy and better manage illnesses are the best ways to drive down health care costs. Keeping the American workforce well helps American businesses remain competitive in the global economy.

America must provide quality, affordable health care to all. But that's not enough. The government must create strategies to eliminate health disparities and improve the health of all Americans, regardless of race, ethnicity, or socioeconomic status. A strong public health system and public policies focused on prevention of disease and injury must be part of the solution.

Guiding Principles for Prevention

Preventing and combating threats to our health is the primary responsibility of our nation's public health system. The public health system consists of health agencies at the federal, state, and local levels of government that work in collaboration with health care providers, businesses, and community partners. Achieving a healthier America requires a national commitment to revitalizing and modernizing the public health system.

1. We believe prevention must drive our nation's health strategy.

- Our support for health care has focused for too long on caring for people after they become sick or harmed. Prevention means improving the quality of people's lives, sparing individuals from needless suffering, and eliminating unnecessary costs from our health system.
- Fundamentals like investigating epidemics, educating the public about health risks, early screening for disease, and immunizations are proven to help prevent and reduce the rates of illness and disease. A greater emphasis on prevention could significantly reduce rates of chronic illness.

2. We believe Americans deserve healthy and safe places to live, work, and play.

- By supporting policies and programs like promoting healthier schools, smoke-free environments, and improved community design, the government can do more to meet its responsibility to help citizens lead healthier lives.
- The government must protect air, water, and food; minimize chemical exposures; and provide communities healthier environments.

3. We believe every community should be prepared to meet the threats of infectious disease, bioterrorism, and natural disasters.

- A basic role of government is to protect us and our health from threats like bioterrorism and infectious disease outbreaks, and to keep our food supply safe.

4. We believe Americans deserve to know what government is doing to keep them healthy and safe.

- The federal government's role is to ensure that the public health system has sufficient resources and meets basic standards for protecting the public's health. Government at all levels must also be held accountable for the health and safety of the American people. And, the government must show that it is spending public health dollars effectively and in ways that clearly improve the public's health and safety.

WE, THE UNDERSIGNED, ARE PROUD TO BE SIGNATORIES TO THIS VISION FOR A HEALTHIER AMERICA:

AARP • Active for Life • AIDS Action Council • Allergy & Asthma Network Mothers of Asthmatics • Alliance for Healthy Homes • America Walks • American Academy of Pediatrics • American Alliance for Health, Physical Education, Recreation and Dance • American Association for Homecare • American Association of Occupational Health Nurses, Inc. • American Cancer Society-Cancer Action Network • American College of Clinical Pharmacy • American College of Occupational and Environmental Medicine • American College of Preventive Medicine • American Diabetes Association • American Federation of State, County and Municipal Employees (AFSCME) • American Heart Association • American Institute for Medical and Biological Engineering • American Lung Association • American Nurses Association • American Osteopathic Association • American Optometric Association • American Pharmacists Association • American Public Health Association • American Red Cross • American School Health Association • American Tai Chi Association • Amputee Coalition of America • Association for Prevention Teaching and Research • Association for Professionals in Infection Control and Epidemiology • Association of Maternal and Child Health Programs • Association of Public Health Laboratories • ssociation of Schools of Public Health • Association of State and Territorial Directors of Nursing • Association of State and Territorial Health Officials • Association of State and Territorial Public Health Nutrition Directors • Association of Women's Health, Obstetric, and Neonatal Nurses • Autism Society of America • Bauman Family Foundation • Breast Cancer Fund • California Communities Against Toxics • The California Endowment • Campaign for Tobacco-Free Kids • Campaign to End Obesity • CDC Foundation • Center for Behavioral Epidemiology and Community Health, Graduate School of Public Health, San Diego State University • Center for Biosecurity, University of Pittsburgh Medical Center • The Center for Infectious Disease Research and Policy, University of Minnesota • Center for Science in the Public Interest • Childbirth Connection • CityMatCH • Clean Water Action • Commissioned Officers Association of the U.S. Public Health Service • Commonweal • Defeat Diabetes Foundation • Directors of Health Promotion and Education • Environmental Defense • Every Child By Two • FamilyCook Productions • Families Against Cancer & Toxics • Families in Search of Truth • The Federation of American Scientists • First Focus • Fit & Able Productions, Inc. • Florida Hospital Celebration Health • Georgia Public Health Association • Grantmakers In Health • Healthy Homes Collaborative • Hepatitis B Foundation • HIV Medicine Association • Home Safety Council • Immunization Action Coalition • Ingham County (MI) Health Department • Institute for Agriculture and Trade Policy • Institute for Children's Environmental Health • Institute of Food Technologists • International Health, Racquet, & Sportsclub Association • International SPA Association • International SPA Association Foundation • Leadership for Healthy Communities • League of American Bicyclists • Lose to Live Inc. • M+R Strategic Services • Marathon Kids • March of Dimes Foundation • Micah's Mission (Ministry to Improve Childhood & Adolescent Health) • My Brother's Keeper, Inc. • National Alliance of State and Territorial AIDS Directors • National Association for Public Health Statistics and Information Systems • National Association of Chronic Disease Directors • National Association of Community Health Centers • National Association of County and City Health Officials • National Association of Local Boards of Health • National Association of State EMS Officials • National Center for Bicycling & Walking • National Center for Healthy Housing • National Coalition for LGBT Health • National Coalition for Promoting Physical Activity • National Council on Aging • National Disease Clusters Alliance • The National Environmental Health Association • National Hispanic Medical Association • National Network of Public

Health Institutes • National Nursing Centers Consortium • National Nursing Network Organization • National Physicians Alliance • National Public Health Information Coalition • National Recreation and Park Association • National Research Center for Women & Families • National Tuberculosis Controllers Association • The National Urban League • National WIC Association • Nemours Health and Prevention Services • The New York Academy of Medicine • New York State Nutrition Council • Partners for a Healthy Nevada • Partnership for Prevention • Physicians for Social Responsibility • The Praxis Project/Path • Prevent Blindness America • Prevention Institute • Preventive Cardiovascular Nurses Association • Public Health Foundation • Research!America • Researchers Against Inactivity-Related Disorders • Robert Wood Johnson Foundation • Samuels & Associates • Safe Routes to School National Partnership • Shaping America's Health • Society for Adolescent Medicine • Society for Advancement of Violence and Injury Research • Society for Public Health Education • The South Carolina Eat Smart, Move More Coalition • Sporting Goods Manufacturers Association • The Sports Karma Foundation • Trust for America's Health* • Tulane Center for Applied Environmental Public Health • United States Water Fitness Association • University of Arkansas Fay W. Boozman College of Public Health • Vegetarian Resource Group • Washington Health Foundation • Women's Sports Foundation • YBH (Youth Becoming Healthy) Project, Inc. **The Healthier America Project is organized by the Trust for America's Health.*

Section 2

INFRASTRUCTURE RECOMMENDATIONS

SECTION 2

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SECTION 2

Infrastructure Recommendations

A. FUNDING PUBLIC HEALTH FOR A HEALTHIER AMERICA

Public health is chronically underfunded in the U.S. There is currently a shortfall of $20 billion per year in spending on public health, according to an analysis by The New York Academy of Medicine (NYAM) and Trust for America's Health (TFAH) conducted in consultation with a panel of experts.

The analysis found that federal, state, and local public health departments are unable to adequately carry out core functions at current funding levels, including:

- Monitoring the health of the public;
- Enforcing public health laws;
- Diagnosing and investigating health problems in the community;
- Mobilizing community partnerships;
- Developing policies that support individual and community health efforts;
- Linking people to needed health services;
- Assuring a competent public health and individual health care workforce;
- Evaluating effectiveness, accessibility, and quality of individual and population-based health services; and
- Researching new insights and innovative solutions to health problems.[2]

Current federal, state, and local public health spending is approximately $35 billion per year -- more than $120 per person.[3] The federal government provides nearly 60 percent of these funds, and state and local governments provide the other 40 percent. This spending represents approximately 1.78 percent of total National Health Expenditure Accounts (NHEA).[4]

Based on a review of prior analyses and consultation with the panel of 15 leading public health experts about the best ways to determine the public health funding shortfall, the researchers conducted two analyses:

1) A review of public health spending in other Organization for Economic Cooperation and Development (OECD) countries, which ranges from 1.1 percent to 6.1 percent of national health expenditures. If the U.S. spent near the average of these countries (three percent of NHEA), it would equal $59 billion, an increased investment of $24 billion annually;[5] and

2) A review of a detailed needs assessment in Washington State.[6] This study found that an estimated additional investment of $400 million dollars is needed yearly "to meet the [Washington State Public Health] standards 95 [percent] of the time throughout the state."[7] This would equate to an additional $64 per person per year or $18 billion per year nationally.

Federal, state, and local governments should:

- Increase public health funding to adequately support core functions. The country should spend a total of $55 to $60 billion annually (approximately $187 per person) on public health to adequately prevent disease and protect Americans from disease threats. TFAH estimates it would take four to five years for the public health system to absorb and grow to meet this level of increased investment and expansion of services. Based on the current funding model, the federal government should provide 60 percent of this increase -- an additional $12 billion annually -- and state and local governments should provide 40 percent of this increase -- $8 billion annually. (See Section 4 for federal health agency budgets.)

Potential Revenue Streams For the Increased Funds Could Include:

The following are a series of options for ways to finance an increased investment in public health. Either individually or cumulatively, the goal should be increasing federal spending for public health by $12 billion. Increases should be made over a period of years to build to this level of funding.

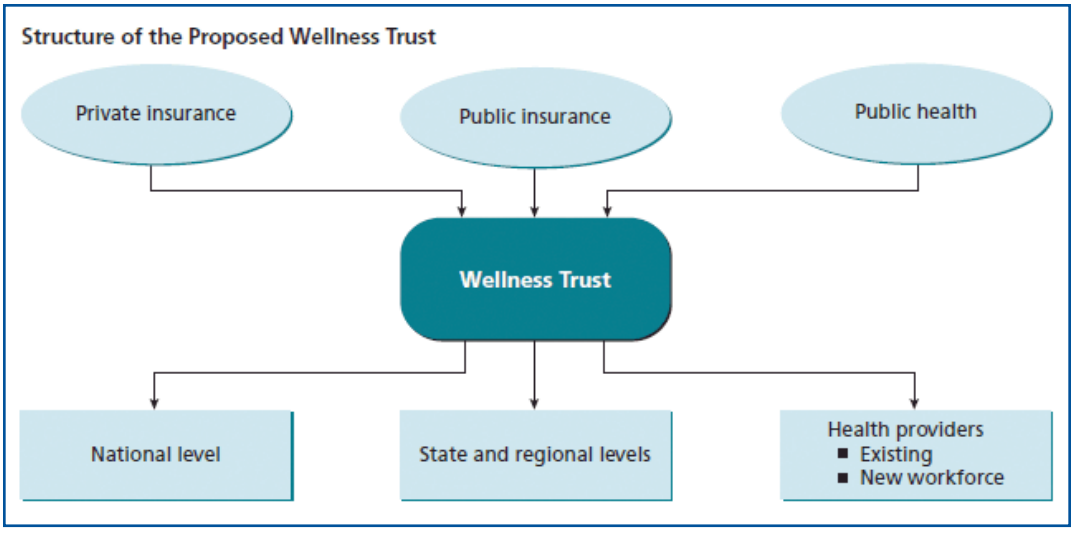
Over the past five years, federal funding for public health has not kept pace with inflation. $2.58 billion -- which is 21.5 percent of the $12 billion -- is needed just to restore key public health agencies to funding levels in 2005.

Existing Funding Streams and Public Health Programs: Federal Level

Create a guaranteed funding stream for prevention and public health activities by tapping Medicare, Medicaid, and private payers, as well as public health dollars.

- **Wellness Trust**

The Brookings Institution's Hamilton Project's proposal for a Wellness Trust is one potential model for establishing a revenue stream to support clinical and community-based prevention.[8, 9]



The Wellness Trust would ensure every American has access to a core set of proven preventive care services, including immunizations and clinical prevention, screenings, and health counseling. The set of services would be decided by a set of expert Trustees, based on the most effective and highest-impact types of prevention, such as breast cancer screenings, pneumonia vaccinations for seniors, and community walking programs. The Trust would then become the primary payer for these services for all Americans, and it would also have the authority to provide funding for infrastructure improvements.

The Wellness Trust would be governed by an independent entity, would be authorized to respond to Congress without review from the U.S.

Department of Health and Human Services (HHS), and would have independent rule-making authority It would be similar to the Boards of Trustees of the Social Security and Medicare Trust Funds, or the Federal Reserve. Support for the Wellness Trust would come from federally-funded health agencies and private insurers determining their spending and resulting savings from preventive services. The amount the federal government spends on priority prevention services would determine the budget authorization for the Wellness Trust. Funding would come from general revenue, in a process similar to how Medicare is funded, and would increase annually by the estimated projected growth in national health expenditures.

Medicare

By the time they are eligible, millions of Americans enter Medicare with conditions that could have been lessened or prevented. In the end, Medicare -- and taxpayers -- bears the cost burden of providing for people who could be significantly healthier or have their existing conditions much better managed.

Medicare has a direct interest in assuring a healthier aging population. If Americans are healthier when they reach the age of 65, it could save Medicare billions of dollars. An enhancement of preventive care services – for people both under and over the age of 65 – is long overdue, as this approach will ultimately save money and lead Americans down the road to longer, healthier lives. This would require a change in policy regarding the appropriate target of Medicare-funded initiatives, looking at funding efforts to improve the health of Americans before they reach the age of 65 as well as once they are Medicare-eligible. Two very different approaches could be taken:

- Tapping a percentage of Medicare spending and allocating those resources to fund public health programs. Medicare would more than likely recoup the investment in future savings.
- Creating a "prevention initiatives" demonstration pilot program with direct support from the Centers for Medicare and Medicaid Services (CMS). One example of how Congress could create a new structure is by creating a Healthy Living, Healthy Aging pilot program for pre-Medicare-eligible Americans to invest in proven community-based disease prevention programs to help prevent disease and promote better health for Americans under the age of 65, potentially focusing on individuals between 55 and 64 years old. This investment would show a return in savings for Medicare, since it would reduce the rates of disease and keep people healthier as they age. CMS should contract with eight or fewer state or local health departments to support community-based anti-smoking, physical activity, and nutrition initiatives that have demonstrated the capacity to prevent and/or modify chronic disease risk factors. Public health departments should conduct community screenings of the targeted population to assess healthy behaviors and measure blood pressure, cholesterol, blood sugar, and other chronic disease risk factors.

Medicaid

A similar rationale exists for Medicaid investment in certain communities. Medicaid programs could see a return on investment on community-level prevention initiatives that would reach beyond the Medicaid population. If preventive efforts can help stop some people from developing disabilities, this could also prevent these individuals from becoming Medicaid eligible, which would create additional cost savings. Policy changes would be needed to permit financing community-level prevention services under Medicaid, but this would ensure an increased investment by both the federal and state governments. Approaches similar to those outlined for Medicare should be considered:

- Tapping a percentage of federal Medicaid spending (with a required state match) would create substantial new resources for public health programs.
- Creating demonstration or pilot programs similar to the Medicare program above to help resolve issues of who is a Medicaid provider and how reimbursement can be handled.

- Setting up Medicaid Administrative Accounts. States currently use federal Medicaid matching funds to reimburse a portion of administrative costs. This reimbursement effectively underwrites many state and local health programs. Some of this matching amount could be designated to support prevention-related programs.

- **Existing Federal Public Health Programs**

Opportunities exist, through traditional funding mechanisms (e.g., discretionary spending or the Public Health Service (PHS) evaluation tap, which by statute can be no less than 0.2 percent and no more than one percent of the total PHS program budget) to increase support for core public health and preventive services.[10] As new mechanisms are developed, existing programs require additional funding. While choices need to be made based on priorities and effectiveness, a substantial investment is needed to make up for recent cuts in many federally-funded public health programs. Congress and the Executive Branch should commit to indexing future public health spending to increases in national health expenditures overall.

Supporting State Initiatives

The federal government can play a critical role in incentivizing states and localities to increase their investment in public health. The NYAM and TFAH analysis has shown that on average states and localities provide about 40 percent of revenues for public health programs.

- **Create a matching requirement for grantees receiving increased federal funding**

There is a wide variation in the level of investment by states and localities in public health. States and localities would be required to provide a match to receive new federal money, reflecting the 60 percent federal and 40 percent state-local investment that currently exist. The actual state match could be adjusted in a manner similar to the Medicaid program. States should be required to maintain existing investment (maintenance of effort or MOE) in exchange for increased federal resources. Some adjustments in the matching requirement could also be made for those states that are already spending higher levels so that the MOE does not serve as a disincentive for funding. As long as public health remains a shared federal-state-local responsibility, all players must step up to the plate and increase their level of investment.

- **State- or Community-Level Equivalent of the Wellness Trust**

The federal government could provide seed money for the formation of a public-private partnership agency at the state- or community-level modeled on a national Wellness Trust. It would create an infrastructure to receive voluntary and/or mandatory contributions to ensure coordination and make decisions about investments. Additionally, federal matching funds could serve as an incentive to states and localities to create such an entity.

Possible Options for New Revenue Streams

Surcharges on Health Care Funding Mechanisms

Private insurers, not just Medicare and Medicaid, benefit from public health spending. Mechanisms should be explored to ensure they contribute in some way to community-level public health interventions. A surcharge could be placed on employer-sponsored insurance (including Department of Defense health coverage and the Federal Employee Health Benefits Plan), which could be waived if insurers agree to a "prevention investment package," which could include:

- First-dollar coverage for all age-appropriate prevention services, recommended by the U.S. Preventive Services Taskforce, including immunizations and screening;
- Contributions (amount determined by insurer size) to local community-based prevention efforts (such as a local wellness trust);
- Employee wellness program (meeting best practices standards) offered free to all companies they insure and to their workers; and
- First-dollar coverage for maintenance drugs, such as high blood pressure medication.

Taxes That Can Help Influence Behavior

Certain taxes can be used to promote healthy behaviors while also providing revenue for public health programs. Options include:

- Soda and candy or snack taxes, which could reduce consumption of unhealthy foods and also make Americans healthier if the revenue from these taxes were earmarked for prevention. Yale University researchers estimate that a national tax of as little as one cent on soda, candy, and other snack foods could raise nearly $2 billion a year.[11] As one example, in May 2004, the University of Virginia Health System began adding warning labels to its vending machines and charging a five cent tax on the least healthy items. In one year, consumption of these snacks fell by five percent and $6,700 was raised, which was donated to a children's fitness program at the university.[12]
- Tobacco taxes, which have been shown to reduce smoking, and in many states, could be used to help to fund health programs.
- Federal alcohol taxes are at historically low levels and they are inconsistently levied on beer, wine, and liquor. Equalizing federal excise taxes could raise nearly $8 billion, increasing public health funding while at the same time reducing alcohol-related injuries, suicides, and unhealthy alcohol use.
- Food advertising profits tax, which annually is nearly $11 billion in spending on direct media advertising in the U.S. Nearly 70 percent of that amount is spent on convenience foods, candy snacks, alcoholic beverages, soft drinks, and desserts.[13] Profits media outlets make from these sales could be taxed.

METHODOLOGY FOR GENERATING THE ESTIMATE OF CURRENT INVESTMENT

The New York Academy of Medicine conducted an extensive review of the literature to identify previous methods for estimating government investment in public health. In September 2007 and January 2008, an expert panel was convened to provide input on the previous attempts and develop consensus on the approach for this project. The panel agreed none of the existing approaches was adequate and recommended that the new estimating methodology used for this project should be simple and should rely on existing sources of data.

The New York Academy of Medicine obtained local-, state-, and federal-level estimates of investment in public health and summed these to generate the current national public health investment estimate.

- **Estimates excluded investment by non-government agencies.** The estimates did not include tribal contributions. Since the analysis was primarily concerned with the role of government in public health, it did not include investment by non-government actors such as community organizations, foundations, or private firms. Investments made by these agencies are difficult to quantify and do not reflect government investment.
- **Estimates only examined health department budgets.** While the health of the public can be promoted through various agencies, such as departments of education, transportation, agriculture, and the environment, this project aims to determine the support provided to core public health functions typically carried out through local, state, and federal public health departments.
- **Estimates excluded funding of personal health care services to the extent possible.** At all levels of government, Medicaid-supported activities were considered as personal health care services. To the extent allowed by the data sources, these were excluded from the estimates. In some cases, health departments provide and fund direct, personal health care services, such as sexually transmitted disease treatment and prevention. The expenditures for these services were included in the analysis because they could not be disaggregated within health department budgets.

State and local health departments vary greatly in the services they offer and underwrite. Some, but not all, state and local health department budgets may reflect investment in primary care, mental health care, substance abuse prevention and treatment, and environmental health. However, the available data sources did not allow for the examination of program-level spending by state or local health departments or to determine the investment in a particular set of services.

Local Investment

Source: 2005 National Profile of Local Health Departments by the National Association of County and City Health Officials (NACCHO).[14] Local spending on public health is an estimated $3,974,222,981, or $15.19 on a per capita basis.

State Investment

Source: Shortchanging America's Health 2006, a TFAH report of publicly-available 2005 budget documents.[15] The state-level data provided by TFAH excluded federal support and Medicaid. The state expenditures were added together to generate a national total of state investment in public health ($9,656,746,136). The per capita state investment in public health totaled $33.14.[16]

Federal Investment

Sources: Fiscal year (FY) 2005 U.S. Department of Health and Human Services budget documents, including agencies most directly responsible for funding local and state health department infrastructure and programs (Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), Substance Abuse and Mental Health Services Administration (SAMHSA), and Federal Drug Administration (FDA), and the Indian Health Service (IHS) (excluding IHS clinical services).[17] The total was $21,567,000,000 ($22 billion) -- or $72.89 per person.

Individual states vary greatly in the share of public health funded by different levels of government. The national figures are a composite that is not representative of the federal, state, and local share in any one state.

B. FEDERAL HEALTH AGENCIES: RESTRUCTURING FOR A HEALTHIER AMERICA

The federal government is responsible for protecting the health of Americans. But the federal public health structure is broken and needs to be fixed.

Federal health agencies set national priorities and goals for the country's health, including reducing disease rates, and providing funding and other support to states and communities that carry out many programs and services directly aimed at improving health in the U.S.

The U.S. Department of Health and Human Services (HHS) has outlined top priority objectives aimed at reducing the main causes of death through a Healthy People initiative, which they revise every 10 years. Unfortunately, the country has failed to achieve nearly 70 percent of these goals.[18] And, 15 of these health targets, including diabetes and obesity rates, have gotten worse.[19] It is clear that the current structure, where HHS is expected to address health problems in isolation, is not working. A wide range of factors impact how healthy a person is. Improving the health of Americans will require thinking in a new way where government agencies work together.

Millions could be spared from needless suffering by increasing physical activity and good nutrition and reducing tobacco use and injuries. And, in addition to improving health, keeping Americans healthier is one of the most important ways the country could significantly reduce health care costs.

The country's health agenda has become so dominated by managing the high costs and treatment of health problems, that preventing disease and helping Americans stay healthier only receives a small fraction of attention and funding support. The way federal health agencies are currently structured and funded, they do not have the resources or jurisdiction necessary to reach our national objectives for improving health. In particular, the public health service is underfunded, understaffed, and often using out-of-date technologies to combat today's modern health threats.

FEDERAL GOVERNMENT PUBLIC HEALTH RESPONSIBILITIES[20]

In partnership with states and localities, the federal government has an obligation to:

- Ensure all levels of government have the capabilities to provide essential public health services;
- Act when health threats may span many states, regions, or the whole country;
- Act where the solutions may be beyond the jurisdiction of individual states;
- Act to assist the states when they do not have the expertise or resources to mount an effective response in a public health emergency such as a disaster, bioterrorism, or an emerging disease; and
- Facilitate the formulation of public health goals in collaboration with state and local governments and other relevant stakeholders.

Examples of Budgets for HHS Agencies

Agency	Fiscal Year 2008 Appropriations
Centers for Medicare and Medicaid Services	$608 billion
National Institutes of Health	$29.5 billion
U.S. Centers for Disease Control and Prevention	$9.2 billion
Substance Abuse and Mental Health Services Administration	$3.4 billion
Health Resources and Services Administration	$6.9 billion
U.S. Food and Drug Administration	$2.3 billion
Total U.S. Department of Health and Human Services	$731 billion

Source: Budget in Brief, Department of Health and Human Services, FY 2008.

Trust for America's Health (TFAH) consulted a wide, bipartisan range of current and former HHS and White House officials, state and local health officials, and other experts in public health policy to identify limitations with the current federal structure, and recommendations for changes. Major problems include:

- **Lack of clear, strong leadership;**
- **Insufficient focus on disease prevention, one of the most important ways to reduce health care costs;**
- **Understaffing; and**
- **Limited coordination within health agencies and poor coordination across agencies in the federal government.**

To improve leadership and coordination, and to place a stronger emphasis on disease prevention, TFAH assembled the following recommendations for the federal government. These recommendations represent a set of options that could be addressed together as a whole or individually.

CHANGES AT THE WHITE HOUSE

The President should publicly acknowledge that improving the health of Americans is a national priority and should:

- **Appoint a Secretary of HHS who has a strong understanding of public health as well as health care and will ensure that public health is central to the setting of departmental goals and objectives.**
- **Create a Public Health Taskforce within 90 days of taking office.** The Taskforce would provide recommendations for the structure of a new public health entity within 120 days of appointment to the President and Congress. Responsibilities for this new entity should include:
  - Setting national short- and long-term public health goals, with special emphasis on communities with the most significant health problems.
  - Providing policy, budget, and organizational recommendations to the President and Congress.
  - Assessing the current status of federal, state, and local public health capacity, identifying key weaknesses and gaps, and providing recommendations for strengthening capacity.
  - Creating strategies for improved coordination among federal, state, and local levels of government, and ensure that federal funds are used effectively by state and local recipients.
- **Issue an Executive Order that declares keeping America healthier as a national priority.** This Order should require fast-tracking policy changes and placing public health experts on the staffs of the White House Domestic Policy Council, National Economic Council, Homeland Security Council, and National Security Council, in addition to the expertise already housed in the Office of Management and Budget (OMB).
- **At OMB, it is important to retain the expertise and structure on budget, management, and regulatory matters so that health is considered in an integrated way and extends beyond health financing and the funding of biomedical research.**

THREE POTENTIAL MODELS FOR A NEW NATIONAL PUBLIC HEALTH LEADERSHIP

- **A National Public Health Board (NPHB) convened by the President to serve as an independent voice on the state of the nation's health.** A NPHB would bring needed oversight capacity to the sprawling public health system and would address the nation's most pressing health issues. Currently, such a body does not exist, and there is little coordination or leadership at the federal agency to drive public health practices throughout the country.
- **A Public Health Advisory Commission (PHAC) as an independent congressional agency to advise the U.S. Congress.** This new Commission would provide public health expertise to Members of Congress as well as oversight capacity to the broad public health system. This agency would be similar to the Medicare Payment Advisory Committee (MedPAC), which conducts wide-ranging analysis and offers recommendations to the Congress regarding the Medicare program.
- **A National Public Health Council (NPHC) created and convened by the Secretary of HHS.** The Council would convene state and local health commissioners and members of the federal government at regular forums on at least an annual basis. The Council would focus primarily on federal, state, and local interaction, and secondarily on federal issues.

CHANGES AT HHS

In an effort to strengthen prevention and public health at HHS, a number of actions should be taken. **The next Administration should:**

- **Elevate the current Assistant Secretary for Health position to be an Undersecretary for Health (USH).** This office should oversee a strategic approach to prevention, preparedness, and public health to increase coordination and accountability among agencies, including all Public Health Service agencies, the Assistant Secretary for Preparedness and Response, and the Centers for Medicare and Medicaid Services reporting to this official. The USH is not meant to disempower agencies or add another bureaucratic layer, but to help coordinate and provide leadership. Further, the USH and the Secretary would have integrated budget and policy analysis staff so as not to have two layers of review.
- **Appoint a strong, independent Surgeon General who would be given the authority and resources to strengthen the Public Health Service Commissioned Corps.**
  - ▲ The Surgeon General must be given the independence to speak directly to the public on matters of health, and be given the resources needed to ensure those messages are heard.
  - ▲ The Surgeon General oversees the Public Health Service Commissioned Corps, which must be reinvigorated by lifting the cap on the number of active members and creating more flexibility and provisions for backup service. Currently, the Corps is underfunded, understaffed, and often uses out-of-date technology.
  - ▲ The Surgeon General should also support the visibility of state and local health departments as critical parts of the public health system.
- **Clearly define public health emergency preparedness and response roles and responsibilities.** Many experts have called for more clarity around the roles and responsibilities of federal agencies involved in public health emergency preparedness, including the Departments of HHS, Homeland Security (DHS), Veterans Affairs (VA), and Defense (DOD), and in offices within HHS -- the Assistant Secretary for Preparedness and Response (ASPR), the Centers for Disease Control and Prevention (CDC), and the Health Resources and Services Administration (HRSA).

- **Under the current structure, ASPR functions as both a policy arm and an operating division.** As a policy office, it recommends and oversees policy for all HHS agencies and interacts with other cabinet agencies and the White House on preparedness issues. As an operating division, it manages some programs including hospital preparedness grants. Some officials have suggested that all preparedness grants should be managed by ASPR rather than CDC, even though CDC has traditionally functioned as an operating division and has expertise in managing grants. Roles must be clarified. With support from a new Undersecretary of Health, ASPR should focus on consistency in policy among programs, to ensure that all HHS agencies follow the policy guidance of ASPR. CDC should continue to be the main operating division for preparedness grants, to avoid adding more bureaucracy and confusion for state and local government grantees.

- **Foster collaboration between federal, state, and local officials.** This would help enable public health authorities to exchange expertise and experience, and help to increase state and local effectiveness, capacity for innovation, and adoption of national health priorities.

- **Establish a new public health research institute.** This institute could create and disseminate public health best practices and provide states and localities with the data they need to make decisions about implementing policies and programs. The institute would also help ensure greater accountability for the use of tax dollars.

- **Address workforce gaps and improve training and coordination throughout HHS.**
  - Make recruiting and retaining a new generation of public health professionals a high priority, in order to meet the impending shortage of public health workers.
  - Create a public health "boot camp" where all HHS employees can learn about public health programs, including explanation of state and local responsibilities.
  - Give federal public health employees opportunities to participate in leadership training programs.

STRENGTHENING THE PUBLIC HEALTH SERVICE COMMISSIONED CORPS

The Public Health Service Commissioned Corps is the nucleus of the federal government's public health workforce.

- The Corps is one of the nation's seven uniformed services. It consists of 11 categories of public health professionals, such as physicians, pharmacists, environmental health experts, nurses, veterinarians, and mental health professionals.
- There is a Congressionally-mandated cap of 2,800 "active" members for the Corps. There are an additional 3,200 reservists and another 3,000 inactive or retired members, who may also hold positions within the public health service, but they are not part of the "active" Corps.[21] Reservists are less likely to receive promotions and have less job protection during force reductions.
- Routinely, an estimated 25 percent of new Corps members transition into their positions after serving in the armed forces.[22] Former armed services members may lose their rank if they do not enter the Corps through an inter-service transfer. Because of the cap on Corps members, inter-service transfers have become rare.
- New hires to the Corps typically begin as reservists, and it often takes years to become an active service member because of the cap mentioned above.
- Active Corps members are deployed when public health emergencies occur, such as during Hurricanes Ike, Gustav, and Katrina, the Indian Ocean tsunami in 2004, and September 11 and the anthrax attacks in 2001.
- Two-thirds of the active duty Corps members are part of the Indian Health Service.
- Salaries for Corps members and reservists are paid by the agencies where they work; there is no direct or dedicated funding for the Corps.

PUBLIC HEALTH AT HHS

The federal agency with primary responsibility for public health activities is **HHS.** Within HHS, the **Public Health Service (PHS)** conducts various health functions including disease control, health regulation, research and direct provision of services. The PHS is an essential component of all federal efforts to promote health and prevent disease.[23] Eight agencies, currently reporting to the HHS Secretary, comprise the PHS:

- **Agency for Healthcare Research and Quality (AHRQ)**
- **Agency for Toxic Substances and Disease Registry (ATSDR)**
- **U.S. Centers for Disease Control and Prevention (CDC)**
- **U.S. Food and Drug Administration (FDA)**
- **Health Resources and Services Administration (HRSA)**
- **Indian Health Service (IHS)**
- **National Institutes of Health (NIH)**
- **Substance Abuse and Mental Health Services Administration (SAMHSA)**

The **Office of Public Health and Science (OPHS)** and the **Office of the Assistant Secretary for Preparedness and Response (ASPR)** are two other offices in HHS with important public health responsibilities. Both of these offices report to the **Assistant Secretary for Health (ASH).**

Public health is primarily federally-funded through two types of grants:

- **Categorical grants,** which provide funds for a specific purpose and restrict states' discretion and increase federal oversight, and
- **Block grants,** created in the early 1980s, to achieve greater flexibility in the use of funds, to use tax dollars more efficiently, and to provide more cost-effective services.

While the Centers for Medicare and Medicaid (CMS) is not part of the PHS, it does play an important role in keeping the public healthy through the preventive health services that are and are not covered by Medicare and Medicaid programs.

GOVERNMENT-WIDE CHANGES

- **The new Undersecretary of Health and the new public health experts at the White House should be charged with convening a sub-Cabinet Working Group across all federal agencies to encourage consideration of the health impact of all policies and programs.**
- **An Office of Health Policy should be created in all Cabinet departments.** These offices would evaluate the health impact of policies and programs within each department. Commissioned Corps Officers should staff such offices.
- **Health improvement reviews should also be conducted for all new domestic policies, with a goal of improving health and reducing health disparities.** Reviews are expressly not intended to increase barriers to public health initiatives.
- **The Office of Personnel Management (OPM) should also ensure that the federal government sets an example as an employer.** Worksite wellness programs and supportive preventive health insurance benefits should be made available to all federal employees.

PUBLIC HEALTH AT FEDERAL AGENCIES BEYOND HHS

In addition to HHS, numerous federal offices have some part in public health protection; over 50 agencies and departments are involved in some aspect of public health. This list provides examples of programs and policy areas that impact health in the various departments.

Department of Agriculture (USDA): Through departments such as the **Center for Nutrition Policy and Promotion,** the **Food Safety and Inspection Service,** the **Animal and Plant Health Inspection Service,** and the **Animal Research Service,** the USDA is involved in a range of health-related initiatives. These include ensuring the safety of meat, poultry, and egg products; tracking the impact of infectious diseases on U.S. livestock and poultry; promoting healthy food and nutrition initiatives, and overseeing practices to provide safe drinking water to rural America. USDA administers the **School Meal Program** and partners with HHS to determine the **Dietary Guidelines for Americans.**

Department of Defense (DOD): Administers major health care and prevention programs, runs BSL-4 lab, and funds research for various diseases through such divisions and initiatives as the **U.S. Army Medical Research Institute of Infectious Diseases,** the **Armed Services Blood Program Office,** and the **Global Emerging Infections Surveillance and Response System.**

Department of Education (ED): the **Office of Safe and Drug-Free Schools (OSDFS)** oversees physical education, mental health, drug education, and anti-violence campaigns designed to promote national student health and a safe school-going experience.

Department of Energy (DOE): the **Office of Environmental Management** ensures the safe handling of waste generated by energy production, tests soil, air, and water near energy sites, and supports epidemiological research on the health effects of radiation exposure.

Department of Homeland Security (DHS): Through divisions such as **Border and Transportation Security and Emergency Preparedness and Response,** works to prevent terrorist attacks and plan for effective response procedures to threats. Specific health-related initiatives focus on enforcing animal and plant embargoes and improving public health system's readiness against a bioterrorism attack.

Department of Justice (DOJ): Bureau of Alcohol, Tobacco, Firearms, and Explosives ((ATF), formerly housed in Treasury), oversees initiatives designed to protect the public from health risks posed by illegal distribution and sales of alcohol, tobacco, and firearms.

Department of Labor: Occupational Safety and Health Administration (OSHA) and the **Mine Safety and Health Administration (MSHA)** promote standards and regulations to protect the health and safety of workers in the U.S.

Department of Transportation (DOT): the **National Highway Traffic Safety Administration (NHTSA)** promotes vehicle safety and healthy behavior on U.S. highways through public health-related practices such as anti-drunk driving initiatives and seat belt laws.

Department of the Treasury (Treasury): Promotes the compliance of alcohol and tobacco product manufacturing, marketing and importation with federal laws, and oversees the collection and levying of related taxes through the **Alcohol and Tobacco Tax and Trade Bureau.**

Department of Veterans Affairs (VA): VA offers public health and medical services (including offering veterans health benefits), engages in collaborative medical and health research, and is on-call for mobilization duties in the advent of emergencies and disasters.

Environmental Protection Agency (EPA): Sets and enforces standards for air and water quality, pesticide use, waste and recycling, and chemical use and researches and partners with local and state agencies to assess environmental impact of disease.

Independent Establishments and Government Corporations

Consumer Product Safety Commission (CPSC): Oversees consumer product safety initiatives (looking after common health hazards such as toys, cribs, power tools, cigarette lighters, and household chemicals).

Federal Trade Commission (FTC): Enforces federal truth-in-advertising laws on claims for weight-loss advertising, foods, drugs, dietary supplements, and other products promising health benefits. Monitors unfair practices on deceptive claims for tobacco and alcohol advertising and reports to Congress on cigarette and smokeless tobacco labeling, advertising, and promotion.

Nuclear Regulatory Commission (NRC): Regulates usage of nuclear materials. Works in conjunction with environmental and public health professionals to plan for and respond to potential nuclear emergencies (such as Three Mile Island).

President's Commission on Physical Fitness: Advises the President through the Secretary of Health and Human Services about physical activity, fitness, and sports in America.

C. ACCOUNTABILITY FOR A HEALTHIER AMERICA

A strong public health system focused on the prevention of disease and injury is essential to protecting the health and safety of all Americans. But today, our public health system is not held as accountable as it should be for health outcomes, or for how taxpayers' public health dollars are spent.

Americans across the country deserve and should expect basic health protections. However, right now, fundamental public health services intended to protect our health and the funding of these programs often differ dramatically from state to state and among communities within states.

Currently, there is no systematic approach in the U.S. for ensuring minimum levels of health services for all Americans, or that government funding is being spent on public health programs in the most effective way. Establishing standards and accountability efforts have often been limited by lack of sufficient resources and other incentives to change existing systems.

Trust for America's Health (TFAH) convened a number of experts from government, academia, and public health organizations and asked them to make recommendations for improving accountability throughout the public health system. Their top recommendations are:

- Link accountability to measurable improvements in the health of communities;
- Create policies, incentives, and other mechanisms that will encourage accountability and continuous quality improvement (CQI); and
- Expand accreditation for public health systems to support accountability.

The following are a range of actions the federal government could take to improve accountability and support efforts to create a CQI mechanism to ensure that public health programs keep pace with the changing needs of communities. For accountability efforts to be successful, the federal government must provide strong leadership, state and local governments must be given adequate resources and be empowered to make changes, and officials must build on existing accountability and accreditation programs.

Recommendations for Improving Accountability

The federal government should:

- **Create a pilot program to give state and local health departments greater flexibility with the use of prevention and preparedness funds in exchange for more accountability for improving health in communities.** The U.S. Centers for Disease Control and Prevention (CDC) should establish a pilot program where state and local health departments would be allowed greater flexibility for how they use federal funds in exchange for greater accountability for improving health outcomes and measures in communities. This pilot program would allow a state or local health department to pool its current streams of federal prevention funding and receive additional funding to adopt and implement a locally-generated "prevention priority action plan" that incorporates performance measures tied to improved health outcomes. This program would reward, incentivize, and equip states and localities that are committed to accountability for improving health outcomes and could be applied more broadly to improve prevention initiatives for the entire public health system.
- **Create a funding stream to help state and local health departments pay for accountability capacity development.** Many state and local agencies cannot afford self-assessments, preparation for accreditation, and other CQI and accountability efforts. Through either a dedicated funding stream or a set-aside from existing grants, state and local health departments should receive federal financial support to improve their accountability, including use of grant

money to finance the work of the Public Health Accreditation Board (PHAB).

- **Create a public health research institute.** This institute should invest in best practices, generate data on health outcomes and workforce issues; address complex problems like social determinants of health, focus on prevention, and assist in the development of accountability measures. Such an institute should build on existing partnerships within the federal government, as well as consider efforts going on in state and local government and the private sector.

- **Encourage governors, mayors, and other locally elected officials to become more directly accountable.** Promoting the health of a community goes beyond just what health departments do. Even though much of the federal funding for health passes through health departments, it is important that elected officials commit to any accountability process, including engaging all relevant government agencies and signing Memorandums of Understanding outlining clear goals when receiving federal funds. Another approach could be to tie Medicaid and other federal health funding to state and local investment in prevention and to the participation of state and local agencies in accountability processes, such as the PHAB's accreditation program.

- **Establish national guidelines and measures for core public health functions and require that states and localities report the findings to the public and federal government.** In exchange for federal funding to support such functions, health departments should demonstrate that they have met minimum accountability standards. The guidelines should move beyond process to focus on quantitative objectives and outcomes to help ensure institutional capacity to meet core functions and high-priority services. The federal government would compile, analyze, and report on these measures to policymakers and the public on a regular basis.

CHALLENGES FOR BASING ACCOUNTABILITY ON IMPROVING HEALTH OUTCOMES

There are a number of challenges for establishing health outcome standards or measures, including:

- It can take a significant period of time before many interventions have a significant effect on health;
- There are not always evidence-based interventions with demonstrated links to change in health (for example, available data may only show an impact on behaviors that affect health); and
- Data collection and surveillance systems may not exist to measure the desired change in health.

Accountability efforts should strike an appropriate balance between intermediate process measures and longer term health outcome goals until both the research base and data points are available to shift primarily to an outcomes approach.

Logic models that set particular milestones can be established to measure intermediate goals. A two-way system of accountability should be created, where the federal government and state and local governments all share responsibility. The federal government as a grantor should work with state and local government grantees to determine mutually agreeable goals and work together to assess achievement. This process must also incorporate mechanisms for revising goals and measures based on progress and new scientific developments.

Current State Efforts to Foster Accountability and Quality Improvement

Many states have been implementing initiatives to foster accountability and quality improvement. The most successful examples of these efforts have been when local health departments have actively collaborated with state health departments in the design and implementation of state-wide programs.[24] Some state examples include:

- North Carolina, with strong local support, has made accreditation mandatory for local health departments.[25] As of July 2008, 40 (out of 85) local health agencies have been accredited.[26]
- In Washington, the legislature mandated the development of a "public health improvement plan" with a strong evaluation component that moves in the direction of linking performance assessment of local public health departments with health outcomes.[27]
- Illinois recently issued a State Health Improvement Plan that implements the legislature's mandate to build prevention and accountability into the state's health system.[28] It does this by identifying four specific health conditions: 1) alcohol, tobacco, and other drug use; 2) obesity; 3) physical activity; and 4) violence, of which reduction is central to prevention, and identifying specific interventions to reduce them.

Current Federal Efforts to Foster Accountability and Quality Improvement

CDC is working to support accountability and quality improvement in targeted areas. For example:

- The Racial and Ethnic Approaches to Community Health (REACH) program, which funds national and regional centers of excellence and community-level programs, promotes evidence-based approaches to reducing disparities in health outcomes among racial and ethnic groups.

Current Accreditation Efforts

With support from CDC and the Robert Wood Johnson Foundation, leaders of major national public health organizations formed the Public Health Accreditation Board (PHAB) in May 2007. The mission of the PHAB is to implement a voluntary national accreditation program for state and local health departments.[29] This program focuses on continuous quality improvement (CQI) in health departments and involves a neutral, external assessment of conformity with the standards required for accreditation in order to bolster "health department accountability to the public and policymakers."

The PHAB plans to issue proposed standards for accreditation in 2008.[30] Accreditation programs and accountability efforts should establish a balance between "intermediate" outcomes, such as the implementation of a specific preventive service or intervention for which solid data show a link to improved health outcomes, and actual health outcomes, such as Body Mass Index (BMI) measurement. Success in delivering "intermediate outcomes" can serve as a surrogate marker of effectiveness in achieving the ultimate health outcome and as a meaningful measure of improved performance and accountability for health departments. See www.phaboard.org for more details.

KEY ELEMENTS OF A NEW HEALTH OUTCOMES ACCOUNTABILITY PILOT PROGRAM

Eligibility, Selection, and Standards

- CDC, in consultation with states, would establish selection criteria to ensure participation by a diverse cross section of departments that would most likely benefit from participation in the program and contribute to lessons that could be applied elsewhere.
- On the basis of these criteria, CDC would select up to 10 state health departments to participate.
- CDC, in consultation with states and localities, would set standards for the implementation of the program, including guidance for states on their selection of outcome measures and design of evaluation plans.
- A Memorandum of Understanding between the Secretary of HHS and the state's governor would be signed in order to ensure the delivery of appropriate community-level prevention interventions and engage all aspects of state government.

Prevention Priority Action Plans

- Each state would develop a "prevention priority action plan" through an inclusive public process with review by CDC.
- With national prevention goals and priorities as a guide, the plans would outline the high-priority prevention goals of the state, strategies and programs for achieving them, and quantitative performance measures tied to health outcomes. These could include intermediate measures that the state and CDC agree are appropriate milestones toward achieving the desired health outcomes.
- Priority setting and selection of performance measures would draw on such sources as:
  - *The Healthy People 2010* or *2020* Leading Health Indicators and *Healthy People 2010* or *2020* goals and supporting evidence;[31]
  - State collected survey or administrative data on key health indicators;
  - The *Guide to Community Preventive Services*;[32]
  - The *Guide to Clinical Preventive Services*;[33] and
  - Other sources of information documenting the link between specific interventions and desired health outcomes.
- CDC would review the plans for technical sufficiency and compliance with federal criteria but defer to states and localities on priorities.
- The state health departments would implement their action plans over a three- year period, with annual reporting to CDC on progress and issues, which would include the opportunity for a mid-course correction without loss of funds, and a full evaluation upon completion.

Funding and Accountability

- CDC would provide funding support and other incentives for participation in the demonstration program by:
  - Making grants to support development of the Prevention Priority Action Plan;
  - Allowing states the flexibility to merge their existing federal funds for prevention-oriented programs, e.g., diabetes, nutrition, and/or cancer funds, into a single pool to fund state and local priorities in accordance with their own action plans;
  - Providing a significant increase over the state's current federal prevention funding;
  - Permitting a portion of grants to be used for funding infrastructure improvements needed to support implementation of approved plans; and
  - Funding the evaluation.
- At the conclusion of the three-year demonstration period, participating departments would work with an external partner, such as a local academic institution or research organization, to evaluate and report publicly on any change in health outcomes.
- Renewal of participation would depend on the department's development of credible plans for improving performance in areas in which prevention outcome goals have not been achieved.

Evaluation and Expansion

- At the close of the initial demonstration period, CDC, in consultation with states, would evaluate the overall results of the program, recommend modifications to improve its effectiveness, and develop a plan for expanding the program so that any qualifying state or locality could participate.

KEY ELEMENTS FOR EXPANDING ACCREDITATION TO SUPPORT ACCOUNTABILITY

- CDC would have lead responsibility within the federal government for supporting the PHAB accreditation program, though some of the incentives and support efforts might be implemented by other elements of HHS.
- CDC should establish a coordination mechanism for ongoing consultation and collaboration with the PHAB.
- CDC should develop incentives and provide support for states and localities to pursue accreditation. Examples of incentives and support include:
  - *Providing grants to states and localities to support their pursuit of accreditation.* Preparation for and pursuit of accreditation imposes costs on state and local health departments that can deter participation in a voluntary program. CDC should develop and implement a grant program to cover a share of these costs. Additionally, states and localities should be allowed to target a portion of existing funds and grant money to accreditation processes, for instance, funds from the Preventive Health and Health Services Block Grant should be able to be used for supporting accreditation processes.
  - *Easing CDC reporting requirements and other federally-imposed administrative burdens on departments that achieve accreditation.* Progress reports, audits, site visits, and similar requirements associated with federal funding impose substantial costs on state and local heath departments. Easing these requirements would provide a positive incentive and reward for achieving accreditation.
  - *Creating a two-tiered special infrastructure grant fund that would support filling gaps necessary to achieve accreditation and sustaining ongoing infrastructure necessary to support accreditation and CQI.* Accreditation is not a one-time event but rather an ongoing process aimed at continuous quality improvement. A two-tiered special infrastructure trust fund would provide a further incentive to pursue accreditation, support CQI, and reflect the fact that accredited agencies have a solid framework for making good use of federal dollars.
- CDC would require a significant increase in resources both to manage its federal leadership role on accreditation and to fund PHAB and health department activities directly related to achieving accreditation.
- The special infrastructure grant fund, which presumably would be implemented by CDC's National Center for Chronic Disease Prevention and Health Promotion in conjunction with the prevention block grant, would require its own dedicated resources.

D. WORKFORCE CRISIS FOR PUBLIC HEALTH: RECRUITING THE NEXT GENERATION OF PUBLIC HEALTH PROFESSIONALS

From first responders to scientists searching for cures to disease, our public health workforce is vital to protecting our nation's health. But our public health workforce is in crisis. There is a serious deficit of public health workers with the expertise needed to meet the depth and breadth of the responsibilities they are expected to carry out.

Public health professionals are responsible for keeping America healthy and preventing disease. In today's dangerous world, they also help keep our nation secure. Examples of their many responsibilities include:

- Preventing or containing potential infectious disease outbreaks such as pandemic flu, Methicillin-resistant *Staphylococcus aureus* (MRSA), and antibiotic-resistant bugs;
- Responding to natural disasters like Hurricanes Ike, Gustav, and Katrina to potential bioterrorism attacks;
- Reducing chronic diseases, including cancer, heart disease, type 2 diabetes, and Alzheimer's;
- Preventing disease threats to our food, air, and water; and
- Limiting accidents, injuries, and occupational hazards.

Workforce in Crisis

There is a shortage of public health workers -- and the problem is expected to get worse. As baby boomers retire, there is not a new generation of workers being trained to fill the void of expertly-trained public health workers our country needs. If the crisis is not addressed now, these vacancies leave the public at unnecessary risk for preventable health problems.

- The U.S. has an estimated 50,000 fewer public health workers than it did 20 years ago.[34]
- One-third of the public health workforce in states will be eligible to retire within five years,[35] and 20 percent of local health department workers will be eligible to retire within just two years.[36]
- Eleven percent of state public health positions are currently vacant,[37] and four out of five current public health workers have not had formal training for their specific job functions.[38]
- The Public Health Service Act, which includes provisions for training, recruitment, and retention of public health professionals, has not been reauthorized in 10 years and is outdated.

It's Time for Action

To ensure the health and safety of Americans, federal, state, and local governments must take action now to recruit, train, and retain the next generation of professionals in public health. Existing efforts to recruit and retain the public health workforce are insufficient. New policies and incentives must be created to make public service careers in public health an attractive professional path, especially for the emerging workforce and those changing careers.

The next Administration and Congress should:

- **Institute a grant and/or loan repayment program to college juniors and seniors and graduate students (in their final years of training) who commit to entering governmental public health.** Students would have to meet certain academic requirements, such as achieving a B average, to qualify for the program.
- **Provide federal matching funds to state and local governments to invest in recruitment, retention, training, and retraining for public health workers.**
- **Allow federal funding to support more public health education programs.** Currently, only the nation's 40 schools of public health can compete for certain CDC and other funding to support governmental public health professionals. Universities that offer master's programs in public health (outside the schools of public health) and other related master's programs should be allowed to compete for funding.
- **Strengthen the U.S. Public Health Service Commissioned Corps by increasing the number of active duty personnel, creating a "Ready Reserve," and establishing a dedicated funding stream for all Corps activities under the management and fiscal control of the Surgeon General.**
- **Task a new public health institute or an appropriate HHS office with collecting and disseminating best practices and providing information about career categories, skill sets, and workforce gaps.** An enumeration of the public health workforce is also needed to determine the current distribution of jobs to include trend lines, as well as wages, benefits, training, and pathways from which workers enter public health.
- **Create an interagency advisory panel to coordinate workforce development at all levels of government.** Such a panel would serve as a clearinghouse that would help link federal, state, and local public health workforce development; coordinate recruiting and training efforts; and provide technical assistance to expand the public health workforce. The panel should be replicated at the state level as well.

The federal government should partner with state and local governments to:

- **Establish a national public health retirement system for state and local workers.** Government salaries are often less competitive and do not have portable retirement benefits. This makes it difficult for public health workers to change jobs and advance their careers. A new system should be established that would allow public health professionals to buy into the Federal Employees Retirement System, the Public Health Service Commissioned Corps retirement program, or a new program created specifically for them, such as through an entity like TIAA-CREF.
- **Identify candidates for careers in public health at community colleges, vocational and technical education programs, One Stop Career Centers, and Job Corps Centers.**
- **Require public health representation on state, local, or regional workforce boards to help expand career recruitment in the public and private health sectors.**

SPECIAL CHALLENGES FOR EDUCATING AND TRAINING PUBLIC HEALTH PROFESSIONALS

Recruiting, training, and retaining the public health workforce are complicated because the types of needed public health expertise vary widely.

There is no one typical career path for "public health." The field encompasses a range of specialties and services. This means the educational track is not as clear cut as it is for many other professions.

The Institute of Medicine (IOM) points out that public health professionals "receive their education and training in a wide range of disciplines and in diverse academic settings, including schools of public health, medicine, nursing, dentistry, social work, allied health professions, pharmacy, law, public administration, veterinary medicine, engineering, environmental sciences, biology, microbiology, and journalism."[39]

Eighty percent of public health professionals have not received training in the area of their specific duties.[40]

There are 40 graduate schools of public health and an additional 70 institutions offer masters programs in public health. Increasingly, these schools are not educating students for the scope of available governmental public health positions. Only 20 percent of graduates who receive master's degrees from schools of public health go on to work in governmental public health.[41]

Currently, only the 40 graduate schools of public health are eligible for funding streams from the CDC, while the 70 public health masters programs and other graduate programs, such as public health nursing, are not eligible for these funds.

PUBLIC HEALTH SERVICE COMMISSIONED CORPS BACKGROUND

The Public Health Service Commissioned Corps is the backbone of the public health workforce for federal agencies. The Corps reports to the Surgeon General and consists of 11 categories of public health professionals, including physicians, environmental health experts, nurses, veterinarians, pharmacists, and mental health professionals.

There are concerns with the existing structure of the Corps that limit the effectiveness of the Corps and the attractiveness of the Corps as a career option:

- There is a Congressionally-mandated cap of 2,800 active duty members of the Corps, which has been in place since 1993.[42] There are 3,200 reservists, who fill many of the same positions as the active duty members, and 3,000 inactive or retired members that are not part of the "active" Corps.[43] Reservists are less likely to receive promotions and have less job protection during forced reductions.
- Routinely, an estimated 25 percent of new Corps members transitioned into their positions after serving in the armed forces.[44] Former armed services members may lose their rank if they do not enter the Corps through an inter-service transfer. Because of the cap on Corps members, inter-service transfers have become rare.
- New hires to the Corps typically begin as reservists, and it often takes years to become an active service member because of the cap mentioned above.
- Salaries for Corps members and reservists are paid by the federal agencies where they work; there is no direct or dedicated funding for the Corps.

(Note: Information about Commission Corps is also included on page 22.)

Establishing First Responder Teams

The President's Fiscal Year 2008 budget included a proposal for Health and Medical Response Teams (HAMR), but the program was not funded. The idea is to create special teams to organize, train, and equip public health personnel to improve the nation's capabilities for responding to health emergencies. When the teams were not responding to crises, they could be used to supplement state and local health departments that are facing severe ongoing workforce shortages. This would help provide an interim solution to the state and local workforce shortage crisis.

Creating a "Ready Reserve"

There are not sufficient numbers of public health professionals to respond during major health emergencies, and when Corps members are called away to respond to emergencies, it means their ongoing functions are often neglected. If a "Ready Reserve" program was created, retired members of the Corps could become reservists who could be deployed on short notice during emergencies, or could fill in at federal agencies when active members are needed during emergencies, to ensure ongoing functions are carried out. Reservists would be required to participate in an appropriate number of drills and training throughout the year. Members of the reserve could also help fill in to provide services for underserved communities where health problems are the greatest.

Recruiting Retirees to Train the Next Generation

In addition to other workforce shortages, a large number of current educators and academics focused on training health professionals are expected to retire in the near future. To help fill the gap, retired Corps members should be given incentives to move into faculty positions to help train the next generation of public health professionals. This could be modeled on similar efforts, like the "Troops to Teachers" program.

MODELS FOR CREATING A NEW ENTITY TO RESEARCH AND SUPPORT THE PUBLIC HEALTH FIELD

Currently, there is no agency or entity that studies and disseminates best practices and information about career categories, skill sets, and workforce gaps in public health. This should include examining public health functions and jobs throughout the federal government beyond health agencies, and public health functions within state and local governments.

Models for where this function could be created and housed could be within a new Public Health Research Institute or within the Office of the Surgeon General, an Undersecretary for Health, or other offices at HHS. All data should be collected in conjunction with the U.S. Department of Labor and Bureau of Labor Statistics.

SPOTLIGHT ON SPECIAL STRATEGIES FOR RECRUITING AND RETENTION

Area Health Education Centers and the Youth Health Service Corps

Area Health Education Centers (AHEC) are federally funded and link university health science centers with community health delivery systems to provide training sites for students, faculty, and practitioners. A few states, such as Connecticut, have used some of their AHEC funds to establish Youth Health Service Corps initiatives that train and place high school students as volunteers in community health agencies. The student volunteers, who may be enrolled in vocational and technical education, not only provide relief to the workforce shortage problem, but may also help develop a pipeline for future public health employees. Under the Youth Health Service Corps model, an AHEC may partner not only with health entities, but also programs such as Learn and Serve America, a part of the Corporation for National and Community Service.

Establishing Programs at Community Colleges and Vocational and Technical Programs

- Nearly 40 percent of community college attendees are first generation college students, and many are non-traditional students.[45]
- Tech Prep programs serve secondary and higher education institutions. They offer two-year associate programs, and two-year certificates.
- Job Corps is an education and vocational training program administered by the U.S. Department of Labor.

Building public health curricula and courses at community colleges and vocational and technical programs could provide new streams for recruiting and training a new generation of public health workers. Community colleges typically have greater flexibility in establishing new and tailored course offerings and could partner with public health departments to set up training to address the unique needs of the communities they serve. Vocational and technical education centers, and health focused career academies, should also create apprenticeships with health departments. These types of initiatives will help expand and diversify the public health workforce.

Career-Ladder Programs to Support Mid-Career Training

As employers, the federal, state, and local government health agencies should support and fund ongoing professional development training for public health workers. This will ensure that public health workers are prepared to handle the constantly changing public health needs in communities, skills are kept up-to-date, and opportunities are provided for career advancement.

PUBLIC HEALTH WORKFORCE OVERVIEW

There are approximately 3,000 federal, state, and local government health agencies in the U.S. These agencies often work closely with private sector health associations.

- The Public Health Service Commissioned Corps is the nucleus of the federal government's public health workforce.
- The main federal public health agencies include the U.S. Centers for Disease Control and Prevention (CDC), the Office of the Surgeon General, the Substance Abuse and Mental Health Services Administration (SAMHSA), the Health Resources and Services Administration (HRSA), and the Food and Drug Administration (FDA). There are public health functions in many other agencies ranging from the Bureau of Prisons to the Department of Homeland Security (DHS).
- There are more than 100,000 state public health employees, and approximately 160,000 local public health employees.[46, 47]
- Public health nurses constitute 25 percent of the public health workforce in states.[48]
- There are 2,800 veterinarians who are part of the government public health workforce. They work on food safety, emergency preparedness, detecting disease outbreaks, and controlling emerging new disease threats.[49] For instance, veterinarians were the first to identify West Nile Virus.

EXISTING EFFORTS TO RECRUIT AND RETAIN THE PUBLIC HEALTH WORKFORCE ARE INSUFFICIENT

- HRSA has a number of programs aimed at recruiting health professionals for underserved areas. Most of these focus on staff for Community Health Centers and other primary care settings.
- Some CDC programs may indirectly address workforce issues, such as Prevention Research Centers, the Centers for Health Preparedness Program, and bioterrorism preparedness funding, but workforce recruitment and retention is only a minor part of these efforts.
- The *2006 Pandemic and All Hazards Preparedness Act (PAPHA)* created a student loan repayment demonstration project at the U.S. Department of Health and Human Services (HHS) to encourage service in state public health departments, but the program has not been funded.
- The *Public Health Preparedness Workforce Development Act* was introduced by Senators Richard Durbin (D-IL) and Charles Hagel (R-NE) and Rep. Doris Matsui (D-CA) to establish public health workforce scholarships and loan repayment programs, specifically aimed at increasing the emergency public health workforce, but the legislation has not been passed by Congress.

E. INCORPORATING PUBLIC HEALTH AND PREVENTION INTO HEALTH CARE REFORM

America must provide quality, affordable health care to all. A strong public health system and public policies focused on prevention of disease and injury should be a cornerstone of a health reform plan.

As part of health care reform, the federal government and Congress should:

- **Provide universal, quality coverage and access to give all Americans the opportunity to be as healthy as they can be.** All individuals and families should have a high level of services that protect, promote, and preserve their health, regardless of who they are or where they live. Coverage alone is insufficient. A reformed system must also ensure access to care. Every American should have a "medical home" so they have access to coordinated care. State and local health departments often provide direct primary care and/or clinical preventive services to significant portions of the population, and therefore, need to have adequate funding streams if that role continues in a reformed system.

- **Invest in disease prevention to ensure that universal coverage is as cost-effective as possible.** A reformed health care system must invest in both clinical and community-based prevention.

  - The Partnership for Prevention has identified a series of clinical preventive measures that, if fully adopted by 90 percent of the population, could save 100,000 lives a year.

  - Trust for America's Health (TFAH), in collaboration with The New York Academy of Medicine, has identified a series of community level disease prevention programs for improving rates of physical activity, nutrition, and smoking cessation that could dramatically reduce the prevalence and/or severity of the most expensive chronic diseases in the U.S. today.

  - Based on an economic model developed by the Urban Institute, TFAH found that an investment of $10 per person per year in effective programs to improve physical activity, good nutrition, and prevent smoking could result in savings of more than $16 billion in health care costs annually within five years. This is a return of $5.60 for every $1 spent.

  - Many clinical preventive interventions require a strong community-level base to be effective. Community programs support the ability of individuals to follow medical advice and make healthy choices. For example, a doctor can encourage a person to be more physically active, including writing a prescription for a person to get more exercise. However, unless a person has access to a safe, accessible place to engage in activity, they will not be able to "fill" this prescription.

- **Ensure that any health care financing system that is developed includes stable and reliable funding for core public health functions and clinical and preventive services.** A strong public health system is necessary to help promote better health, monitor the health of the country, and protect people from health threats that are beyond individual control, including bioterrorism, food-borne illness, and natural disasters. The nation must adequately fund federal, state, and local public health departments and programs to be able to fulfill their responsibility of protecting the public's health, and, at the same time, public health needs a predictable, sustainable funding stream. Effective implementation of community-level prevention programs requires providing support to community organizations and coalitions that directly carry out this lifesaving work.

- **Invest in bolstering the workforce and modernizing information systems for both health care and public health needs; if the public health system is not adequately supported, it will undermine the successes of health care reform efforts.** The public health system is facing a critical workforce shortage. Bolstering the public health workforce must be included in efforts to fortify the nation's overall workforce of health professionals. Electronic health records (EHRs) contain invaluable information about the health of Americans. While individual privacy must be vigilantly protected, aggregate information about the health of communities would provide public health officials with unprecedented levels of information to investigate health threats, such as being able to look for patterns of disease and connecting this information to possible causes. Public health officials should have access to EHRs for community-based research purposes while individual privacy is protected.

- **Extend quality assurance to community-based prevention in addition to direct medical care.** Since community-based prevention programs are important to maintaining the health of Americans, every effort should be made to ensure we are investing in the most effective programs possible. Community-based efforts should include performance measures and independent assessments to be able to understand cost-effectiveness and impact on health to better inform where to best invest resources.

- **Ensure that a reformed health care system will be prepared to react to and mitigate the consequences of a public health emergency.** A reformed health care system must contribute to critical public health functions, such as:

  - Surveillance, including integrating into other electronic health systems the mechanisms that identify new or urgent crises;
  - Surge capacity by providing ongoing financial support for health facilities to build the capacity to manage a sudden increase in demand;
  - Appropriate reimbursement for preparedness and response so providers have the financial incentive and capacity to respond; and
  - Community resilience by supporting efforts to create stronger community ties between the reformed health care system and communities.

F. MEDICARE: IMPROVING PREVENTION TO HELP CONTAIN COSTS AND IMPROVE HEALTH

By the time they are eligible, millions of Americans enter Medicare with health conditions that could have been lessened or prevented. In the end, Medicare -- and taxpayers -- bear the cost burden of providing for people who could be significantly healthier or have their existing conditions much better managed.

By 2030, 20 percent of the U.S. population -- 71 million Americans -- will be 65 or older, and Medicare-eligible. Aging-related diseases are projected to increase the country's health care costs by 25 percent during this time period.[50] Eighty percent of America's seniors live with at least one chronic disease that could lead to premature death or disability.[51] An enhancement of preventive care services -- for people both under and over the age of 65 -- is overdue, as this approach will ultimately save money and lead Americans down the road to longer, healthier lives.

Pre-Medicare Prevention: Ensuring Healthy Beneficiaries

Many cases of chronic illness, particularly heart disease, stroke, diabetes, and some forms of cancer, could be avoided or delayed through physical activity, healthy nutrition, and avoiding tobacco use, and through early detections of cancer and other diseases, according to the U.S. Centers for Disease Control and Prevention (CDC).[52] However, most Americans age without the benefit of strong preventive health care or community-based programs that could help them stay healthy longer.

A recent report by Trust for America's Health (TFAH) found that if the country invested $10 per person per year in proven community-based prevention programs, Medicare could save $5.2 billion annually within five years and nearly $6 billion annually within 10 to 20 years.[53] Many clinical prevention services could also reduce Medicare spending. Improving disease screenings and immunizations, for example, could help people detect diseases early or avoid them altogether. This often makes treatment more effective or keeps problems from getting worse - all of which lead to health care cost savings. For instance, if all seniors were vaccinated for pneumonia, health care costs could be reduced by $1 billion per year.[54] Reducing adult smoking rates by one percent could result in more than 30,000 fewer heart attacks, 16,000 fewer strokes, and health care savings of more than $1.5 billion over five years.[55]

Our current health care system is set up in opposition to the goal of ensuring people reach the age of Medicare as healthy as they can be. Medicare has no legal authority to help ensure people stay as healthy as possible before they reach 65 years old. The federal government should set a national goal of helping Americans stay healthier throughout their lives -- not only for the savings that would result from ongoing preventive care -- but so that people live as well and independently as long as they can.

Medicare Prevention: Optimal Coverage

Seniors currently face significant gaps in coverage of preventive health care services under Medicare. Physical exams are limited in scope. Critical screenings and immunizations are either offered infrequently or seen as "optional" for select beneficiaries, while only a few of the preventive services covered are actually "recommended for the elderly population." A thorough expansion and restructuring of Medicare benefits by the Center for Medicare and Medicaid Services (CMS) will ensure improvements in both the span and quality of life of beneficiaries.

The federal government should consider potential options for increasing preventive services within Medicare, including:

- **Implement a National Health and Prevention Strategy focused on lowering disease rates.** This strategy should include every federal government agency and state and local governments, define clear roles and responsibilities, and work with private industry and community groups. Developing and implementing policies aimed at reducing obesity and tobacco use should be key objectives of the strategy.

- **Create a *Healthy Living, Healthy Aging* pilot program for pre-Medicare-eligible Americans.** A pilot program should be developed through Medicare to invest in proven community-based disease prevention programs to help prevent disease and promote better health for Americans under the age of 65, potentially focusing on individuals between 55 and 64 years old. This investment would show a return in savings for Medicare, since it would reduce the rates of disease and keep people healthier as they age. CMS should contract with eight or fewer state or local health departments to support community-based anti-smoking, physical activity and nutrition initiatives that have demonstrated the capacity to prevent or modify chronic disease risk factors. Public health departments should conduct community screenings of the targeted population to assess healthy behaviors and measure blood pressure, cholesterol, blood sugar, and other chronic disease risk factors.

- **Guarantee proven preventive health care services to all Americans through a Wellness Trust.** Medicare funding should also be used to support a Wellness Trust that will ensure every American has access to a core set of proven preventive care services, including immunizations and clinical prevention, screenings, and health counseling. The set of services would be decided by a set of experts based on the most effective and highest-impact types of preventive care, such as breast cancer screenings and pneumonia vaccinations for seniors.

- **Expand Medicare preventive care benefits.** It is important to provide seniors with strong preventive benefit care, so they can be as healthy and independent as long as possible. Currently Medicare prevention benefits are limited. Enrollees are offered a "Welcome to Medicare" preventive physical exam, which includes height and weight measures, a blood pressure screening, vision screening, an electrocardiogram, and suggestions for additional screenings and immunizations such as flu shots, mammograms, and diabetes or cancer screenings as necessary.[56] In addition, beneficiaries are eligible for a cardiovascular screening blood test once every five years and an additional diabetes screening to be done either once a year for all "at risk" beneficiaries or twice a year for those diagnosed with pre-diabetes.[57] Medicare also covers 12 other preventive services, only five of which are "recommended for the elderly population."[58] These services include pneumonia immunizations, hepatitis B immunizations, Pap smears, mammograms, flu immunizations, pelvic exams, bone density screenings, colon cancer screenings, diabetes self-management trainings, prostate cancer screenings, glaucoma screenings, and nutritional therapy for diabetes and people with end-state renal disease. Expanding coverage requires an act of Congress.[59] Congress should authorize CMS to expand Medicare preventive benefits based on the recommendations of the U.S. Preventive Services Task Force.

G. BEHAVIORAL HEALTH: A NECESSARY COMPONENT OF A HEALTHIER AMERICA

The World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."[60] Behavioral health is often considered separately from medical or physical health and is not widely considered a major public health concern.[61]

Trust for America's Health (TFAH) consulted a range of behavioral health experts, including members of the Whole Health Campaign, a collaboration of more than 94 organizations dedicated to ensuring both mind and body are included in the health care debate, to outline policy recommendations to develop better federal policies to address mental health and substance use issues.[62] The recommendations should be viewed as essential components of the recommendations in the sections of the *Blueprint for a Healthier America* that address funding, federal structure, accountability, and workforce.

ACCORDING TO THE WHOLE HEALTH CAMPAIGN:

- More than 84 million Americans are affected by a mental health problems or addictive disorder;
- Mental health problems and addictive disorders are the leading cause of combined death and disability for women and the second-leading cause for all men;
- Mental health problems and addictive disorders annually cost the U.S. $171 billion in lost productivity;
- More than 33,000 Americans die by suicide each year and more than 90 percent have a mental health problem or addictive disorder;
- Mental health problem and addictive disorders account for the third highest loss of workplace productivity among chronic diseases;
- More than half of all prison and jail inmates have a mental health problem or addictive disorder;
- Fifty percent of students with mental problems or additive disorders drop out of school, the highest rate of any disability group; and
- Americans with serious mental illnesses die -- on average -- 25 years earlier than the general population, mainly due to untreated health conditions.[63]

Federal Structure

- Behavioral health experts should be represented on any independent public health taskforce or commission that focuses on public health, prevention, and early intervention. Behavioral health experts should also be represented within the staff focusing on public health issues in the White House, including within the Domestic Policy Council.
- Behavioral health expertise and issues should be integrated into the Office of Management and Budget (OMB) and considered as an integral part of all health-related policy, budgetary, and regulatory decisions.
- Leadership is critical to successfully partnering behavioral and physical health. In organizing its new leadership, the U.S. Department of Health and Human Services (HHS) should develop and implement a coordinated effort between behavioral and physical health. This effort should occur across all federal agencies that have an interest in health.
- Worksite wellness programs for federal employees and their families should include behavioral health awareness, including screening for tobacco use, mental health problems, and alcohol use, as well as confidential counseling for people who have these conditions.

Workforce

- All public health professionals should be trained to screen and identify mental health problems and addictive disorders.
- Academic, as well as continuing, education settings should cross-train on both physical and behavioral health.

Accountability

- National measures must be developed to determine how well community-level preventions and interventions and other government programs are working to improve behavioral health. Once these measures are determined, officials should be held accountable for meeting goals and creating mechanisms for improvements if goals are not met. For example, if a new public health research institute is created, behavioral health must be one of the key areas considered.

Funding

- Federal alcohol taxes should be considered as a potential source of revenue for funding public health programs. These taxes are historically low and are different for beer, wine, and liquor. Equalizing federal excise taxes could raise nearly $8 billion, increasing public health funding while at the same time reducing alcohol-related injuries, suicides, and unhealthy alcohol use. (See Section 2A of the *Blueprint for a Healthier America* for more options for funding public health.)
- A number of experts have recommended the creation of a Wellness Trust to cover key clinical and community-based prevention and intervention services for all Americans. Community-level behavioral health interventions should be included and covered by the Wellness Trust. (See Section 2A for additional details.)

Section 3

TRUST FOR AMERICA'S HEALTH INITIATIVE RECOMMENDATIONS

SECTION 3

Trust for America's Health

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SECTION 3

Trust For Americas Health Initiative Recommendations

A. *PREVENTION FOR A HEALTHIER AMERICA:* Investments in Disease Prevention Yield Significant Savings, Stronger Communities -- Recommendation for a National Health and Prevention Strategy

The nation's economic future demands we find ways to reduce health care costs. Preventing sickness is one of the most important ways we can accomplish this goal. Not only could we save money, but also many more Americans would have the opportunity to live healthier lives.

Physical activity, nutrition, and smoking are three of the most important areas to target to improve health. A number of community-based programs have shown they can lead to increased physical activity, good nutrition, and smoking prevention, which generates significant returns both for health and financial savings. There is a wide range of other disease prevention efforts that target these and other health problems and have a beneficial impact on the health of Americans.

A National Health and Prevention Strategy and a sustained investment in disease prevention programs could help the country realize significant savings. However, we need to make the investment to see the returns.

Trust for America's Health (TFAH) issued a report in July 2008 that found that a small strategic investment in disease prevention could result in significant savings in U.S. health care costs.

The report concludes that an investment of $10 per person per year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than $16 billion annually within five years. This is a return of $5.60 for every $1.

Out of the $16 billion, Medicare could save more than $5 billion, Medicaid could save more than $1.9 billion, and private payers could save more than $9 billion.

The report focused on disease prevention programs that do not require medical care and target communities or at-risk segments of communities. Examples of these programs include providing increased access to affordable nutritious foods, increasing sidewalks and parks in communities, and raising tobacco tax rates.

Estimates for Return on Investment (ROI) for One-Two Years, Five Years, and 10-20 Years

The economic findings are based on a model developed by researchers at the Urban Institute and a review of evidence-based studies conducted by The New York Academy of Medicine. The researchers found that many effective community-based programs cost less than $10 per person, and that these prevention programs have delivered results in lowering rates of diseases related to lack of physical activity, poor nutrition, and tobacco use. The evidence shows that implementing these programs in communities reduce rates of type 2 diabetes and high blood pressure by five percent within two years; reduce heart disease, kidney disease, and stroke by five percent within five years; and reduce some forms of cancer, arthritis, and chronic obstructive pulmonary disease by 2.5 percent within 10 to 20 years.

With an investment of $10 per person per year in proven community-based disease prevention programs, the nation could yield a net savings of:

- More than $2.8 billion in one-two years, a return of $0.96, which means the country could recoup nearly $1 over and above the cost of the program for every $1 invested;
- More than $16 billion within five years, an ROI of $5.60 for every $1; and
- More than $18 billion within 10-20 years, an ROI of $6.20 for every $1.

NATIONAL RETURN ON INVESTMENT OF $10 PER PERSON (Net Savings in 2004 dollars)

	1-2 Years	5 Years	10-20 Years
U.S. Total	$2,848,000,000	$16,543,000,000	$18,451,000,000
ROI	0.96:1	5.6:1	6.2:1

Note: When ROI equals 0, the cost of the program pays for itself. When ROI is greater than 0, then the program is producing savings that exceed the cost of the program.

Savings for Payers

In addition to total dollars saved, the study looked at how this investment could benefit different health care payers.

Net Savings By Medicare, Medicaid, And Private Insurers For An Investment Of $10 Per Person

	1-2 Years	5 Years	10-20 Years
Medicare, U.S. Total	$487,000,000	$5,213,000,000	$5,971,000,000
Medicaid, U.S. Total	$370,000,000	$1,951,000,000	$2,195,000,000
Other payers and out-of-pocket, U.S. Total	$1,991,000,000	$9,380,000,000	$10,285,000,000

Conservative Estimates

The savings estimates in the report represent medical cost savings only and do not include the significant gains that could be achieved in worker productivity and enhanced quality of life. The researchers built the model to yield conservative estimates for savings, using low-end assumptions for the impact of programs on disease rates and high-end assumptions for the costs. The study is based on 2004 dollars.

The federal government should:

- **Develop a National Health and Prevention Strategy that articulates the vision of a healthier America:** The U.S. Secretary of Health and Human Services (HHS), on behalf of the President, should be charged with developing a strategy through a collaborative process. The strategy must:
  - **Incorporate increased prevention efforts into health care services and finance;**
  - **Strengthen collaboration among public agencies and the private sector; and**
  - **Ensure essential prevention services are delivered nationwide in accordance with minimum national standards.**

A NATIONAL HEALTH AND PREVENTION STRATEGY SHOULD INCLUDE AS CORE OPERATING PRINCIPLES:

- Efficient deployment of resources to prevent illness;
- Accountability for outcomes;
- Recognition that helping people be healthy requires addressing the entire social context, including geographic, economic, racial, and ethnic disparities; and
- Performance standards, outcome measures, and accreditation procedures for delivery of essential prevention services by federal, state, and local agencies.

A National Strategy to Combat Obesity should be a central component of a National Health and Prevention Strategy. (See Section 3B for more details on a National Strategy to Combat Obesity.)

GREENBERG QUINLAN ROSNER RESEARCH

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- **Investment in keeping people healthy and preventing disease is viewed as an effective measure for keeping health care costs down.** As the table below shows, 63 percent believe that investing in helping people prevent disease and stay healthy will save money on long-term health care costs, against just 32 percent who believe that this type of investment is not worth the cost.

- **Health issues have a real place in the debate.** Though it is unlikely major diseases and health problems like obesity trump the economy as a high priority for Americans, these health issues are certainly very real for many people. As demonstrated by the table below, nearly as many people (44 percent) believe that the U.S. needs to make an immediate investment in health issues as believe that while these health issues are important, the economy is a bigger concern (47 percent).

Investment in Health Issues Seen as Important Priorities

Respondents were asked "Now let me read you some short statements about health problems and safety issues in the United States. Please tell me which statement comes closer to your own view."

	1st Statement - 2nd Statement
Investing in helping people prevent disease and stay healthier now will save money on health care costs in the long run. Investing in helping people prevent disease and stay healthier now will not help, because it will cost too much and too many people will continue to make poor health decisions anyway.	63 - 32
Diseases and major health issues such as childhood obesity are big problems, and we need to invest more money now into preventing them. Diseases and major health issues present real problems for the country, but there are too many other priorities, such as education or the economy, that we need to invest in first.	44 - 47

Prevention is seen as a top reason to increase government funding for health issues. As seen in the table below, nearly three-quarters or more of the American public believe that statements centered on prevention are convincing reasons to invest more government funding into health issues.

Top Reasons to Increase Health Funding Center on Prevention

Respondents were asked "Please tell me whether this is a very convincing, somewhat convincing, a little convincing or not at all convincing reason to increase government funding for health issues, like researching and preventing major diseases and health problems."

	Very Convincing	Total Convincing
America's future depends upon the health of our children, yet our kids are becoming less healthy every day, falling behind the rest of the world, and could be the first generation to live shorter, less healthy lives than their parents. We are failing our children, and it is time to make their health our top priority.	45	74
There is a clear connection between people's living environment and their health -- we need to make sure our communities are clean, healthy, and safe. When we invest in improving the health of our communities, we improve the health of the people who live and work there.	43	78
Major diseases and health problems are driving health care costs through the roof and bankrupting American businesses. If we invest now in preventing disease and staying healthy, people will have fewer illnesses and their health care costs will be lower, and families and businesses will have to spend less on health insurance and medical care, which will save us all money in the long run.	39	73

Prevention-centric solutions to the problem are seen as useful. When given a list of 13 potential preventive measures to help combat America's obesity epidemic, at least 60 percent of the public viewed 11 of the measures as useful ideas. The top ideas for combating obesity centered on increasing physical activity and improving nutrition for children in schools. Tax incentives for staying healthy and expanded nutritional labeling in stores and restaurants also scored well.

B. *F AS IN FAT: HOW OBESITY POLICIES ARE FAILING IN AMERICA* -- RECOMMENDATIONS FOR A NATIONAL STRATEGY TO COMBAT OBESITY

Obesity is a public health crisis in America. America's future depends on the health of its citizens. The obesity epidemic has lowered productivity and put a major strain on the nation's health care system. More than one quarter of health care costs are now directly related to obesity and physical inactivity. In just the past two decades, adult obesity rates have climbed from 15 percent to 30 percent.[64] Today, two-thirds of adults are obese or overweight. Even more alarming is the number of children who are at risk. With approximately 23 million children overweight or obese, today's generation of young people may be the first in American history to lead sicker, shorter lives than their parents.

As part of a larger National Health and Prevention Strategy, Trust for America's Health (TFAH) recommends the country create a National Strategy to Combat Obesity -- a comprehensive, plan that involves governments at all levels, researchers, communities, faith-based organizations, schools, families and individuals, employers, insurers, the food and beverage industries, and agribusiness and farmers. The following are some of the major recommendations that the federal government should take for developing a National Strategy to Combat Obesity.

The Federal Government Must Lead and Work with Every Segment of Society

Individuals have the responsibility to eat properly and be physically active. But, government has an important role to play as well. It can remove the obstacles that make it hard for individuals to make healthy choices.

Many of the forces that have contributed to the obesity crisis are deeply ingrained in our culture. Nutritious foods often cost more, and the pressures of work and family leave little time for preparing healthy meals or exercise. With greater distances between home, work, school, and shopping areas Americans are eating out more frequently and relying more on prepared foods. Government has the responsibility to help individuals deal with the forces that are beyond their control. Government must lead, and work with every segment of society to develop solutions.

The next President should:

- **Make obesity a national health priority and work with Congress to put substantial resources behind a National Strategy to Combat Obesity;**
- **Convene a sub-Cabinet working group to develop a government-wide approach to addressing obesity;**
- **Establish a National Obesity Prevention Advisory Board made up of representatives from state and local government, health care, business, the food and beverage industry, education, civic and faith-based communities, farmers and researchers to consult with the sub-Cabinet working group; and**
- **Launch a nationwide public education campaign on obesity.**

Federal Agency Action

- **Each federal agency should review its existing programs, budgets, and new initiatives to examine the direct and indirect impact of these initiatives on obesity.** Policies and programs in nearly every federal agency have an impact on obesity, ranging from farm subsidies at the U.S. Department of Agriculture (USDA) to smart growth policies at the U.S. Department of Transportation (DOT), U.S. Department of Housing and Urban Development (HUD), U.S. Environmental Protection Agency (EPA), and U.S. Department of the Interior (DOI). Upon completing the review, each agency should propose ways it can help support a National Strategy to Combat Obesity.

The Federal Government and Schools

The USDA should issue revised school nutrition guidelines based on expected recommendations from the Institute of Medicine (IOM) to be implemented as soon as possible to ensure that schoolchildren consume foods recommended in the most recent Dietary Guidelines for Americans. The U.S. Department of Education should set national standards for physical education and physical activity in the schools.

The Federal Government and Business

The federal government should lead by example and provide comprehensive health care benefits for addressing obesity through the Federal Employee Health Benefits Program. Medicare, Medicaid, and the State Children's Health Insurance Program should set an example for private insurers by updating and increasing obesity-related coverage and reimbursement for preventive services such as nutrition counseling and physical activity programming. Government at every level should provide incentives to employers to offer workplace wellness and prevention programs to their employees.

The Federal Government and the Food and Beverage Industries

The federal government should encourage food, beverage, and confectionery companies to agree to continue and strengthen voluntary restrictions on the marketing and advertising of unhealthful foods to youth. The U.S. Department of Education and USDA should ban all marketing and advertising of unhealthy foods in schools. The relevant federal agencies should work with industry and retail outlets to support nutrition labeling and to ensure that packaged foods and meals reflect recommended portion sizes. The relevant federal agencies should also work with the restaurant industry to provide better and more readily accessible information about the nutritional content of menu items. If these voluntary measures do not go far enough, the federal government should pursue regulatory action.

The Federal Government and Agriculture

The Administration and Congress should reduce barriers to the domestic production of fruits and vegetables, such as government subsidies for corn, wheat, soybeans, rice, and cotton. USDA should support farmers markets, farm-to-school, urban gardens, and other programs that incentivize bringing fresh, locally grown food into communities; especially those that are underserved by major grocery stores. USDA should also reexamine its child nutrition programs and ensure that they encourage the consumption of healthy foods, including the recommended daily amount of fruits, vegetables, and whole grains. By setting higher nutritional standards, and expanding food assistance packages to include more produce (as was done with the Women Infants and Children (WIC) program), USDA can increase the demand for fresh fruits and vegetables.

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- **Obesity is a significant issue that is becoming increasingly important.** In fact, obesity is the only health or safety issue to have grown in importance since 2006.
- As the table below demonstrates, 63 percent now say that "diseases related to obesity" is a very important issue for government to focus on ("very important" means they rated it between eight and 10 on a scale from zero to 10, where 10 means the issue is extremely important for government to focus on). This represents a nine-point increase from 2006, when 54 percent rated such diseases as a very important issue on this scale.
- The perceived importance of all other health and safety issues has decreased over the past two years. For instance, 70 percent of people rated bioterrorism attacks a very important issue in 2006, compared to just 52 percent now. Similarly, the percent rating developing vaccines for pandemics as very important dropped from 66 percent in 2006 to 55 percent now.

Focus on Obesity Grows While Other Issues Become Lower Priorities

Respondents were asked: "Now, I am going to read you a number of health and safety issues facing our country today. For each, please tell me, on a scale of zero to 10, how important to you that issue is for government to focus on, with zero meaning it is not at all an important issue for government to focus on and 10 meaning it is an extremely important issue for government to focus on. You can use any number between zero and 10."

	2006	2008	Net Change
Decreasing diseases related to obesity like diabetes and heart disease	54	63	+9
Preparing for a biological terrorist attack, like anthrax or small pox	70	52	-18
Developing vaccines to prevent a worldwide flu pandemic, like bird flu	66	55	-11
Stopping the spread of infectious diseases, like HIV/AIDS	70	62	-8
Chemical terrorism, like dangerous chemicals being released into drinking water	74	70	-4
Preventing smoking among kids and protecting people from secondhand smoke	52	49	-3

- **Obesity and childhood obesity issues raise big concerns about the health of the country. Nearly half the country** (49 percent) says that the fact that 23 million kids in the U.S. are overweight and that childhood obesity rates have tripled causes them to feel very concerned about the health of the country (81 percent say it makes them at least somewhat concerned). Similarly, the fact that two-thirds of Americans are obese or overweight, which is a factor in more than 20 diseases, makes 43 percent of the country very concerned, and 78 percent at least somewhat concerned.
- In a focus group exercise, when asked to circle the health concern that is of greatest concern to them, nearly half of participants (48 percent) chose obesity, diseases related to obesity, lack of physical activity, or poor nutrition, significantly outpacing infectious diseases, aging, and smoking concerns.
- The focus group discussion on obesity centered largely on children and the increasing lack of exercise and poor nutrition among American kids. As one man in Georgia put it, "Obesity is a problem because look at the kids today. Instead of going out and play like we did, in my generation, they are in front of the TV or game things or watching more soap operas, MTV and VH1."
- **The public is most receptive to school-based solutions to the obesity crisis that center on kids.** Two specific proposals to fight the obesity epidemic stand out above others. Sixty-nine percent of respondents believe that removing junk food from schools and providing healthier school lunches is a very useful way to combat obesity, while 62 percent feel that expanding physical exercise in schools is a very useful idea. Giving people incentives to stay fit is the next-highest rated proposal, but falls a full 18 percentage points behind on this scale, at 44 percent very useful.

C. *READY OR NOT? PROTECTING THE PUBLIC'S HEALTH FROM DISEASES, DISASTERS, AND BIOTERRORISM* -- RECOMMENDATIONS FOR FIXING THE GAPS IN PUBLIC HEALTH EMERGENCY PREPAREDNESS

Seven years after September 11, 2001, and the anthrax attacks, and three years after Hurricane Katrina, major problems still remain in our readiness to respond to large-scale emergencies and natural disasters. The country is still insufficiently prepared to protect people from disease outbreaks, natural disasters, or acts of bioterrorism, leaving Americans unnecessarily vulnerable to these threats.

The following recommendations were developed through consultation with a range of experts in public health and infectious disease preparedness. Since 2003, Trust for America's Health (TFAH) has issued Ready or Not? Protecting the Public's Health from Diseases, Disasters, and Bioterrorism, to assess federal and state preparedness to respond to health emergencies, and provide recommendations for fixing gaps in our nation's preparedness.

Defining Public Health Preparedness Roles and Responsibilities

The next Administration must address how public health emergency preparedness and response can be better organized. Many experts have called for more clarity around the roles and responsibilities of federal agencies involved in public health emergency preparedness, including the Departments of Health and Human Services (HHS), Homeland Security (DHS), Veterans Affairs (VA), and Defense (DOD) -- and for offices within HHS, including the Assistant Secretary for Preparedness and Response (ASPR), the U.S. Centers for Disease Control and Prevention (CDC), and the Health Resources and Services Administration (HRSA).

The federal government should:

- **Ensure a broad understanding of health security issues within the Executive Office of the President.**
  - ▲ The next Administration should appoint a Deputy Assistant to the President for Health Security Affairs who can coordinate domestic and global security issues across the National Security Council, Homeland Security Council, Domestic Policy Council, and National Economic Council.
- **Harness the broad health response expertise of the various cabinet agencies.**
  - ▲ HHS is the lead cabinet agency for determining policy and planning for emergencies. There is broad consensus among experts that HHS should remain as the lead agency. However, other cabinet agencies have different types of expertise that are needed during emergencies. For example, the VA can manage large health systems and the VA and DOD can effectively and rapidly move people, equipment, and supplies. The White House Homeland Security Council should review Emergency Support Function-8 to determine whether any changes in protocol are needed, and if any new authorities are needed to permit larger contributions by VA and DOD during emergencies.
  - ▲ While HHS is considered the lead agency for public health response, some critical health functions operate out of the DHS Office of Health, such as the management of the surveillance system BioWatch, and related functions are separately managed by other HHS agencies, such as the CDC BioSense surveillance system. The White

House Homeland Security Council should review the health-related functions of DHS and establish a structure to make sure these systems are well-coordinated and housed in the most appropriate agencies.

- **Ensure appropriate division of labor within HHS.**

▲ Under the current structure, ASPR functions as both a policy arm and operating division. As a policy office, it recommends and oversees policy for all HHS agencies and interacts with other cabinet agencies and the White House on preparedness issues. As an operating division, it manages some programs including hospital preparedness grants. Some officials have suggested that all preparedness grants should be managed by ASPR rather than CDC, even though CDC has traditionally functioned as an operating division and has expertise in managing grants. Roles must be clarified. With support from a new Under Secretary of Health (USH), ASPR should focus on consistency in policy among programs, to ensure that all HHS agencies follow the policy guidance of ASPR. CDC should continue to be the main operating division for preparedness grants, to avoid adding more bureaucracy and confusion for state and local government grantees. (See Section 2B on Federal Structure for more on the creation of an Under Secretary of Health.)

Additional priority public health preparedness recommendations include to:

- **Restore full funding for preparedness.** At a minimum, state and local public health emergency preparedness capabilities should be restored to the Fiscal Year 2005 level of $919 million, and hospital preparedness programs to the Fiscal Year 2004 level of $515 million.

- **Ensure that emergency preparedness is part of the health reform debate.**

▲ The health care system has a crucial role to play in emergency response. Currently, preparedness is encouraged through a separate grants program that has received ever-declining levels of funding. Insufficient funds have been provided to build the capacity of hospitals, in particular, to prepare, and no funding streams have been established to ensure reimbursement for services during a response. Any health care reform proposal should ensure that reimbursement rates include resources for health care providers to create and maintain their emergency response capacity, including capital expenditures.

▲ A stand-by temporary emergency health benefit for individuals who are uninsured or otherwise qualified should be created to guarantee coverage of emergency treatment for victims affected by a major public health disaster, regardless of their health insurance status or ability to pay. It would also ensure people with ongoing serious health problems receive the "continuity of care" they need to protect their health and safety and put into place a framework to ensure hospitals are reimbursed for uncompensated care. The Secretary would declare a public health emergency and decide to activate the benefit. With appropriate funding from Congress, the benefit would last for 90 days or less, though the Secretary could extend it for an additional 90 days if needed.

- **Strengthen surge capacity in hospitals.** Surge capacity remains the largest threat to the nation's ability to respond to a major catastrophe. Recommendations for strengthening surge capacity include 1) regional coordination of healthcare facilities, including alternative care sites with public health and emergency management; 2) establishing and supporting alternative care sites; 3) enhancing communication systems; 4) designating a disaster coordinator in each hospital; and 5) building a strong surge workforce by recruiting, in advance, in order to ensure licensing and accreditation issues are resolved before an emergency occurs.

- **Establish clear preparedness standards for all states.** Preparedness varies from state to state and community to community. HHS has yet to establish clear benchmarks and objective standards for preparedness in states. The objectives should focus on outcome results from real-life drills and exercises. Current benchmarks are often process-oriented and are not clear predictors of how well a state will respond to an emergency.
- **Ensure liability protection for volunteers.** Volunteers and private entities have expressed reluctance to participate in response and recovery efforts for fear that their actions may make them liable. The federal government should issue a clear ruling on what liability protections are offered to volunteers under the Stafford Act; state Legislatures should adopt the Uniform Emergency Volunteer Health Practitioners Act; and they should also consider extending the Good Samaritan liability protections to those non-health care volunteers who provide emergency assistance.
- **Modernize technology and equipment.** Surveillance systems must be upgraded so that they meet national standards and are interoperable between jurisdictions and agencies to ensure rapid information sharing. Surveillance systems should be able to detect an infectious disease outbreak, and plans should ensure adequate laboratory surveillance of infectious diseases.
- **Ensure the Strategic National Stockpile has treatments for chronic and infectious threats.** The stockpile should include medications to guarantee that needed treatments are available for chronic conditions, like diabetes, as well as antiviral drugs to treat possible emerging infectious diseases.
- **Modernize risk communications.** Hospitals must develop communication systems that allow health care facilities, public health departments, and emergency responders to talk to each other and collectively manage a response.

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- **Natural disasters are nearly universally seen as inevitable.** A full 97 percent believes that a major natural disaster such as a hurricane, tornado, or earthquake is likely to occur in the United States within the next five to 10 years. Eighty-one percent feel that such an event is very likely to happen.
- **There is a level of uncertainty about how prepared the government is to handle a major natural disaster.** While people do not necessarily view the government as completely unprepared to handle a major natural disaster, neither do they express a very high level of confidence in the government's ability to respond effectively. Though nearly two-thirds say the government and public health system are prepared to handle a major natural disaster, only 15 percent believe these entities are very prepared to handle these types of events. Focus group research indicates that while there is praise for the response to recent wildfires, concerns about the response to Hurricane Katrina clearly still remain.
- **America's lack of preparedness for dealing with natural disasters causes concern.** Despite the sense that the government has responded more effectively to natural disasters that have occurred since Hurricane Katrina, the fact that many U.S. cities and communities still do not have the supplies and plans necessary to deal with these emergencies causes people a great deal of concern. Eighty-two percent say that this fact makes them concerned about the safety of the country, with 53 percent responding that it makes them very concerned.
- **Disaster preparedness is seen as an important role for government.** Sixty-one percent say that "preparing for major natural disasters" is a very important issue for government to focus on ("very important" means they rated it between eight and 10 on a scale from zero to 10, where 10 means the issue is extremely important for government to focus on). A full one-third of the country (33 percent) gave this issue a rating of 10.

D. *FIXING FOOD SAFETY: PROTECTING AMERICA'S FOOD SUPPLY FROM FARM -TO -FORK --* RECOMMENDATIONS FOR IMPROVING FOOD SAFETY

Approximately 76 million Americans -- one in four -- are sickened by food-borne disease each year. Of these, an estimated 325,000 are hospitalized and 5,000 die.[65] Medical costs and lost productivity due to food-borne illnesses are estimated to cost $44 billion annually.[66, 67] Major outbreaks can also contribute to significant economic losses in the agriculture and food retail industries.

Experts estimate that most food-borne illnesses could be prevented if the right measures were taken to improve the U.S. food safety system.

Trust for America's Health (TFAH) consulted a series of experts to outline problems and recommendations for fixing the food safety system in a 2008 report, *Fixing Food Safety: Protecting America's Food from Farm-to-Fork*. Major problems outlined in the report include:

- The U.S. food safety system has not been fundamentally modernized in more than 100 years;
- The bulk of federal food safety funds are spent on outdated practices of inspecting every poultry, beef, and pork carcass, even though changing threats and modern agriculture practices and technology make this an unproductive use of government resources;
- Inadequate resources are spent on fighting modern bacteria threats, such as trying to reduce *Salmonella* or dangerous strains of *E. coli;*
  - An estimated 85 percent of known food-borne illness outbreaks are associated with foods regulated by the U.S. Food and Drug Administration (FDA), but the agency receives less than half of the federal funding for food safety;
- In the past three years, the main food safety function at FDA has lost 20 percent of its science staff and 600 inspectors;
- Gaps in current inspection practices mean acts of agro-terrorism, such as contamination of wheat gluten or botulism, could go undetected until they are widespread;
- While 15 federal agencies are involved in food safety, the efforts are fragmented and no one agency has ultimate authority or responsibility for food safety;
  - For instance, the FDA regulates frozen pizza, but if the pizza is topped with two percent or more of cooked meat or poultry, then the Food Safety and Inspection Service (FSIS) at the U.S. Department of Agriculture (USDA) becomes the regulatory agency;
- Only one percent of imported foods are inspected. Approximately 60 percent of fresh fruits and vegetables and 75 percent of seafood consumed in the U.S. is imported; and
- States and localities are not required to meet uniform national standards for food safety.

To help fix the food safety system, the federal government should:

- **Promote farm-to-fork disease prevention practices.** Food safety priorities must shift from a system focused on outdated, limited end-product and processing plant inspections to a system where the emphasis is placed on preventing outbreaks and illnesses throughout the entire food production process and supply chain.
  - ▲ Preventive strategies, such as the Hazard Analysis and Critical Point Process (HACCP), should be at the center of food safety practices. Outdated practices, like those called for in the current FSIS inspection mandate, should be repealed.
  - ▲ Uniform performance standards and best practices should be defined and adopted, and should be enforceable, including establishment registration, records access, detention and recall authority, and civil penalty authority.
  - ▲ Food safety education programs should be mandatory for commercial food handlers and consumers.
- **Make the food safety system flexible enough to keep pace with modern threats.** Threats to the food supply change as industry practices and farming and processing technologies change. Government strategies for protecting and inspecting the food supply must be able to adapt quickly to these changes.
  - ▲ Ongoing research is needed to identify emerging threats and up-to-date ways to contain them.
  - ▲ Government food safety officials and food companies must be able to keep track of information about disease outbreaks in humans, plants, and animals and results of food inspections so they can quickly detect and contain problems.
- **Monitor foreign imports and international practices.** Food safety agencies must have clear statutory authority and receive the resources necessary to educate overseas regulators and food producers about U.S. food safety standards, require that food importers demonstrate that these standards are being met, and permit U.S. regulators to inspect foreign establishments as well as food at the port of entry. Food safety agencies should also be given the authority and funding to participate in international negotiations and discussions, such as the Codex Alimentarius Commission and the World Trade Organization. Trade agencies regularly take the lead in these discussions, but often lack the food safety mission, expertise, and credibility to effectively represent U.S. interests.
- **Strengthen FDA with increased funding and resources.** Funding for FDA's food program must grow substantially and statutory mandates should be updated to strengthen the agency's abilities to carry out preventive efforts and oversee food imports.
- **Create uniform standards and practices across federal, state, and local levels.** While the states play a critical food safety role, particularly at the retail level, the federal-state-local relationship is not well defined or financed. States and localities should be encouraged and incentivized to adopt and comply with the voluntary uniform standards and practices of the FDA's Food Code and the National Retail Food Regulatory Program.
- **Create a single food safety agency.** While immediate action should be taken to address concerns at FDA, in order to strategically address food safety concerns, make good use of federal resources, and have stronger national and international leadership, the goal over time should be to consolidate and align all federal food safety functions to increase effectiveness, responsibility, and accountability. This agency could then address the food supply as a whole and set priorities accordingly. It could oversee regulation and inspection, but must also have research and surveillance functions as part of its mandate. It should also be required to report on accomplishments, progress, and problems.

- The realigned agency should include: the USDA's Food Safety and Inspection Service (FSIS), FDA's Center for Food Safety and Applied Nutrition (CFSAN), the Center for Veterinary Medicine, the food portion of FDA's field resource, and the food safety aspects of the U.S. Environmental Protection Agency's pesticide program.
- The placement of the U.S. Centers for Disease Control and Prevention (CDC) foodborne disease surveillance program should be reviewed. It must be able to function in a way that not only monitors outbreaks and helps investigate preventive strategies but also provides accountability for how well U.S. food safety systems are working.

While many recommendations for addressing food safety are focused on government actions, the report finds that fixing the food safety system will require a collaborative effort by food producers, processors, distributors, retailers, and consumers, combined with strong leadership from the federal, state, and local government.

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- **A major outbreak of food-borne disease is seen as highly likely to occur.** Fed by a recent string of outbreaks, including *E. coli* in spinach in 2006 and salmonella in peppers just this year, 78 percent of the public believes that an outbreak of food-borne disease is likely to occur in the U.S. in the next five to 10 years, including 42 percent who believe it is very likely to happen.
- **The public views the protection of the nation's food supply as a primary government responsibility.** Sixty-five percent respond that "protecting food from diseases like salmonella and *E. coli*" is a very important issue for government to focus on ("very important" means they rated it between eight and 10 on a scale from zero to 10, where 10 means the issue is extremely important for government to focus on). More than two people out of five (43 percent) gave this issue a rating of 10.
- **Current sense of the safety of our food supply is shattered by the lack of regulation and inspection of food products coming into the country.** Seventy-one percent of people believe that the U.S. government is prepared to handle an outbreak of food-borne disease such as salmonella or *E. coli*. But, when presented with the fact that approximately 60 percent of fresh fruits and vegetables and 75 percent of seafood consumed in the U.S. are imported, yet only one percent of imported foods are inspected, this confidence in government regulation is called immediately into question. Nearly everyone (88 percent) says that this fact makes them concerned about the health of the country, with 69 percent responding that it makes them very concerned, more than any other issue tested in this research.

E. STAMPING OUT SMOKING -- RECOMMENDATIONS FOR POLICIES TO HELP PREVENT SMOKING AND OTHER TOBACCO USE

Tobacco use is the leading preventable cause of death in the U.S. Every year, smoking and secondhand smoke kill about 440,000 people in the U.S. by causing lung cancer, emphysema, heart disease, and other illnesses.[68] Exposure to second-hand smoke is responsible for approximately 38,000 of these deaths each year.[69] Worldwide, tobacco use causes nearly five million deaths per year.[70]

Nearly 21 percent of U.S. adults still smoke, as do 23 percent of U.S. high school students.[71] While significant reductions were achieved in the late 1990's and early 2000's, progress has stalled. The federal government, in partnership with state and local governments, can help reverse this trend. The death toll and devastating health consequences of tobacco use leads to billions of dollars in health care bills.

Health Consequences:

- Smoking harms nearly every organ of the body; causing many diseases and reducing the health of smokers in general.[72]
- Cancer is the second leading cause of death in the U.S.; more than 80 percent of lung cancer deaths and about 20 percent of all cancer deaths are caused by tobacco.[73]
- Smoking causes cancers of the bladder, oral cavity, pharynx, larynx, esophagus, cervix, kidney, lung, pancreas, and stomach, and causes acute myeloid leukemia.[74]
- Smoking causes coronary heart disease, the leading cause of death in the U. S. Smoking triples the risk of dying from heart disease among middle-aged men and women.[75]
- Cigarette smoking causes 80 to 90 percent of deaths from chronic obstructive lung disease.[76]

High Costs:

- Tobacco use costs the U.S. almost $100 billion annually in health care bills, imposing a hidden tax on every individual, family, and business. Productivity losses from premature death total another $97 billion.[77]
- People exposed to secondhand smoke run up an average $10 billion annually in health care costs.[78]

Alarming Trends:

- Every day in America, 4,000 kids try their first cigarette. Another 1,000 kids become daily smokers and one-third of them will die prematurely as a result.[79]
- Progress in reducing smoking has stalled among both youth and adults. In 2006, 20.8 percent of adults smoked cigarettes, about the same as the 20.9 percent in 2004 and 2005. Among high school students, smoking increased from 21.9 percent in 2003 to 23 percent in 2005. This increase followed a 40 percent decline in high school smoking between 1997, when rates peaked at 36.4 percent, and 2003.[80]
- Tobacco company marketing expenditures have skyrocketed since the 1998 state tobacco settlement. From 1998 to 2005, tobacco marketing expenditures nearly doubled from $6.9 billion to $13.4 billion, according to the Federal Trade Commission's most recent report on tobacco marketing.[81]

- Most states still fail to fund tobacco prevention programs at levels recommended by the CDC. In FY 2008, states will spend less than three percent of the $24.9 billion available to them from tobacco excise taxes and the 1998 Master Settlement Agreement (MSA) with the tobacco companies on tobacco prevention and cessation programs. Investing only 15 percent of these funds would allow every state tobacco control program to be funded at the level recommended by the U.S. Centers for Disease Control and Prevention (CDC).[82]

The President and Congress should:

- **Regulate tobacco products.** Congress should enact long-standing legislation to grant the U.S. Food and Drug Administration (FDA) regulatory authority over tobacco products. FDA should have the authority to crack down on tobacco marketing and sales to children, stop tobacco companies from misleading consumers, and require changes in tobacco products to make them less harmful and less addictive. Currently, FDA regulates food, drugs, cosmetics, and even dog food but does not regulate the products that kill more than 400,000 Americans every year.
- **Fund tobacco prevention initiatives.** Congress and the President should increase the amount the CDC receives in federal government funding for tobacco prevention.
- **Work with other nations to reduce global tobacco use and exposure.** The U.S. should help encourage other nations around the world to ratify and implement the new international tobacco control treaty, the Framework Convention on Tobacco Control, in order to reduce tobacco use and save lives.

State and Local Governments Should:

- **Expand proven tobacco control measures.** State and local leaders should implement proven measures to reduce tobacco use and protect everyone from the harms of secondhand smoke. These include tobacco taxes, comprehensive laws to make all workplaces and public places smoke-free, full funding of tobacco prevention and cessation programs, and access to proven smoking cessation methods, such as counseling and FDA-approved medications, for all tobacco users.

F. *SHORTCHANGING AMERICA'S HEALTH* -- UNDERSTANDING SOCIAL DETERMINANTS AND RECOMMENDATIONS FOR IMPROVING THE HEALTH OF ALL AMERICANS, NO MATTER WHERE THEY LIVE

Every American should have the opportunity to be as healthy as he or she can be. But now, health varies dramatically from state to state and community to community.

Access to good medical care is obviously one important factor that impacts how healthy a person is, but a number of other factors play a role in health beyond medical care.

In fact, many researchers have found that where you live, your income level, your socio-economic group, and behavior often impact your health more than either genetics or access to medical care.[83, 84, 85]

Researchers often call factors that are beyond an individual's control "social determinants" of health. It is not just about money, but it is often about the impact money has on the areas where you live and the opportunities you have. Environmental factors, ranging from whether a community has safe and accessible parks and recreation spaces to potential hazards like lead paint and toxic substances, have a major impact on how healthy people are.[86]

A recent report from the Robert Wood Johnson Foundation Commission to Build a Healthier America concluded that, "it may sound counterintuitive, but the best way to reduce America's medical bills and help families ... fight for good health may be to invest in schools, sidewalks, produce markets, preschool programs, parks, housing, and public transit."[87] The Commission report found that:

- College graduates can expect to live at least five years longer than individuals who have not finished high school;
- Poor adults are nearly five times as likely to be in poor or fair health than individuals with the highest incomes;
- Children in poor families are about seven times as likely to be in poor or fair health as children in the highest-income families;
- Nearly one in three adults has a chronic illness that limits their activity compared with fewer than one in 10 adults with the highest incomes; and
- Babies born to mothers who did not finish high school are nearly twice as likely to die before their first birthdays as babies born to college graduates.[88]

Since 2005, Trust for America's Health (TFAH) has reviewed key health statistics and funding levels for public health on a state-by-state level in its report, *Shortchanging America's Health: A State-By-State Look at How Federal Public Health Dollars Are Spent.* TFAH found that rates of disease and other health indicators vary widely from state-to-state and community-to-community.

Improving the health of all Americans, regardless of race, ethnicity, income, or where they live should be a top priority for the federal government. Because such a wide variety of factors influence health, policies in every agency of the federal government can have an impact on health, from transportation and housing to environmental protection and education.

The federal government should:

- **Provide increased leadership and understanding for how policies and programs throughout the government impact the health of Americans.** Section 2B of the *Blueprint for a Healthier America* provides a series of recommendations for restructuring federal health agencies to increase leadership, maximize efficiency and coordination, for building better interdepartmental collaboration at the federal level, and assessing policies and programs across government agencies to consider how they might impact the health of Americans. The federal government should provide leadership on the issue to state and local governments. At all levels of government, strategies and goals for improving determinants of health need to be articulated succinctly and clearly, and programs that affect social determinants -- from education to anti-poverty programs -- must recognize the role they play in health improvement.

- **Fully fund and promote policies that stress disease prevention.** The government should ensure policies and programs will help give Americans the environment and tools they need to live healthier lives, such as supporting safe and accessible recreation spaces, affordable nutritious foods, ways to prevent and avoid smoking and other tobacco use, clean air, water, and land, and safe communities where accidents and injuries can be better avoided. Key policy areas include: early childhood development; economic development initiatives in low-income communities; promoting good nutrition and physical activities in schools, childcare, and after-school programs; preventing smoking and other tobacco use; and strengthening support for low-income individuals to attend community college, vocational programs, and college.[89] Staff at the U.S. Department of Health and Human Services (HHS) should have training about prevention and social determinants of health.

- **Engage representatives from all types of communities in developing policies to improve health.** The views, concerns, and needs of community stakeholders, such as volunteer organizations, religious organizations, and schools and universities must be taken into account when developing policies if they are to be successful.

- **Create systems of accountability for improving the health of communities.** The government should ensure that policies are linked to accountability measures to establish clear responsibilities and mechanisms to determine where improvements need to be made, including measuring progress on social determinants as potential markers for improving health. For more recommendations, see Section 2C of the *Blueprint for a Healthier America.*

G. *HEALTHY WOMEN, HEALTHY BABIES --*
RECOMMENDATIONS FOR IMPROVING INFANT HEALTH

Improvements in maternal and infant health in the U.S. have stalled since 2000.[90] After 40 years of progress, infant mortality rates have not improved -- in fact, infant mortality rates in the U.S. rank 27th behind many other industrialized nations.[91]

Doctors fear that the health of America's babies may start to move in the wrong direction because the health of childbearing aged women is starting to get worse, and this is happening more rapidly among low-income women.

Traditionally, health services to improve birth outcomes have been focused on prenatal care during pregnancy and the time of birth. But, increasing evidence shows that how healthy a woman is even before she becomes pregnant has a great impact on the health of the baby and whether there is an increased risk for infant death or birth defects.

Approximately 62 million American women are of childbearing age.[92] By the age of 25, about half of all women in the U.S. give birth. By age 44, 85 percent of women give birth.[93]

The federal government should:

- **Make it a priority to find ways to improve the health of infants in the U.S. federal agencies should provide seed support to state and local governments to develop models to bring together existing programs to improve women's health and birth outcomes.** For instance, every effort should be made to coordinate relevant Medicaid, Title V Maternal and Child Health Block Grants, and Title X Family Planning programs, and allow these programs to pool resources to collectively address maternal and infant health.

Some states, including Illinois, are already trying this approach. The federal government must provide waivers to allow states to use their funds more efficiently.

ILLINOIS HEALTHY WOMEN: AN EXAMPLE OF A COORDINATED APPROACH

The Illinois Healthy Women initiative is a five-year demonstration project designed to improve the health of women and their future children, placing a focus on providing care to women throughout their childbearing years. The state has focused on expanding access to women's health care services, particularly by expanding Medicaid services to include coverage for adult preventive care and risk assessments, recommending content for annual preventive visits, and enhancing outreach to locate high-risk pregnant women.[94]

The strategy includes: identifying women at high risk and with chronic conditions; establishing medical homes for women; and providing care management. Illinois received a waiver under the State Children's Health Insurance Program (SCHIP) to operate a Family Care program, which provides health insurance to parents with incomes equal to or less than 90 percent of the Federal Poverty Level, and Illinois has used state funds to expand coverage to people within 133 percent of the Federal Poverty Level.

The federal government should also:

- **Ensure that federal programs maximize the health of women of childbearing age by supporting preconception care and expanding current or creating new programs that ensure equitable access to preconception care to all women, regardless of income, race, or ethnicity.**
- **Ensure all existing Medicaid options for prenatal care are fully implemented in every state,** including:
  - **Appropriate reimbursement levels;**
  - **Presumptive eligibility;**
  - **Improved treatment for psycho-social risks; and**
  - **Postpartum coverage.**
- **Enhance Medicaid to include coverage for:**
  - **Family planning;**
  - **Low-income adult women; and**
  - **24 months following a Medicaid-financed birth.**
- **Provide adequate funding for other programs that provide primary care to women of childbearing age, including:**
  - **The Healthy Start Infant Mortality Reduction Program;**
  - **Community Health Centers;**
  - **Title X Family Planning; and**
  - **The Title V Maternal and Child Health Block Grant.**
- **Increase funding for research on preconception health and health care, including providing more resources for:**
  - **The National Center on Birth Defects and Developmental Disabilities at the U.S. Centers for Disease Control and Prevention (CDC) and**
  - **The Eunice Kennedy Shriver National Institute of Child Health and Human Development of the National Institutes of Health.**


AMPICILLIN
Phenergan
COMPAZINE
B-12
SOLUCORTEF
TOBRADEX
TOBRADEX
INAPSINE
ZINACEF

Section 4

OVERVIEW OF FEDERAL PUBLIC HEALTH AGENCIES AND BUDGETS

Trust for America's Health

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SECTION 4

SECTION 4

Overview of Federal Public Health Agencies and Budgets

This section provides an overview of the federal government's public heath programs housed within the U.S. Department of Health and Human Services (HHS). It includes missions; organizational charts; brief descriptions of the major programs or activities managed by agency or office; and a brief funding history.

Information in the organizational charts reflects the current structure of each office, which may differ from the recommendations contained in other portions of the *Blueprint for a Healthier America*.

FUNDING SHORTFALLS

The funding histories reflect the agency's appropriations from fiscal year (FY) 2005 through FY 2008, and includes the partial-year funding provided in a FY 2009 Continuing Resolution, which runs through March 6, 2009, and then show what the funding level would be after adjusting for inflation. Inflation adjustments were calculated using the Bureau of Labor Statistics Consumer Price Index (CPI) Inflation Calculator.[95] With respect to the National Institutes of Health (NIH), inflation adjustments were calculated using the Bureau of Labor Statistics/NIH Biomedical Research and Development Price Index.[96]

The funding charts are intended to demonstrate cuts or increases to public health service programs over four full fiscal years, and the period from October 1, 2008 to March 6, 2009 (which is when the current Continuing Resolution is set to expire) in real dollars.

At the overall program level, some agencies may have experienced a marginal funding increase or a seemingly insignificant decrease in funding. In some cases this is deceptive because the dollar figures do not take into account the demand for increased services. For example, funding for the Ryan White HIV/AIDS program has marginally increased, but the funding has not kept up with inflation or the substantial increase in people needing services. Therefore, the program had seen a real cut of $158 million since FY 2005.

Similarly, funding for the Maternal and Child Health Block Grant has declined over the last four years, and when factoring in inflation, it experienced a real cut of $146 million, not withstanding the large number of women and children in need of additional services. Maternal and child health experts support a funding level of $850 million in FY 2009 in order to provide adequate service delivery.

In other cases, investments in national priorities, especially those related to emergency preparedness, may provide an inaccurate view of the overall agency budget. The U.S. Centers for Disease Control and Prevention (CDC) is one example. Investments in bioterrorism and pandemic influenza preparedness have significantly increased the

agency's overall funding level since September 11, 2001, (although the funds have significantly fluctuated year-to-year), yet many of CDC's core programs have been repeatedly cut. For example:

- In 2005, the Preventive Health and Health Services Block Grant (PHHSBG) was funded at $119 million. The PHHSBG is distributed to states, territories, and tribal governments to support key public health programs in communities. When that figure is adjusted for inflation, the block grant has seen a cut of $36 million over the last four years.
- In FY 2007, the Division of Nutrition, Physical Activity, and Obesity (DNPAO) gave grants to 28 states for state health departments to design, implement, evaluate, and disseminate effective mitigation interventions. In FY 2008, DNPAO cut the number of grantees from 28 to 23 states due to insufficient funding. It would cost $90 million to fund all the states at the level for which they applied.
- The Adolescent and School Health program provides grants to states to establish and run a statewide coordinated school health program that reduces chronic disease risk factors, including tobacco use, poor nutrition, and inadequate physical activity. At current funding levels, the program is only able to fund 22 states and one tribal government. An additional $20 million would be necessary to support all states that applied for the funding.
- HIV/AIDS programs at CDC focus on prevention, screening, and early detection of the virus. In FY 2008, these programs were funded at $1,002 million, a cut of $75 million since FY 2004 (with inflation). Recently the agency submitted a professional judgment budget to Congress that recommended an additional $877 million in FY 2009 and an additional $4.8 billion over five years.

Even CDC funding for all-hazards preparedness has experienced cuts. In FY 2005, funding for states and localities to improve bioterrorism preparedness was $919 million; in FY 2008, it was $767 million. When inflation is factored in, this represents a cut of $264 million.

PANDEMIC FLU

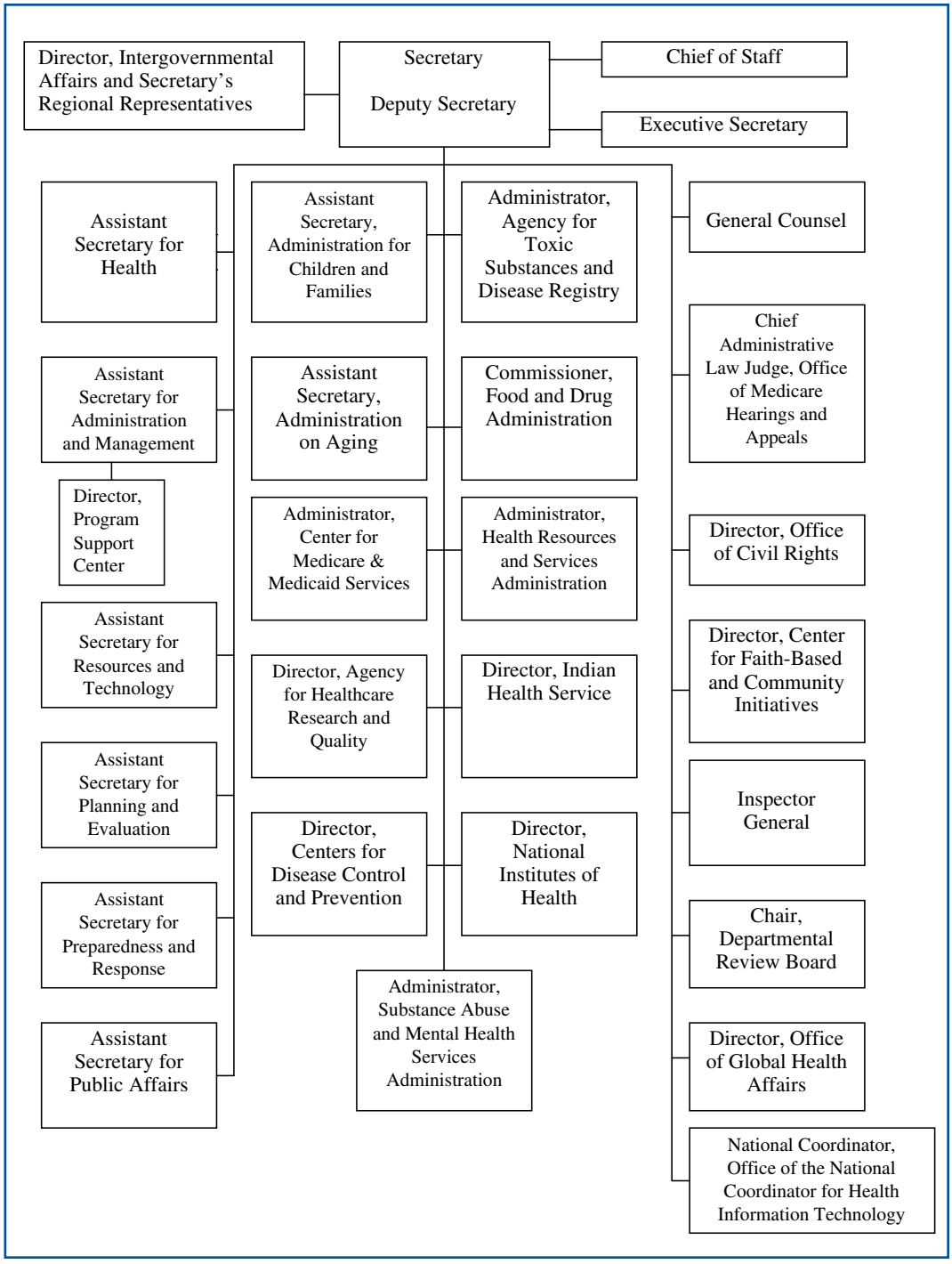
Preparedness for an outbreak of pandemic influenza has been a priority of the Bush Administration. Funding for pandemic flu programs has been spread across federal departments and agencies, although HHS has received the major share of pandemic appropriations.

In November 2005, President Bush requested $7.1 billion over three years for emergency funding for pandemic influenza preparedness. However portions of this request have not been fully funded. In FY 2006, Congress appropriated $5.6 billion in emergency funding to HHS. In FY 2007 and FY 2008, while Congress provided funding for recurring preparedness activities, it failed to provide the $870 million requested in FY 2008 for activities such as expanding vaccine production capacity, purchasing antivirals, and accelerating research and development of rapid diagnostic tests. All funding for state and local pandemic preparedness ($600 million appropriated in FY 2006) has been allocated, with no indication from the Administration or Congress that additional funds are forthcoming.

THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS)

HHS is the U.S. government's principal agency for protecting the health of all Americans and providing essential human services. The department is responsible for overseeing the U.S. Public Health Services Agencies.

HHS ORGANIZATIONAL CHART[97]

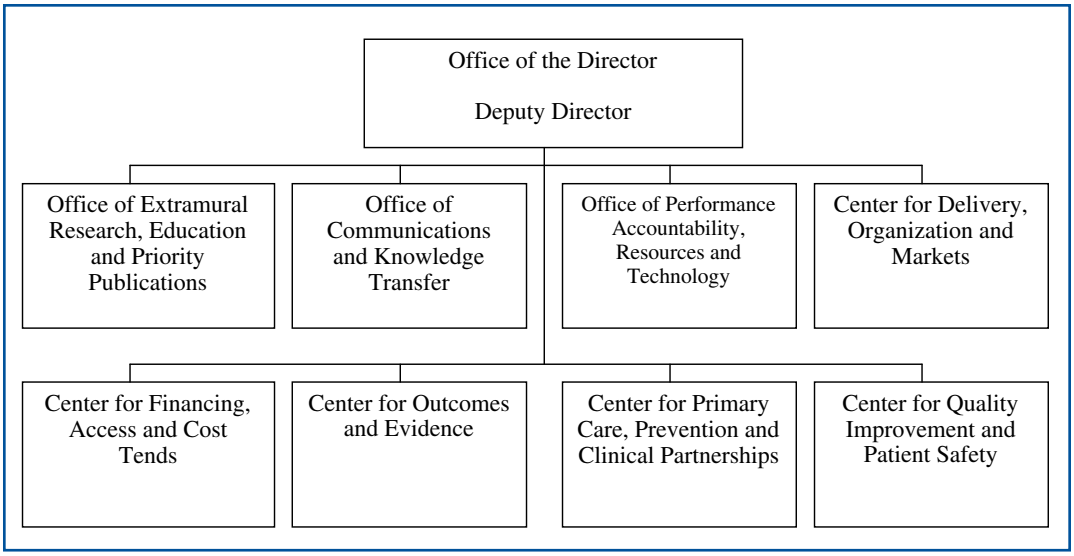


AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ)

MISSION

To improve the quality, safety, efficiency, and effectiveness of health care for all Americans.

AHRQ ORGANIZATIONAL CHART[98]



CENTERS AND MAJOR PROGRAMS

- *Center for Outcomes and Evidence.* This center supports research and assessment of health care practices and technologies.
- *Center for Primary Care, Prevention, and Clinical Partnerships.* This center expands the knowledge base for clinical providers and patients to translate knowledge of systems improvement into primary care practices.
- *Center for Delivery, Organization, and Markets.* This center provides expertise for advances in health care delivery.
- *Center for Financing, Access, and Cost Trends.* This center examines the cost of health care and access to services.
  - *Medical Expenditures Panel Survey (MEPS):* About $55 million of AHRQ's budget is spent on the Medical Expenditures Panel Survey. MEPS collects national estimates of health care use and expenditures and also develops data on cost and savings estimates of proposed policy changes.
- *Center for Quality Improvement and Patient Safety.* The purpose of this center is to improve quality and safety of health care system through research and evidence implementation.

AHRQ FUNDING HISTORY

AHRQ							
Major Program	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008 Enacted	FY 2009 CR	FY 05 Inflated to $08	FY 2009 CR+/- Inflated to $08
Total Program Level	$319	$319	$319	$335	$335	$358	($23)
Health Cost, Quality, and Outcomes Research	$261	$261	$261	$277	$277	$293	($16)
Patient Safety Research	$84	$84	$84	$79	$79	$94	($15)
Health Information Technology	$50	$50	$50	$45	$45	$56	($11)
General Patient Safety Research	$34	$34	$34	$34	$34	$38	($4)
Effective Healthcare Program	$15	$15	$15	$30	$30	$17	$13
Value-Driven Health Care	--	--	--	$4	$4		
Other Quality & Cost Effectiveness Research	$162	$162	$162	$164	$164	$182	($18)
Medical Expenditures Panel Surveys (MEPS)	$55	$55	$55	$55	$55	$62	($7)
Program Support	$3	$3	$3	$3	$3	$3	$0

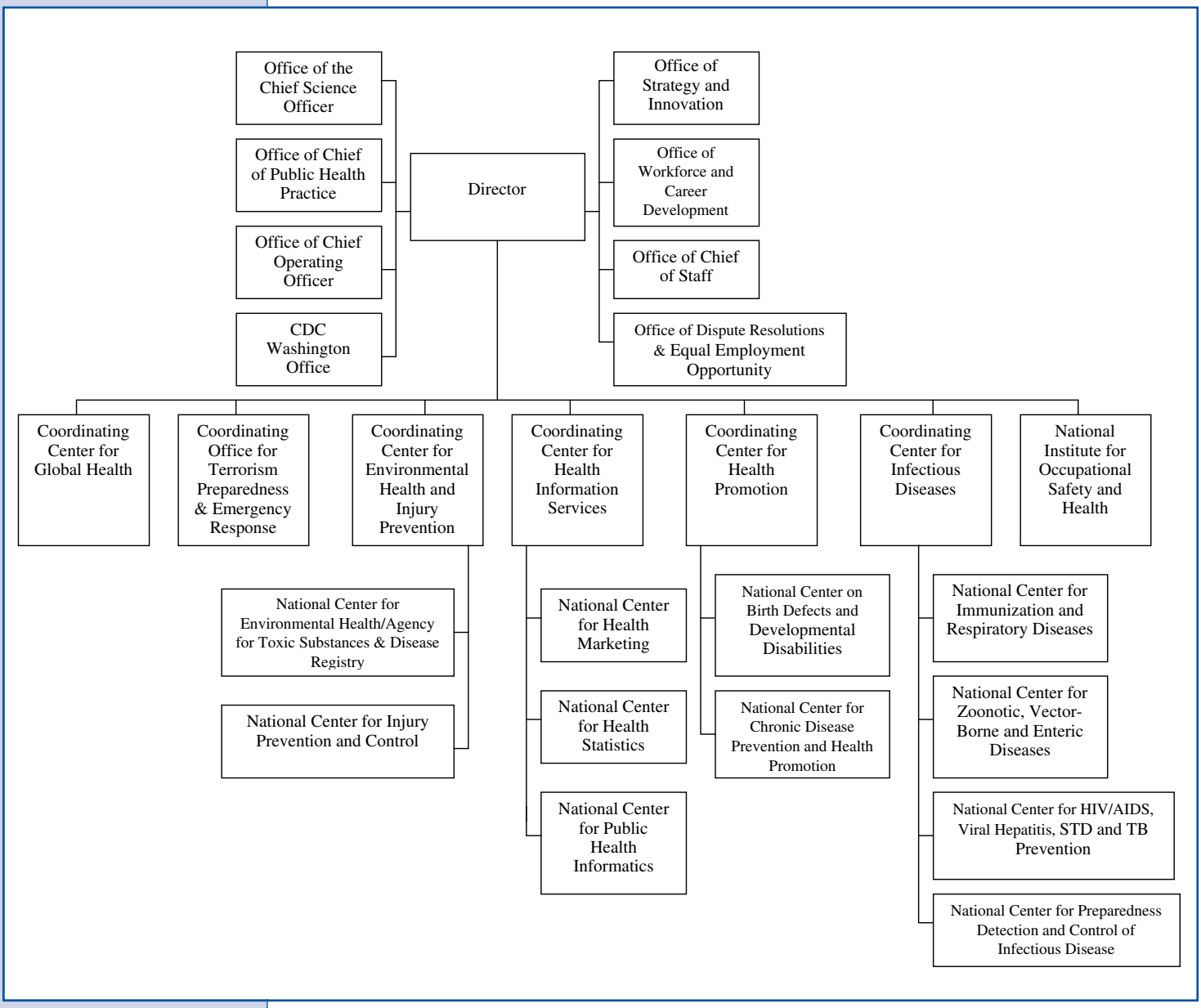
Source: HHS Budget in Brief -- FY 2009, 2008, 2007

U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

MISSION

To promote health and quality of life by preventing and controlling disease, injury, and disability.

CDC ORGANIZATIONAL CHART[99]



CENTERS AND MAJOR PROGRAMS

■ *Coordinating Center for Health Promotion (CoCHP).* The CoCHP is made up of the National Center on Birth Defects and Developmental Disabilities (NCBDDD), the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), and the Office of Genomics and Disease Prevention.

▲ *National Center on Birth Defects and Developmental Disabilities (NCBDDD).* The mission of the NCBDDD is to promote the health of babies, children, and adults, and enhance the potential for full, productive living.[100] The center focuses on prevention, treatment, and research on birth defects and developmental disabilities.

▲ *National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP).* The NCCDPHP leads the "nation's efforts to prevent and control chronic diseases."[101] Programs under this center include: Cancer Control; Diabetes; Healthy Youth; Heart Disease and Stroke; Nutrition, Physical Activity, and Obesity; the Preventive Health and Health Services (PHHS) Block Grant; and others.

• *Division of Nutrition, Physical Activity, and Obesity (DNPAO).* This division is responsible for obesity prevention and control activities, and in FY 2007, gave grants to 28 states for state health departments to design, implement, evaluate and disseminate effective obesity mitigation interventions. Interventions have included making policy changes to encourage access to healthy foods, promoting increased physical activity, and strengthening obesity prevention and control programs in preschools, child care centers, work sites, and other community settings.

• *Division of Adolescent and School Health (DASH).* DASH seeks to prevent serious health risk behaviors among children, adolescents and young adults. Within DASH, the School Health Program provides grants to states to establish and run a statewide coordinated school health program that reduces chronic disease risk factors, including tobacco use, poor nutrition, and inadequate physical activity. Examples of program activities include completion of a walking trail, inclusion of healthy options at concession stands, and inclusion of afterschool activities promoting physical fitness.

• *PHHS Block Grant (PHHSBG).* The PHHSBG block grant is provided to states, territories, and American Indian tribes for use on prevention and health promotion programs for a region's particular public health needs.[102] The goals of the grant are to: create healthy communities; improve disease surveillance; increase life expectancy; promote healthy aging; and achieve health equity.[103]

▲ *Office of Genomics and Disease Prevention.* This office "promotes the integration of genomics into public health research, policy, and practice in order to improve the lives and health of all people."[104]

■ *Coordinating Center for Infectious Diseases (CCID).* The CCID is composed of the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP); the National Center for Immunizations and Respiratory Diseases (NCIRD); the National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZED); and the National Center for Preparedness, Detection, and Control of Infectious Diseases (NCPDCID).

- *National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).* The NCHHSTP "integrates epidemiology, laboratory science, and intervention and prevention initiatives related to a broad range of STDs to enhance opportunities to develop and implement collaborative public health interventions with shared at-risk populations."[105]
  - *HIV/AIDS.* HIV/AIDS programs at CDC focus on prevention, screening, and early detection of the virus.
- *National Center for Immunizations and Respiratory Diseases (NCIRD).* The NCIRD is "an interdisciplinary immunization program that brings together vaccine-preventable disease science and research with immunization program activities."[106]
  - *Vaccines for Children Program (VFC).* The VFC program provides no-cost vaccines to those under age 18 who fall into one of the following categories: Medicaid eligible, uninsured, American Indians or Alaska Natives, and receipt of immunization at federally qualified health centers if health insurance does not cover vaccines. This is CDC's only entitlement program and is linked to state Medicaid plans.
  - *Influenza.* CDC's seasonal flu programs also fall under the NCIRD.
- *National Center for Zoonotic, Vector Borne, and Enteric Diseases (NCVZED).* The NCVZED "provides national and international scientific and programmatic leadership addressing zoonotic, vector-borne, foodborne, waterborne, mycotic, and related infections to identify, investigate diagnose, treat, and prevent these diseases." [107]
- *National Center for Preparedness, Detection, and Control of Infectious Diseases (NCPDCID).* The NCPDCID works on "improving preparedness and response capacity for new and complex infectious disease outbreaks, and will manage and coordinate emerging infectious diseases, integrate laboratory groups, an facilitate increased quality and capacity in clinical laboratories."[108]

- *Coordinating Center for Environmental Health and Injury Prevention (CCEHIP).* The CCEHIP is composed of the National Center for Environmental Health (NCEH), the Agency for Toxic Substances and Disease Registry (ATSDR), and the National Center for Injury Prevention and Control (NCIPC).
  - *National Center for Environmental Health (NCEH).* The NCEH "provides national leadership in preventing and controlling disease and death resulting from the interactions between people and their environment."[109]
    - *Biomonitoring.* For more than 30 years, the Environmental Health Laboratory of the National Center for Environmental Health has been performing biomonitoring measurements. Biomonitoring is the direct measurement of people's exposure to toxic substances in the environment.
    - *Health Tracking.* It can take years for disease symptoms caused by exposure to environmental hazards to appear. This disease surveillance or tracking program helps states to identify the precise environmental causes of chronic diseases, which are responsible for 70 percent of deaths in the U.S. and three quarters of U.S. health care spending.

- *Agency for Toxic Substances and Disease Registry (ATSDR)*. ATSDR "serves the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and diseases related to toxic substances."[110]
- *National Center for Injury Prevention and Control (NCIPC)*. The NCIPC "prevents death and disability from nonoccupational injuries, including those that are unintentional and those that result from violence."[111]

- *Coordinating Center for Health Information and Service (CCHIS)*. The CCHIS is made up of the National Center for Health Marketing (NCHM), the National Center for Health Statistics (NCHS), and the National Center for Public Health Informatics (NCPHI).
  - *National Center for Health Marketing (NCHM)*. The NCHM "provides national leadership in health marketing science and in its application to improve public health."[112]
  - *National Center for Health Statistics (NCHS)*. The NCHS "provides statistical information that guides actions and policies to improve the health of the American people."[113]
  - *National Center for Public Health Informatics (NCPHI)*. The NCPHI "provides national leadership in the application of information technology in the pursuit of public health."[114]
- *Coordinating Office for Global Health (COGH)*. The COGH "provides national leadership, coordination, and support for CDC's global health activities in collaboration with CDC's global health partners."[115]
- *Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER)*. COTPER "helps the nation prepare for and respond to urgent public health threats by providing strategic direction, coordination, and support for all of CDC's terrorism preparedness and emergency response activities."[116]
  - *Public Health Emergency Preparedness Cooperative Agreements*. Emergency preparedness funding for state and local public health departments is distributed through COTPER. With these funds, state and local health departments have enhanced their disease surveillance systems and trained their staff in emergency response.
  - *Division of the Strategic National Stockpile (SNS)*. The SNS is a "national repository of antibiotics, chemical antidotes, ant toxins, life support medications, and medical supplies that can be used to supplement state and local resources during a large-scale public health emengency."[117]

CDC FUNDING HISTORY

CDC							
Major Program	**FY 2005 Actual**	**FY 2006 Actual**	**FY 2007 Actual**	**FY 2008 Enacted**	**FY 2009 CR**	**FY 05 Inflated to $08**	**FY 2009 CR+/- Inflated to $08**
Total Program Level (w/ATSDR)	$7,980	$8,602	$9,116	$9,209	$9,209	$8,952	$257
Total Program Level (w/ATSDR & w/out VFC)*	$6,477	$6,628	$6,381	$6,473	$6,507	$7,266	($759)
Infectious Diseases	$1,679	$1,695	$1,810	$1,905	$1,905	$1,883	$22
Immunization and Respiratory Diseases	$496	$520	$585	$685	$685	$556	$129
HIV/AIDS, Viral Hepatitis, STD and TB Prevention	$979	$963	$1,003	$1,002	$1,002	$1,098	($96)
Zoonotic, Vector-Borne, and Enteric Diseases	$85	$88	$69	$68	$68	$95	($27)
Preparedness, Detection, Control of Infections	$120	$124	$153	$150	$150	$135	$15
Health Promotion	$1,024	$958	$947	$961	$961	$1,149	($188)
Chronic Disease Prevention, Health Promotion, and Genomics	$900	$834	$825	$834	$834	$1,010	($176)
Birth Defects, Developmental Disabilities, Disability, and Health	$125	$124	$122	$127	$127	$140	($13)
Health Information & Service Total	$229	$219	$270	$277	$277	$257	($20)
Environmental Health & Injury Prevention	$289	$287	$283	$289	$289	$324	($35)
Environmental Health	$151	$149	$147	$155	$155	$169	($14)
Injury Prevention and Control	$138	$138	$136	$135	$135	$155	($20)
Occupational Safety and Health	$251	$263	$265	$382	$382	$282	$100
Global Health	$317	$380	$307	$302	$302	$356	($54)
Public Health Improvement & Leadership	$247	$264	$203	$225	$225	$277	($52)
PHHS Block Grant	$119	$99	$99	$97	$97	$133	($36)
Buildings & Facilities	$270	$158	$134	$55	$55	$303	($248)
Business Services Support	$319	$318	$378	$372	$372	$358	$14
Terrorism	$1,623	$1,631	$1,473	$1,479	$1,479	$1,821	($342)
PHS Evaluation Transfers (non-add)	$265	$265	$265	$326	$326	$297	$29
Agency for Toxic Substances and Disease Registry (ATSDR)	$76	$74	$75	$75	$75	$85	($10)
Vaccines for Children	$1,503	$1,974	$2,735	$2,736	$2,702	$1,686	$1,016
Energy Employeess Occupational Illness							
Compensation Program	-	-	$52	$55	$55	-	-
User Fees	$2	$2	$2	$2	$2	$2	$0

* The Vaccines for Children program is mandatory. It is an entitlement program based on population estimates and paid for through the Medicaid program. The CDC budget data is presented with the VFC funding (first line) and without VFC (second line) so that the CDC's discretionary budget can be viewed separately.

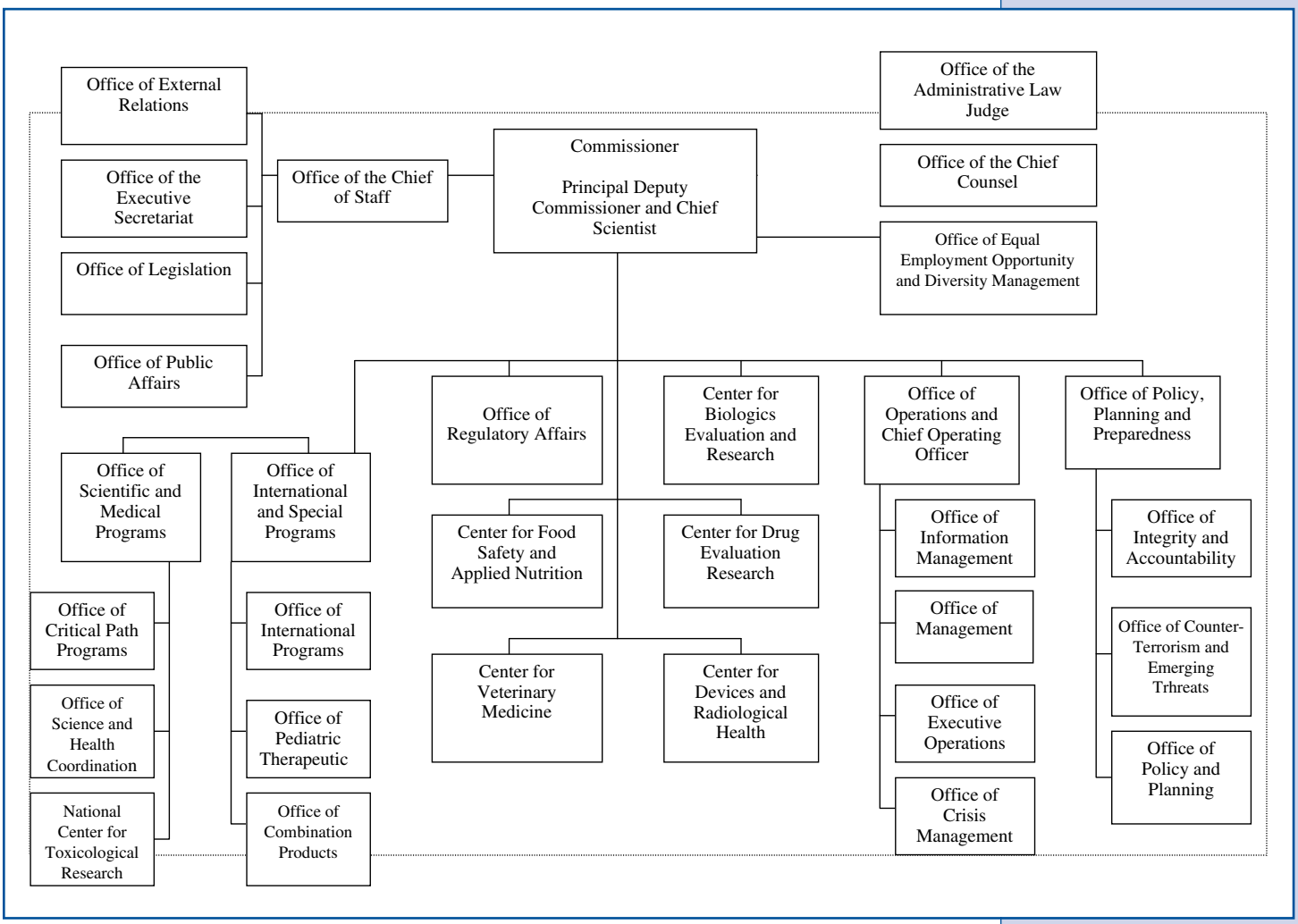
Source: Budget Request Summary, CDC Financial Management Office, Fiscal Years 2009, 2008, 2007

FOOD AND DRUG ADMINISTRATION (FDA)

MISSION

Protecting the public's health by assuring the safety and security of the food supply; the safety, efficacy, and security of human and veterinary drugs; the safety of biological products and medical devices; the safety and security of cosmetics and products that emit radiation; and advancing the public health by helping to speed innovations that make medicines safer and more effective.

FDA ORGANIZATIONAL CHART[118]



CENTERS AND MAJOR PROGRAMS

- *Center for Biologics Evaluation and Research (CBER).*[119] CBER regulates products such as blood and blood products, vaccines, and protein based drugs. CBER also deals with bioterrorism-related drugs.
- *Center for Devices and Radiological Health (CDRH).*[120] CDRH ensures that medical devices, from contact lenses to hip joints or a robotic arm used for surgeries, are safe. Similarly, it sets safety standards for devices that emit radiation, such as microwaves, cell phones, and televisions.
- *Center for Drug Evaluation and Research (CDER).*[121] CDER "promotes and protects the health of Americans by ensuring that all prescription and over-the-counter drugs are safe and effective." All new drugs go through CDER before they are approved, and CDER also monitors direct to consumer drug advertising to ensure accuracy.
- *Center for Food Safety and Applied Nutrition (CFSAN).*[122] CFSAN is responsible for keeping the nation's food supply safe and sanitary and for making sure products are labeled properly. CFSAN regulates all food except meat, poultry, and eggs, which are regulated by the Department of Agriculture.
- *Center for Veterinary Medicine (CVM).*[123] CVM ensures the safety of "food-producing" animals, as well as the safety and effectiveness of the drugs produced for these and other animals. It is also the nation's primary defense against bovine spongiform encephalopathy (BSE), commonly referred to as Mad Cow Disease.
- *National Center for Toxicological Research (NCTR).*[124] NCTR conducts research and technical assistance related to all of the areas that FDA covers, such as food safety, bioterrorism, and antimicrobial resistance.

FDA FUNDING HISTORY

FDA								
Major Program	**FY 2005 Actual**	**FY 2006 Actual**	**FY 2007 Actual**	**FY 2008 Enacted**	**FY 08 Supplemental Appropriation (Enacted 06/08)**	**FY 2009 CR**	**FY 05 Inflated to $08**	**FY 2009 CR +/- Inflated to $08**
Foods	$436	$439	$457	$510		$577	$489	$88
Human Drugs	$496	$518	$565	$680		$708	$556	$152
Biologics	$172	$195	$209	$236		$249	$193	$56
Animal Drugs and Feeds	$98	$99	$104	$109		$115	$110	$5
Medical Devices	$250	$261	$273	$284		$304	$280	$24
National Center for Toxicological Research	$40	$41	$42	$44		$47	$45	$2
Headquarters & Office of the Commissioner**	$115	$117	$122	$133		$133	$129	$4
FDA Consolidation at White Oak	$21	$22	$26	$39		$39	$24	$15
GSA Rental Payments	$129	$134	$146	$159		$159	$145	$14
Other Rent & Rent Related Activities	$36	$36	$50	$61		$61	$40	$21
Export/Color Certification Fund	$7	$8	$8	$10		$10	$8	$2
Subtotal, Salaries & Expenses	$1,801	$1,869	$2,003	$2,264		$2,414	$2,020	$394
Buildings & Facilities	$0	$8	$5	$2		$2		$2
National Center for Natural Products Research	—	—	—	$4		$4		
Total Program Level	$1,801	$1,876	$2,008	$2,270		$2,420	$2,089	$331
Less User Fees:								
Prescription Drug (PDUFA)	-$284	-$305	-$352	-$459		-$459		
Medical Device (MDUFMA)	-$34	-$40	-$44	-$48		-$48		
Animal Drug (ADUFA)	$38	-$11	-$12	-$14		-$14		
Mammography Quality Standards Act (MQSA)	-$17	-$17	-$18	-$18		-$18		
Export/Color Certification Fund	-$7	-$8	-$8	-$10		-$10		
Subtotal, User Fees	-$350	-$382	-$434	-$549		-$549		
Total Budget Authority* **	$1,450	$1,495	$1,574	$1,720	$150*	$1,870	$1,626	$244

*Funds were appropriated in June of FY 2008 but may be spent in FY 2009, in addition to funds made available under the FY 2009 Continuing Resolution. **In FY 04 and 05, there was no "headquarters & Office of the Commissioner;" numbers in those years reflect "other activities. ***Total Budget Authority is the Total Program Level minus user fees.

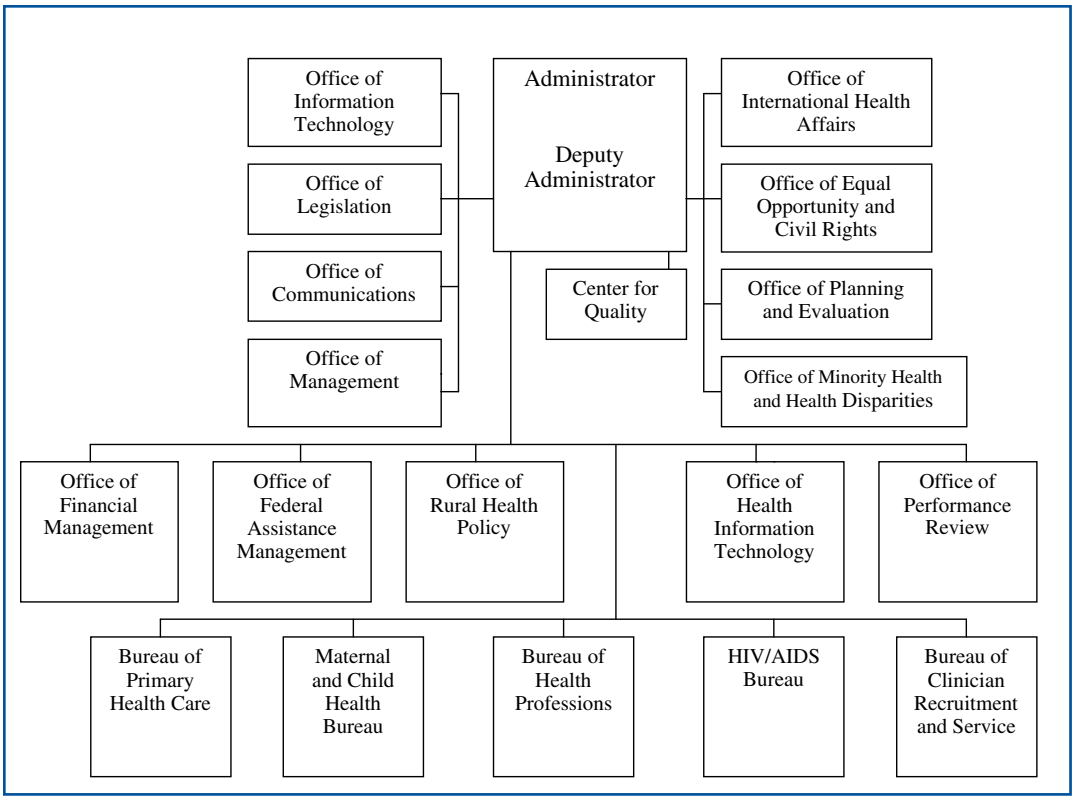
Source: HHS Budget in Brief; FY 2009, 2008, 2007; Public Law 110-252; Public Law 110-329

HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)

MISSION

Improving access to health care services for those who are uninsured and/or who live in medically underserved areas.

HRSA ORGANIZATIONAL CHART[125]



BUREAUS AND MAJOR PROGRAMS[126, 127]

- *Bureau of Primary Health Care.* This Bureau oversees community health centers, migrant health centers, health care programs for the homeless, and public housing health service grants.
- *Community Health Centers (CHCs).* In FY 2008, about one-third of HRSA's budget (about $2 billion) was allocated for community health centers. CHCs provide primary health care services to an estimated 17 million low-income individuals.
- *Bureau of Health Professions (BHP).* BHP provides leadership in the "development, distribution, and retention" of the health workforce.
- *Health Professions.* In FY 2008, Health Professions received $623 million in federal training dollars for nurses and other heath professions, educational loan repayment and scholarship programs, and recruitment funds.

- *Area Health Education Centers (AHECs).* AHECs link university health science centers with community health systems to provide training sites for students, faculty, and health practitioners.

- *Bureau of Clinician Recruitment and Services (BCRS).* BCRS oversees the National Health Service Corps, which provides scholarships and loan repayment to those who agree to serve as primary care providers in health professional shortage areas; and Nursing Scholarship and Loan Repayment, which offers repayment to nurses if they serve no less than two years in an Indian Health Service health center, Native Hawaiian health center, public hospital, migrant health center, or rural health clinic.

- *HIV/AIDS Bureau.* This Bureau oversees the Ryan White HIV/AIDS Programs. After Medicaid, Ryan White programs are the largest federal financial commitment for the care and treatment of people living with HIV/AIDS. These programs reimburse for HIV-related pharmaceuticals, provide community-based services treatment and support services, case management, substance abuse treatment, mental health, and nutritional services.

- *Healthcare Systems Bureau.* This bureau oversees organ donation and transplantation, which supports a registry and network to match donors and potential recipients, and provides education about organ donation; the National Cord Blood Inventory, which provides funds to cord blood banks for transplantation use; the C.W. Bill Young Cell Transplantation Program, which is a bone marrow donor registry; the Office of Pharmacy Affairs, which promotes access to clinically and cost effective pharmacy services; Poison Control Centers, which fund poison control centers throughout the U.S. as well as provide a toll-free number and media campaign; the National Vaccine Injury Compensation Program, which oversees compensation for those who have vaccine-associated injuries and/or deaths; and Healthcare-Related Facilities, which provides for construction and renovation of health facilities throughout the U.S.

- *Maternal and Child Health (MCH) Bureau.* This bureau implements the Maternal and Child Health (MCH) Block Grant. The block grant sends money to the states to establish preventive and primary care networks for pregnant women, mothers, children, infants, and adolescents. MCH provides prenatal care, immunizations, comprehensive health care, home visits, and access to dental care.

- *Other Offices.* In addition to these Bureaus, there are also several offices that oversee information technology and grant and management implementation, as well as the Office of Rural Health Policy, which conducts rural health research and provides technical assistance to state offices of rural health.

HRSA FUNDING HISTORY

HRSA							
Major Program	**FY 2005 Actual**	**FY 2006 Actual**	**FY 2007 Actual**	**FY 2008 Enacted**	**FY 2009 CR**	**FY 05 Inflated to $08**	**FY 2009 CR+/- Inflated to $08**
Total Program Level	$6,854*	$6,119	$6,446	$6,916	$6,916	$7,689	($773)
Primary Care	$1,754	$1,803	$2,006	$2,083	$2,083	$1,968	$115
Health Centers	$1,734	$1,785	$1,988	$2,065	$2,065	$1,945	$120
Free Clinics Medical Malpractice Coverage	$0	$0	$0	$0	$0		
Hansen's Disease Services Program	$20	$18	$16	$16	$16	$22	($6)
Clinician Recruitment and Services	$131	$125	$158	$155	$155	$147	$8
National Health Service Corps	$131	$125	$126	$123	$123	$147	($24)
Nurse Loan Repayment & Scholarship Program			$31	$31	$31		
Loan Repayment/Faculty Fellowships			$1	$1	$1		
Health Professions	$751	$592	$599	$623	$623	$842	($219)
Health Professions Training Activities	$252	$145					
Centers of Excellence			$12	$13	$13		
Scholarships for Disadvantaged Students	$47		$47	$46	$46	$53	($7)
Health Careers Opportunity Program			$4	$10	$10		
Training in Primary Care Medicine and Dentistry			$49	$48	$48		
Area Health Education Centers			$29	$28	$28		
Geriatric Programs			$32	$31	$31		
Allied Health and Other Disciplines			$4	$9	$9		
Public Health/ Preventive Medicine			$8	$8	$8		
Nurse Training/Workforce Development Programs	$151	$150	$119	$126	$126	$169	($43)
Patient Navigator				$3	$3		
Children's Hospitals Graduate Medical Education	$301	$297	$297	$302	$302	$338	($36)
Maternal & Child Health	$869	$835	$838	$849	$849	$975	($126)
MCH Block Grant	$724	$693	$693	$666	$666	$812	($146)
Autism and Other Developmental Disorders				$36	$36		
Traumatic Brain Injury	$9	$9	$9	$9	$9	$10	($1)
Universal Newborn Hearing Screening/ Trauma/ Sickle Cell	$13	$12	$12	$15	$15	$15	$0
EMS for Children	$20	$20	$20	$19	$19	$22	($3)
Healthy Start	$103	$101	$102	$100	$100	$116	($16)
Family-to-Family Health Information Centers	$0	$0	$3	$4	$4		
Ryan White HIV/AIDS Activities	$2,073	$2,061	$2,138	$2,167	$2,167	$2,325	($158)
Health Care Systems	$83	$75	$75	$82	$82	$93	($11)
Organ Transplantation	$24	$23	$23	$23	$23	$27	($4)
Cord Blood Stem Cell Bank	$10	$4	$4	$9	$9	$11	($2)
Bone Marrow Donor Registry	$25	$25	$25	$24	$24	$28	($4)
Poison Control	$24	$23	$23	$27	$27	$27	$0
Rural Health	$153	$168	$168	$175	$175	$172	($3)
Black Lung/Radiation Exposure Compensation	$8	$8	$6	$6	$6	$9	$3
Other	$1,041	$458	$463	$783	$783	$1,168	($385)
Healthy Community Access Program	$83						
Office of Pharmacy Affairs (340B Program)	$0	$0					
Family Planning	$286	$283	$283	$300	$300	$321	($21)
Telehealth	$4	$7	$7	$7	$7	$5	$3
Public Health Improvement (Facilities and Other Projects)				$304	$304		
Health Care Facilities/Other Improvement Projects	$483						
State Planning Grants	$11						
Program Management	$154	$151	$146	$141	$141	$173	($32)
Vaccine Injury Compensation Program			$4	$5	$5		
HEAL Direct Operations			$3	$3	$3		
National Practitioner Data Bank (User Fee)	$16	$13	$16	$19	$19	$18	$1
Health Integrity & Protection Data Banks (User Fee)	$4	$4	$4	$4	$4	$4	$0
Bioterrorism (BT)	$515						

* $515 for BT appropriated in FY 2005 was backed out of the agency total for FY 2005 since that program has since been transferred to the Office of the Assistant Secretary for Preparedness and Response and is reflected in that budget.

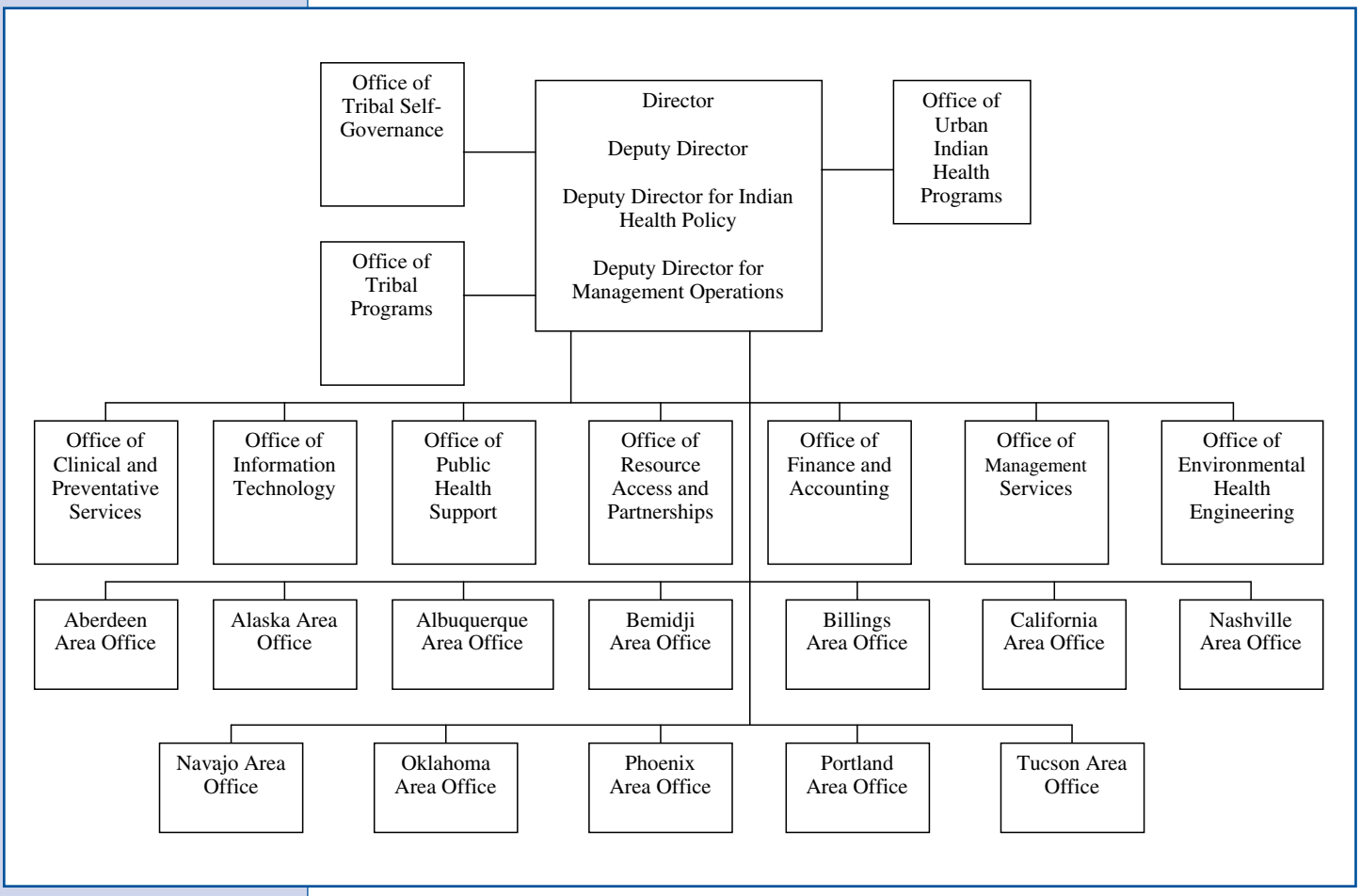
Source: HHS Budget in Brief - FY 2009, 2008, 2007

INDIAN HEALTH SERVICE (IHS)

MISSION

To raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives.

IHS ORGANIZATIONAL CHART[128]



ORGANIZATION AND MAJOR PROGRAMS[129]

Services are delivered in the following ways:

- *Direct Health Care Services.* Health services are delivered through area offices dispersed throughout the nation, as well as 163 IHS and tribally managed units.
- *Tribally-Operated Health Care Services.* Services are provided through compacts which represent 325 tribes.
- *Urban Indian Health Care Services and Resource Centers.* These services are delivered through community health and comprehensive health care centers.

IHS programs are divided between "Services" and "Facilities:"

- *Services.* This includes clinical and preventive health services ranging from providing medical care, which includes substance abuse prevention and treatment, to building sanitation systems to provide water and waste disposal for homes. In recent years, there has been an emphasis on health prevention initiatives such as health education and immunizations.
  - ▲ The largest program that is funded by the IHS is clinical services. The program traditionally receives an annual appropriation of about $3 billion while preventive health receives $140 million.
- *Facilities.* This oversees construction, environmental health support, maintenance and improvement, and medical equipment.

IHS FUNDING HISTORY

Indian Health Services							
Major Program	**FY 2005 Actual**	**FY 2006 Actual**	**FY 2007 Actual**	**FY 2008 Enacted**	**FY 2009 CR**	**FY 05 Inflated to $08**	**FY 2009 CR+/- Inflated to $08**
Total Program Level	$3,813	$3,883	$4,103	$4,282	$4,282	$4,277	$5
Services:	$3,418	$3,523	$3,736	$3,901	$3,901	$3,834	$67
Clinical Services	$2,762	$2,857	$3,056	$3,213	$3,213	$3,098	$115
Contract Health Services	$498	$517	$543	$579	$579	$559	$20
Preventive Health	$110	$117	$123	$128	$128	$123	$5
Contract Support Costs	$264	$265	$270	$270	$267	$296	($29)
Tribal Management/Self-Governance	$8	$8	$8	$8	$8	$9	($1)
Urban Health	$32	$33	$34	$35	$35	$36	($1)
Indian Health Professions	$30	$31	$31	$36	$36	$34	$2
Direct Operations	$62	$62	$64	$64	$64	$70	($6)
Diabetes Grants	$150	$150	$150	$150	$150	$168	($18)
Facilities:	$395	$360	$368	$381	$381	$443	($62)
Health Care Facilities Construction	$89	$38	$26	$37	$37	$100	($63)
Sanitation Facilities Construction	$92	$92	$94	$94	$94	$103	($9)
Facilities & Environmental Health Support	$142	$151	$165	$170	$170	$159	$11
Maintenance & Improvement	$55	$58	$61	$59	$59	$62	($3)
Medical Equipment	$17	$21	$22	$21	$21	$19	$2

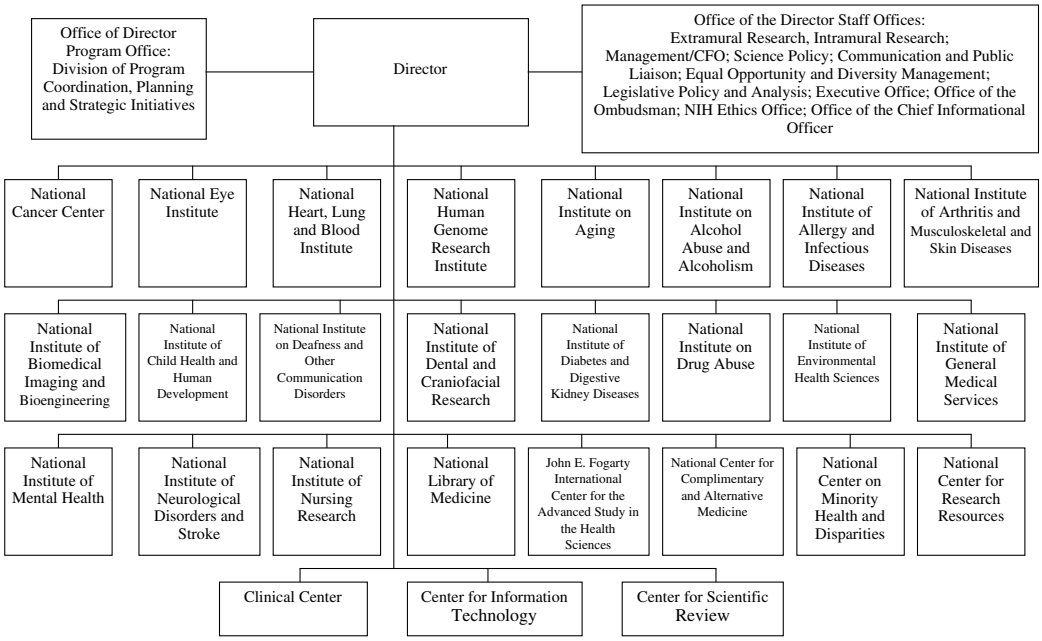
Source: HHS Budget in Brief -- FY 2009, 2008, 2007

NATIONAL INSTITUTES OF HEALTH (NIH)

MISSION

Science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.

NIH ORGANIZATIONAL CHART[130]



ORGANIZATION AND MAJOR PROGRAMS

- NIH has 27 institutes and centers. Each institute and center has its own individual charge and agenda.
  - ▲ The three institutes that annually receive the most funding are the National Cancer Institute, the National Heart, Lung and Blood Institute, and the National Institute of Allergy and Infectious Disease.
- The Office of the NIH Director sets overall NIH policy and goals in addition to planning, managing, coordinating NIH programs.
  - ▲ An estimated five percent of the NIH budget is designated for agency leadership, research management and support, facilities operation.
- *Extramural (External) Research:* About 80 percent of NIH's budget supports research initiatives of more than 300,000 scientists and researchers who are affiliated with over 3,000 universities, medical schools, hospitals,and other research facilities.
- *Intramural (Internal) Research:* About 11 percent of NIH funding is allocated for in-house clinical research. Intramural research gives the nation the ability to respond to immediate health challenges both in the U.S. and globally.

NIH FUNDING HISTORY

NIH								
Major Program	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008 Enacted	FY 09 with Supplemental Approps (June 08)	FY 2009 CR	FY 05 Inflated to $08	FY 2009 CR+/- Inflated to $08
Total Program Level	$28,650	$28,517	$29,137	$29,465	$29,615	$29,465	$32,231	($2,766)
National Cancer Institute	$4,825	$4,788	$4,795	$4,805		$4,805	$5,428	($623)
National Heart Lung and Blood Institute	$2,941	$2,916	$2,920	$2,922		$2,922	$3,309	($387)
National Institute of Dental and Craniofacial Research	$392	$389	$389	$390		$390	$441	($51)
National Institute of Diabetes and Digestive and Kidney Diseases	$1,864	$1,853	$1,855	$1,857		$1,857	$2,097	($240)
National Institute of Neurological Disorders and Stroke	$1,539	$1,533	$1,535	$1,544		$1,544	$1,731	($187)
National Institute of Allergy and Infectious Diseases	$4,403	$4,379	$4,366	$4,561		$4,561	$4,953	($392)
National Institute of General Medical Sciences	$1,944	$1,934	$1,936	$1,936		$1,936	$2,187	($251)
National Institute of Child Health and Human Development	$1,270	$1,264	$1,254	$1,255		$1,255	$1,429	($174)
National Eye Institute	$669	$666	$667	$667		$667	$753	($86)
National Institute of Environmental Health Sciences	$725	$715	$721	$720		$720	$816	($96)
National Institute on Aging	$1,052	$1,045	$1,047	$1,047		$1,047	$1,184	($137)
National Institute of Arthritis and Musculoskeletal and Skin Disorders	$511	$507	$508	$509		$509	$575	($66)
National Institute on Deafness and Communication Disorders	$394	$393	$394	$394		$394	$443	($49)
National Institute of Mental Health	$1,412	$1,402	$1,404	$1,405		$1,405	$1,589	($184)
National Institute on Drug Abuse	$1,006	$999	$1,000	$1,001		$1,001	$1,132	($131)
National Institute on Alcohol Abuse and Alchohism	$438	$435	$436	$436		$436	$493	($57)
National Institute of Nursing Research	$138	$137	$137	$137		$137	$155	($18)
National Human Genome Research Institute	$489	$486	$486	$487		$487	$550	($63)
National Institute of Biomedical Imaging and Bioengineering	$298	$298	$298	$299		$299	$335	($36)
National Center for Research Resources	$1,115	$1,109	$1,144	$1,149		$1,149	$1,254	($105)
National Center for Complementary and Alternative Medicine	$122	$121	$121	$122		$122	$137	($15)
National Center on Minority Health and Health Disparities	$196	$195	$199	$200		$200	$221	($21)
Fogarty International Center	$67	$66	$66	$67		$67	$75	($8)
National Library of Medicine	$323	$322	$328	$329		$329	$363	($34)
Office of the Director	$405	$478	$1,047	$1,109		$1,109	$456	$653
Buildings and Facilities	$110	$86	$81	$119		$119	$124	($5)

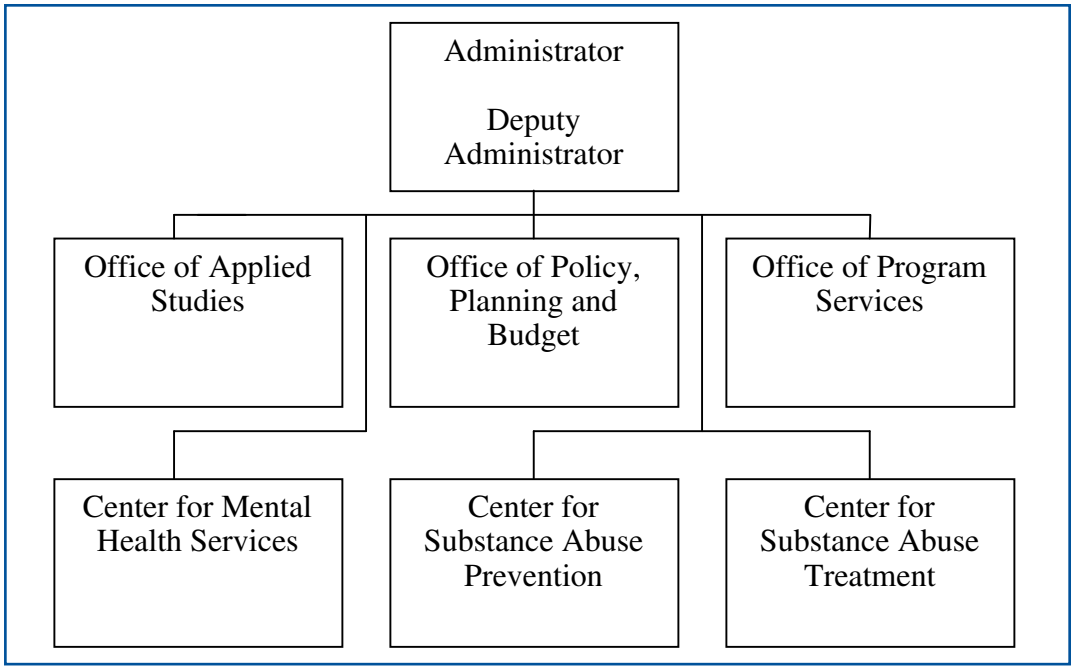
Source: HHS Budget in Brief - FY 2009, 2008, 2007

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA)

MISSION

Improving the quality and availability of prevention, treatment, and rehabilitative services for those individuals who are at risk for a mental or substance use disorder(s).

SAMHSA ORGANIZATIONAL CHART[131]



CENTERS AND MAJOR PROGRAMS

- *Center for Mental Health Services.* This center's purpose is to improve prevention and mental health treatment services.
  - ▲ *Mental Health Services Block Grant:* This block grant received $421 million in FY 2008. It provides funds for mental health services in all 50 states
- *Center for Substance Abuse Prevention and Center for Substance Treatment:* These two centers oversee funding to the states for alcohol and drug abuse prevention, treatment, and rehabilitation services. Funding from these centers is allocated through a block grant to the states.
  - ▲ *Substance Abuse Block Grant:* In FY 2008, the block grant received almost $2 billion in federal funds. It provides funds to the states to support alcohol and drug abuse prevention, treatment and rehabiltation services.

SAMHSA FUNDING HISTORY

SAMHSA							
Major Program	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008 Enacted	FY 2009 CR	FY 05 Inflated to $08	FY 2009 CR+/- Inflated to $08
Total Program Level	$3,392	$3,324	$3,327	$3,356	$3,356	$3,805	($449)
Substance Abuse:	$2,397	$2,349	$2,350	$2,353	$2,353	$2,689	($336)
Substance Abuse Block Grant	$1,776	$1,757	$1,759	$1,759	$1,759	$1,992	($233)
Programs of Regional & National Significance							
Treatment	$422	$399	$399	$400	$400	$473	($73)
Prevention	$199	$193	$193	$194	$194	$223	($29)
Mental Health:	$901	$883	$884	$911	$911	$1,011	($100)
Mental Health Block Grant	$433	$428	$428	$421	$421	$486	($65)
PATH Homeless Formula Grant	$55	$54	$54	$53	$53	$62	($9)
Programs of Regional & National Significance	$274	$263	$263	$299	$299	$307	($8)
Children's Mental Health Services	$105	$104	$104	$102	$102	$118	($16)
Protection & Advocacy	$34	$34	$34	$35	$35	$38	($3)
Program Management	$94	$92	$93	$93	$93	$105	($12)

Source: HHS Budget in Brief -- FY 2009, 2008, 2007

HHS'S OFFICE OF THE SURGEON GENERAL

MISSION

The Office of the Surgeon General, under the direction of the Surgeon General, oversees the operations of the 6,000-member Commissioned Corps of the U.S. Public Health Service and provides support for the Surgeon General in the accomplishment of his other duties.

ORGANIZATION AND MAJOR ACTIVITIES

- The Surgeon General is a part of the Office of Public Health and Science, which is composed of "12 core public health offices and the Commissioned Corps."[132]
- The Surgeon General's main purpose is to be the nation's chief health educator by giving Americans scientific information on how to improve their health.
- The Surgeon General also oversees the U.S. Public Health Service Commissioned Corps.

HHS'S OFFICE OF MINORITY HEALTH

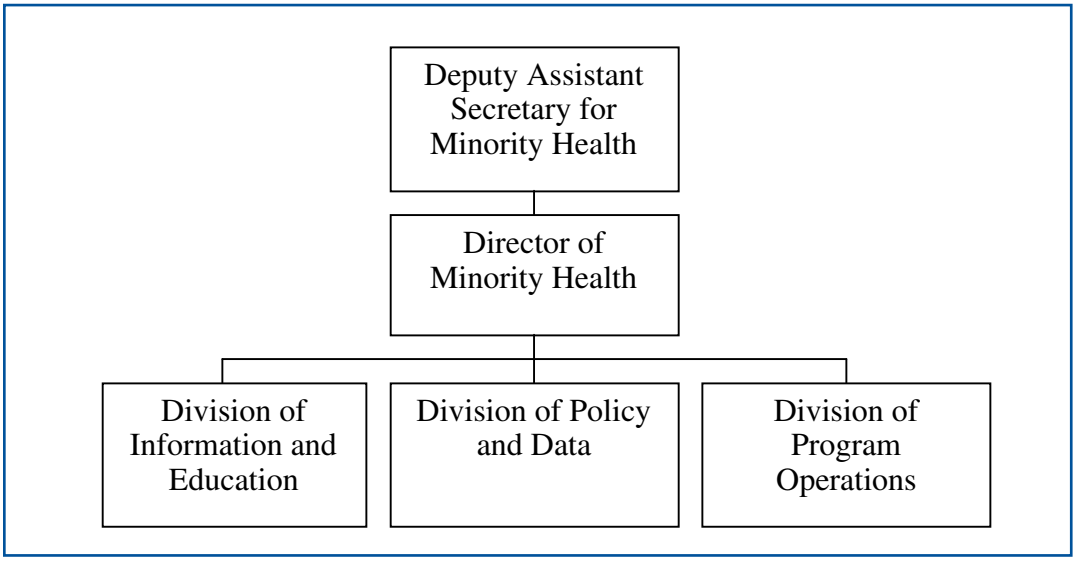
MISSION

To improve and protect the health of racial and ethnic minority populations through the development of health policies and programs that will eliminate health disparities.

ORGANIZATION AND MAJOR ACTIVITIES

- The Office of Minority Health (OMH) was created in 1986 to "advise the Secretary and the Office of Public Health Science (OPHS) on public health program activities affecting American Indians and Alaska Natives, Asian Americans, Blacks/African Americans, Hispanics/Latinos, Native Hawaiians, and other Pacific Islanders."[134]
- OMH is a part of the Secretary's office and is overseen by both a Deputy Assistant Secretary and a Deputy Director. Its responsibilities include:
  - Providing staff for the Advisory Committee on Minority Health;
  - Giving support and overseeing the Regional Minority Health Consultants in the 10 HHS regional offices
  - Operating the OMH Resource Center, a referral service on minority health which also provides capacity development through workshops and consultations
  - Overseeing the Center for Cultural and Linguistic Competence in Health Care, a resource center for health care professionals; and
  - Supervising grant initiatives that facilitate community linkages and strategies.

OFFICE OF MINORITY HEALTH ORGANIZATIONAL CHART[133]

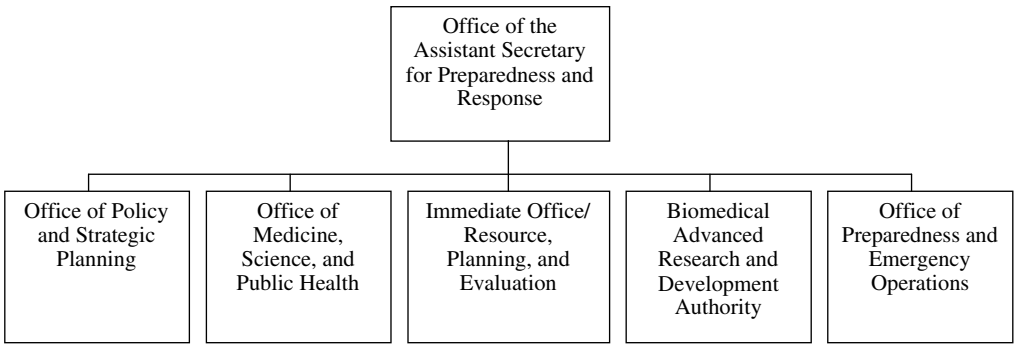


HHS'S ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE (ASPR)

MISSION

ASPR directs and coordinates HHS's activities to protect the public from acts of terrorism and other public health and medical emergencies.

ASPR ORGANIZATIONAL CHART[135]



ORGANIZATION AND MAJOR ACTIVITIES[136]

- ASPR was previously known as the Office of Public Health Emergency Preparedness.
- The Office's main responsibility is to advise the Secretary on matters of terrorism and public health and medical emergencies.
- ASPR has four offices:
  - Biomedical Advanced Research and Development Authority (BARDA). BARDA provides "coordination and expert advice regarding public health medical countermeasures late stage advanced development and procurement."[137]
  - Office of Preparedness and Emergency Operations (OPEO). OPEO develops operational plans, training, and exercises "to ensure the preparedness of the ASPR Office, the Department of Health and Human Services, the Federal Government, and the public to respond to domestic and international public health and medical threats and emergencies."[138] It is also responsible for logistics for most ASPR programs.
  - Office of Medicine, Science, and Public Health (OMSPH). OMSPH provides "expert medical, scientific, and public health advice on domestic and international medical preparedness policies, programs, initiatives, and activities."[139] It is also the liaison with national and international health and science organizations.
  - Office of Policy and Strategic Planning (OPSP). OPSP is "responsible for policy formulation and coordnation for preparedness and response strategic planning."[140] In partnership with other offices, OPSP also analyzes short and long term policies and Presidential directives.

Section 5

BACKGROUND RESOURCES

Trust for America's Health

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SECTION 5

Background Resources

B. HEALTHIER AMERICA: AN AGENDA FOR MODERNIZING PUBLIC HEALTH

From Principles to Policies: A National Health and Prevention Strategy

The nation must develop a National Health and Prevention Strategy that articulates the vision of a healthier America. The Secretary of Health and Human Services (HHS), on behalf of the President, should be charged with developing this plan in a collaborative process. The strategy must:

- Incorporate increased prevention efforts into health care services and finance;
- Strengthen collaboration among public agencies and the private sector; and
- Ensure essential prevention services are delivered nationwide in accordance with minimum national standards.

The National Health and Prevention Strategy should include as core operating principles: (1) efficient deployment of resources to prevent illness; (2) accountability for outcomes; and (3) recognition that helping people be healthy requires addressing the entire social context, including geographic, economic, racial, and ethnic disparities.

Implementation of the National Health and Prevention Strategy should include performance standards, outcome measures, and accreditation procedures for delivery of essential prevention services by federal, state, and local agencies.

In order to achieve these goals, everyone must participate and work together.

Every individual, every business, every community, and every level of the health system, including health care providers and public health agencies at the federal, state, and local levels of government, must take shared responsibility for protecting the health of families and communities.[141]

Public health agencies at all levels of government provide a unique and essential role of convening and fostering collaboration among all sectors of society to consider the health consequences of policy decisions.

- The **federal government** must play a leadership role and serve as a catalyst for change, driving fundamental change and bold initiatives. The federal role includes: financial and technical assistance for state and local health agencies and best practice information for designing and implementing effective prevention programs.
  - ▲ In America, every individual, family, and community has a right to the same level and quality of services to help them be healthy, regardless of who they are or where they live – a right only the federal government can ensure.
- **States and communities** are the front lines of protecting the public's health. Public health practitioners, with leadership from governmental partners, must understand the particular health concerns of each community and mobilize resources to address them. They must focus on, track, and prevent disease; provide childhood and adult vaccinations; prevent and respond to threats of bioterrorism and disease; prevent trauma and injuries; ensure food and water safety; and protect against environmental health hazards.
- **Businesses** must provide employees with health promotion and disease prevention benefits and healthy work environments and conditions. They should work to create public-private partnerships to ensure healthier communities for their workers and their

families. Corporate leaders also need to continue to sound the alarm on how an unhealthy workforce affects bottom-lines.

- **Schools** must build physical and health education into the curriculum. The federal government should make it easier for states and localities to do so by writing physical and health education requirements into the No Child Left Behind Act – these are as important to student achievement as the academic standards in the Act.
- **Non-health agencies and community organizations** must communicate and collaborate with leaders at all levels of government. Community organizations are uniquely positioned to reach certain sectors of the community that government has traditionally had difficulty reaching.

The following are key components of a National Health and Prevention Strategy.

1. LEADERSHIP AND ACCOUNTABILITY: A HEIGHTENED ROLE FOR THE SECRETARY OF HEALTH AND HUMAN SERVICES

Currently, there is no clear focal point within the federal government for national leadership on wellness and prevention. Within the federal government, one individual, the U.S. Secretary of Health and Human Services (HHS), should have the responsibility (on behalf of the President) to convene and facilitate coordinated planning and investment in programming and research across all federal agencies, and hold them accountable for preventing disease and empowering every person to live a healthier life.

The specific responsibilities of the HHS Secretary would include:

- Establishing and leading an Intergovernmental Public Health Coordinating Council composed of representatives of state, tribal, and local health directors and persons representing the general public as the vehicle for wide collaboration in developing and overseeing implementation of the National Strategy.
- Implementing the National Strategy, including making available sufficient resources, based on widely agreed upon performance standards, outcome measures, and accreditation procedures to ensure accountability for effective use of resources in the delivery of essential wellness and prevention services by federal, state, and local agencies.
- Undertaking regular and transparent assessments of progress in meeting the performance standards with adequate effort and progress by state and local agencies as a prerequisite for full federal funding.

2. FUNDING FOR THE NATIONAL HEALTH AND PREVENTION STRATEGY

The HHS Secretary, in close collaboration with all elements of the health system, should determine the funding requirements to implement the National Health and Prevention Strategy and develop a financing plan to meet those requirements by:

- Collaborating with all elements of the health system to determine the funding requirements to implement the National Strategy and developing a financing plan to meet those requirements, including the consistent and continuous delivery of sufficient resources to support services nationwide in accordance with minimum national standards.

- Assuring that the financing plan includes a new statutory funding mechanism to provide substantial and stable federal resources to support state and local prevention programs, as well as the provision of necessary technical assistance to states and localities to implement the National Strategy and meet their local responsibilities.
- Including reasonable matching and maintenance-of-effort formulas in the financing plan that define and ensure adequate federal, state, and local funding of wellness and prevention efforts.

3. TOOLS AND KNOWLEDGE NEEDED FOR IMPLEMENTING THE NATIONAL HEALTH AND PREVENTION STRATEGY

As part of the National Health and Prevention Strategy, the federal government should develop and operate a comprehensive information and assessment system to provide public agencies and private actors the best possible information about: (1) the health status of populations throughout the country; (2) priorities for investment in wellness and prevention; and (3) the effectiveness of proposed and implemented interventions in preventing adverse health outcomes. In order to achieve this outcome, the strategy should require that:

- The U.S. Centers for Disease Control and Prevention's (CDC) disease surveillance systems be modernized to better share data with other federal, state, and local governmental and non-governmental partners, and to take advantage of the potential of electronic health records to produce more robust and timely information that can be used to understand chronic, infectious, and environmental health problems, and detect emerging problems.
- The federal government should adopt a philosophy and practice of transparency and commit itself to the rapid sharing of health information with all public and private partners in the health system, consistent with legitimate privacy and national security concerns.

4. ELIMINATE HEALTH DISPARITIES

The social determinants of health include education, income, housing conditions, occupation, race, ethnicity, social connectedness, and place of residence. To address health disparities, the federal government should:

- Provide leadership to make eliminating health disparities a central aim of both the National Health and Prevention Strategy and the public health system itself;
- Invest in the data collection and analysis required to understand the basis for health disparities and develop and fund effective interventions to reduce them; and
- Develop a priority list of significant socioeconomic, racial, and ethnic disparities associated with the major chronic diseases; develop specific goals, strategies, and action plans to reduce them; and report annually on progress and obstacles.

5. CHRONIC DISEASE

Many chronic diseases are, to a substantial degree, preventable. However, many of the known strategies to help people prevent chronic disease are not receiving the resources or prioritization needed to be effectively implemented. The federal government should take action to address specific chronic disease problems, including the following:

Financing Prevention of Chronic Disease

- ***Problem:*** The health care finance system shortchanges the funding of preventive health care services, such as obesity counseling, early screening, and immunization.
- ***Objective:*** Comprehensive coverage of preventive health care services should be included in all federal- and state-financed health insurance programs and be a central aim of broader health care finance reform. Additionally, coverage for such services should be provided without a copay or deductible.

Screening for Early Detection and Prevention

- ***Problem:*** Health screening is a proven and effective way to reduce the health burden of chronic disease, but it is not practiced to the extent it must be to achieve its full potential.
- ***Objective:*** The federal government, in collaboration with state and local health officials, should lead a national campaign to increase screening for major chronic diseases, focusing on such high-priority prevention opportunities as mammography screening, blood pressure and cholesterol testing, and colorectal cancer screening. Associated with any campaign to increase screening must be assurances that those needing treatment are linked to care. Changes in laws, regulations, contracts, and reporting requirements will be necessary.

Preventing Tobacco Use

- ***Problem:*** Tobacco remains the single most preventable cause of death and disease in the United States, and despite recent progress, kills more than 400,000 people annually.[142]
- ***Objective:*** The federal government should provide stronger leadership to reduce smoking and its health consequences by fully funding comprehensive state tobacco control programs, raising taxes on tobacco, and empowering the Food and Drug Administration (FDA) to regulate tobacco products. Local and state governments have already shown strong leadership in this area.

Reducing Obesity, Overweight, and Physical Inactivity

- ***Problem:*** Though obesity, overweight, and physical inactivity are closely linked with the most common threats to longevity and quality of life, including cardiovascular disease and stroke, diabetes, hypertension, and some cancers, they are not a priority at the national level and a coherent, effective prevention strategy is lacking.
- ***Objective:*** The federal government should engage all stakeholders in a concerted national effort to provide individuals the tools they need to reduce obesity, overweight, and physical inactivity, and their health consequences. This effort would include promotion of expanded physical and health education, as well as healthier nutrition policies, in schools, day care, and after-school settings; readier access to wellness programs in the workplace and elsewhere; a healthier built environment; better information in the marketplace about the caloric and nutritional content of foods; and changes in laws, regulations, rules, and reporting.

6. ENVIRONMENTAL HEALTH

The interaction between human beings and chemical, biological, and physical hazards in the natural and man-made environment is one of the primary determinants of health and the cause of increased risks of cancer, birth defects, childhood development problems, asthma, and neurological disease, all of which inflict significant suffering and economic costs reaching billions of dollars.

At the federal level, environmental risks are now addressed in a piecemeal fashion by numerous agencies, without a clear focal point for leadership, development of the knowledge needed to understand risks, and action to reduce risks. As a result, the federal government is falling far short of what it could do to protect people from environmental hazards and prevent disease, disability, and death. Additionally, state and local governmental agencies are not able to work effectively and in a coordinated fashion with the federal government to protect their residents. Actions in the following areas will help address these problems.

Providing Leadership on Environmental Health

- ***Problem:*** The lack of a focal point for national leadership on environmental health undermines the effectiveness and accountability of the federal effort, as well as coordinated efforts among federal, state, and local governments, and impedes progress in reducing risks and protecting the health of Americans.

- ***Objective:*** The federal government should strengthen its leadership by designating a single official as the President's environmental health leader with responsibility to develop an overall environmental health strategy (including measures of progress), coordinate among agencies on implementation of the strategy, and report to Congress and the public biennially on the state of environmental health and the progress achieved.

Building Knowledge of Environmental Health Problems and Solutions

- ***Problem:*** The establishment at CDC of the National Environmental Public Health Tracking Program was an important step in the right direction, but health agencies, businesses, and individual citizens still lack the knowledge they need to understand and prevent environmental health problems.

- ***Objective:*** The federal government should build on the Tracking Program and its many other disease surveillance and biomonitoring programs and transform them into a 21st century system for detecting environmental hazards – a system capable of discovering hazards in real time and making the information available promptly, in usable form to all who need it to protect health. Additionally, a broader research agenda is needed to improve our understanding of environmental risks to health.

Taking Action to Protect Health

- ***Problem:*** The federal government is chronically slow in acting to address environmental health problems.

- ***Objective:*** The President's environmental health leader, in collaboration with federal agencies and their state and local counterparts, should identify the ten most significant environmental health hazards and opportunities to reduce risk, set specific goals, and establish action plans for reducing those risks, and report biennially on progress and obstacles. Adequate funding must accompany these actions.

Addressing the Built Environment

- ***Problem:*** Conditions in the built environment – including homes, workplaces, transportation systems, playgrounds, and other public spaces – profoundly affect rates of illness and injury and levels of stress among children and adults in ways that are just beginning to be understood.

- ***Objective:*** Bring public health departments, urban planners, transportation experts, manufacturers, developers, and the community together to prevent and solve environmental health problems, and provide adequate funding to do so.

7. INFECTIOUS DISEASE

The HIV/AIDS epidemic that emerged in the 1980's, and the present, very real threat of a devastating pandemic influenza remind us that infectious disease remains a major health problem in the U.S., not to mention having three infectious diseases – influenza, pneumonia, and septicemia – still among the top ten causes of death. We know through long experience what works to prevent infectious disease, and we have many of the tools that are needed, such as surveillance, immunization, and antibiotics, but we have neither fully deployed the tools we have, nor invested sufficiently, to keep up with the dynamic and persistent problem of infectious disease in our globalized society.

It is critical that the federal government act decisively to improve the prevention and containment of infectious disease by bolstering its efforts in at least three areas.

Early Detection of Outbreaks and Emerging Infectious Diseases

- ***Problem:*** CDC coordinates and supports more than 100 national surveillance systems that are implemented primarily by state and local health officials, and that are characterized by poor sharing of information among the systems and delays in reporting results to those who need the information in a timely fashion.[143] These systems are also characterized by inadequate funding, making it difficult to protect the public's health.

- ***Objective:*** The Secretary of HHS, working through CDC and in close partnership with state and local health departments, should drive the integration and modernization of infectious disease surveillance to take advantage of important new disease detection and information technologies, such as electronic lab reporting and electronic health records to deliver high-quality information on a timely basis to people who can use it to prevent disease.

Childhood and Adult Immunization

- ***Problem:*** Vaccination is among the most effective tools to prevent infectious disease, but many children and adults do not receive recommended vaccinations due in part to increased costs and barriers to access.

- ***Objective:*** The federal government should fully fund all of CDC's immunization programs and take other actions needed to improve access and motivate people to seek vaccination, with the goal of achieving 100 percent vaccination rates among all Americans.

Pandemic Influenza Preparedness

- ***Problem:*** Many experts consider a future influenza pandemic to be inevitable and pandemic preparedness to be essential to the nation's health and economic well-being. This requires sustained federal leadership and strategic investment of adequate resources to meet the preparedness need.

- ***Objective:*** The federal government should update as needed, fully fund, and promptly carry out the President's National Strategy for Pandemic Influenza Implementation Plan, and it should step up its investment in vaccine and anti-viral drug development and supply to be able to more rapidly vaccinate and treat the population should a pandemic occur. The federal government should also ensure that state and local governments have the capacity to deliver these countermeasures.

8. HEALTH DISASTER PREPAREDNESS

The September 11 attacks, Hurricane Katrina, and the ongoing threat of bioterrorism make clear the need to be prepared for the public health consequences of extraordinary events. Failure to prepare can turn a health crisis into a health catastrophe resulting in human suffering and economic losses that could have been avoided.

Congress and the President have recognized this fact, as evidenced by the passage of the Public Health Security and Bioterrorism Act of 2002 and the Pandemic and All-Hazards Preparedness Act of 2006 ("All-Hazards Act"). The challenge now is to ensure that federal, state, and local preparedness efforts are continuously and adequately funded and well implemented, with particular attention to preparing the public health workforce, developing and stocking needed technology and equipment, and fully involving all levels of government and all elements of the community, in the context of clearly defined performance standards, so that all Americans are equally protected.

Leadership and Accountability

- ***Problem:*** In our highly decentralized system of federal, state, and local health agencies, national leadership and action are essential to ensure disaster and emergency threats are well-assessed and standards for preparedness are set. As Hurricane Katrina illustrated, this is not always the case.

- ***Objective:*** Designate a single official within HHS to be responsible, accountable, and fully empowered to plan and coordinate implementation of the National Health Security Strategy called for in the All-Hazards Act. This official should either perform or oversee all the preparedness-related activities of the new Assistant Secretary for Preparedness and Response, the Assistant Secretary of Health, and all other components of HHS. Further, he or she must ensure the needed coordination and integration across all the agencies that have a role to play.

Surge Capacity and the Workforce

- ***Problem:*** Emergencies place great strain on an already over-stretched public health workforce, which, due to chronic underfunding, struggles to meet routine public health needs and remains in most localities ill-prepared to respond to major health disasters.

- ***Objective:*** The federal government should strengthen the regular public health workforce by fully funding and implementing the workforce enhancement provisions of the All-Hazards Act and provide for a supplemental, volunteer workforce trained to assist in large-scale emergencies by enhancing recruitment, training, and retention of volunteer medical personnel in the National Disaster Medical System and the Medical Reserve Corps.

Technology and Equipment

- ***Problem:*** Early detection and containment of disease outbreaks associated with acts of bioterrorism or natural disaster is critical to minimizing the harm done to health and the economy, but demands increasingly sophisticated surveillance strategies, including improved diagnostics, more real-time reporting systems, and greater coordination and computer connectivity, as well as effective countermeasures, such as vaccines, and treatment drugs.

- ***Objective:*** The federal government should fully fund and implement the Biomedical Advanced Research and Development Authority (BARDA), as authorized in the All-Hazards Act, and bolster the Strategic National Stockpile of medicines and equipment needed to respond to emergencies through research, development, production, and acquisition of needed items.

Involving the Community in Preparedness Planning

- ***Problem:*** Emergency preparedness requires the attention and involvement of thousands of government agencies at all levels and working relationships with a wide array of business and community groups, but this requires new and more effective means of communication and outreach and a particular focus on vulnerable populations.
- ***Objective:*** The federal government should make active community involvement a central pillar of its preparedness strategy and planning process and support the efforts of states and localities to develop innovative methods for involving and collaborating with all segments of the community.

CONCLUSION

With a renewed commitment to prevention and a revitalized public health system, America can fulfill the vision of becoming the healthiest nation in the world, reaping enormous benefits in personal well-being and economic security. Though this vision will ultimately be achieved at the individual, family, and community level, it requires the active participation of all stakeholders and sustained leadership and action at the federal level. This document offers a template for federal leadership and action and for the long-overdue moment when wellness and prevention are placed at the center of America's health strategy.

APPENDIX 1

Agenda for Modernizing Public Health

ACTING TO PREVENT CHRONIC DISEASE – A WELLNESS AGENDA FOR AMERICA'S FAMILIES AND COMMUNITIES

Background and Need for Action

In sheer magnitude of impact, chronic disease is America's number one health problem, encompassing five of our top six causes of death -- heart disease, cancer, stroke, chronic obstructive pulmonary disease, and diabetes. In addition, Alzheimer's disease and other chronic conditions affecting mental health contribute significantly to the nation's chronic disease burden. All together, chronic disease today accounts for about 70 percent of all deaths in the United States, inflicts untold disability and suffering, and consumes three-quarters of the $1.7 trillion our nation now spends on health care each year. [144, 145, 146, 147, 148]

The effects of chronic disease have a profound impact on America's families and communities. If current trends continue, it is estimated that one in three U.S. children will become diabetic and be at increased risk of nerve and kidney damage, heart disease, and blindness.[149] Breast cancer now strikes almost 180,000 women annually and kills 40,000.[150] Research is also beginning to indicate that cardiovascular disease and diabetes may be risk factors for Alzheimer's, a disease that already cripples so many Americans. And, as it stands today, the toll taken by chronic disease will only grow as our population ages.

As chronic disease robs more Americans of their lives (and their quality of life), it is also wreaking havoc on our nation's economy. Today, it is claiming an ever-growing share of health care spending and also poses a threat to the future of Medicare. Even more, the soaring costs of chronic disease are damaging local economies and the competitiveness of American business. In one state alone, Indiana, the cost to employers of tobacco-related illness is estimated to have exceeded $100 billion in new business investment and 175,000 jobs, as companies seek to locate where health costs are lower, often meaning overseas.[151]

For all the destruction caused by chronic disease, to a substantial degree, most are preventable. While genetics and uncontrollable environmental factors clearly play a role, personal choices, individual lifestyle decisions, the man-made social environment, and the failure to implement known prevention measures are among the highest risk factors of chronic disease. For example, smoking, the single most preventable cause of death and disease in the U.S., causes 440,000 premature deaths annually.[152] The recent success of smoking cessation programs demonstrate that rates of smoking, especially among the young, can be reduced, thus saving lives.

Despite these well-recognized facts, our nation's health system and policy debates continue to focus principally on the delivery and financing of treatment services; not the fact that America today invests less than 5 percent of its resources in chronic disease prevention activities. At the state level, however, this is beginning to change.

In direct response to the economic impact chronic disease is having in Indiana, the state's governor has launched the innovative IN-

Shape Indiana program to combat obesity and smoking.[153] Similarly, California and other states that are moving toward universal health coverage are recognizing that wellness and prevention are essential elements of any economically sustainable health strategy. Nevertheless, the scant attention given to prevention persists at the federal level. As a result, America is missing a great opportunity to improve both the well-being of our citizens and our economy by delaying the onset of, or preventing altogether, disabling and often fatal chronic disease.

Ultimately, the success of wellness and prevention initiatives is determined by individuals, families, and their communities. However, the federal government can move wellness and prevention to the center of our nation's health strategy and help ensure that Americans have the knowledge they need to lead healthier lives. To achieve this, the federal government, acting through the Secretary of Health and Human Services (HHS), and with the full support of Congress, should lead, develop, and implement a National Health and Prevention Strategy (National Strategy).

A successful National Strategy would bridge the growing divide between the delivery of individual health care services and the efforts of public health agencies to protect the population as a whole. Achieving this would require integrating and bolstering the wellness and prevention efforts of all federal and state health services. This, in turn, would require new funding mechanisms as well as the creation of additional capacity for information collection and assessment. However, government action alone will not be sufficient. To achieve its goals, a National Strategy must also involve schools, businesses, community groups, and other stakeholders.

Financing Prevention

Investing resources in wellness and prevention is the critical first step. There is substantial evidence that prevention programs can work to reduce the risk of chronic disease and the associated burden of suffering, disability, and drain on the health finance system. As noted, our nation invests relatively little to develop and implement population-based, chronic disease prevention programs, and we do not have adequate mechanisms to cover the costs of wellness and preventive health care programs for individuals. The federal government should take the following actions to help address these needs:

- Substantially increase at the federal level the conduct and dissemination of systematic research and analysis to support effective chronic disease prevention programs and set priorities for prevention efforts, particularly those that operate at the community level.
- Increase funding through the Centers for Disease Control and Prevention (CDC) of high-priority, effective state and local prevention programs that strengthen the capacity of public health departments and their community partners to deliver prevention services.
- Include comprehensive preventive health services, such as obesity, nutrition, and physical activity counseling, and smoking cessation programs, in federal employee health insurance programs and in Medicaid and Medicare. Encourage business and nonprofit organizations to do the same through tax incentives or other means.
- Require that coverage of preventive services with no co-pays or deductibles be a central objective of any federal reform of the health care finance system.
- Encourage states that are moving toward universal health coverage to provide for preventive services as part of the health care delivery system and through increased support of the wellness and prevention programs provided by public health agencies.

Screening for Early Detection and Prevention

CDC has identified health screening as a vital factor and proven-effective intervention for preventing and reducing the burden of chronic disease. For this reason, the federal government should take the following steps to increase screening:

- Work in close collaboration with state and local health officials to develop a national plan to increase screening for the major chronic diseases, including financing to improve capacity and access. This plan should also use social marketing campaigns to encourage mammography screening, blood pressure, blood cholesterol, colorectal cancer screening, and other similar measures. Associated with any campaign to increase screening must be assurances that those needing treatment are linked to care.
- Ensure full and effective delivery of Medicaid's child health component, known as the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, and provide assurance of similar services for children served by the State Children's Health Insurance Program.
- Develop incentives through regulation and other means for private insurance plans to provide these preventive benefits with minimal or no co-pays ordeductibles.
- Harness electronic health records to improve monitoring of preventive measures in clinical settings and promote adherence by clinicians to preventive services guidelines.

Preventing Tobacco Use

Tobacco remains the single most preventable cause of death and disease in the United States and must continue to be a principal public health priority. Immediate action is required to:

- Raise federal and state excise taxes on tobacco products to deter smoking and finance tobacco control programs and other public health measures;
- Fully fund all state comprehensive tobacco control programs, including school-based programs and public education campaigns, at the minimum level recommended by CDC;
- Support states and localities in their efforts to enact comprehensive smoke-free workplace laws; and
- Pass legislation empowering and directing the Food and Drug Administration (FDA) to regulate tobacco products in order to reduce their harmful and addictive properties and prevent their marketing to children.

Addressing Cancer, Heart Disease, and Diabetes

Chronic diseases cause 70 percent of deaths in the U.S., and are responsible for three-quarters of health care spending.[154, 155, 156, 157] In addition, one in every two men and three women will develop cancer, and one in four Americans has heart disease. [158, 159, 160] These and other data remind us that, while screening is a necessary component to prevent additional disease burden, we must also respond to the fact that millions of Americans are sick today. Opportunities exist to improve quality of care and limit disease progression and complications that need to be explored by developing and implementing new programs and policies. For example:

- Using surveillance systems to monitor and ensure quality care is delivered to those living with chronic diseases. Two examples of use of surveillance to improve care are the monitoring of hemoglobin A1C levels for diabetes or viral load of HIV.

Reducing Obesity, Overweight, and Physical Inactivity

Obesity, overweight, and physical inactivity are closely linked with many of the most common and significant threats to longevity and quality of life, including cardiovascular disease and stroke, diabetes, hypertension, and some cancers. Because of this, reducing obesity and overweight, and increasing physical activity, is a high public health priority and merits substantially greater effort and attention at the federal level, including:

- Better coordination of federally-funded research concerning obesity to improve understanding of its biological, behavioral, and social causes and devise workable interventions to reduce the problem.
- Inclusion of obesity and nutrition counseling, as well as screening for obesity and its related chronic conditions, in federal employee health insurance programs and Medicaid.
- Expansion of federal government employee wellness programs and encouragement of their adoption by private employers.
- Purchase of healthier foods and raising of nutrition standards for all government food assistance programs and for food sold in schools.
- Expansion of physical activity and access to healthy foods in school and after-school settings, and incorporation of nutrition and physical education into "No Child Left Behind" requirements.
- Improvement in the level and quality of information that individuals and educators can use to address obesity and promote wellness, including:
  - ▲ Updating food labeling to place more emphasis on calories;
  - ▲ Improving the utility of the Food Pyramid for consumers;
  - ▲ Requiring the posting of nutrition information on restaurant menus and menu boards;
  - ▲ Improving and expanding social marketing campaigns to reduce obesity; and
  - ▲ Communicating physical activity guidelines to health educators, policy-makers, and the general public.
- Ensure that a wellness impact statement be required prior to the construction of new transportation projects, federally-funded buildings, and other major federal actions affecting the built environment.
- Provide economic incentives to state and local health departments and the private sector to consider the health impact of the built environment and to take action to promote the construction and use of sidewalks, bike trails, playgrounds, and other features of a healthy community.

Eliminating Social Disparities in Chronic Disease Incidence and Prevention

The social determinants of health include education, income, housing conditions, occupation, race, ethnicity, social connectedness, and place of residence. *The Healthy People 2010* process at HHS identified three chronic disease conditions where racial and ethnic minorities experience serious disparities in health access and outcomes:

- **Cancer** – African-American women are more than twice as likely to die of cervical cancer as white women and more likely to die of breast cancer than women of any other racial or ethnic group.
- **Cardiovascular disease** – The rate of death from heart disease was approximately 30 percent greater in 2000 among African-American adults than among white adults; death rates from stroke were 40 percent higher.
- **Diabetes** – In 2000, American Indians and Alaska natives were 2.6 times more likely to have diagnosed diabetes than non-Hispanic Whites; African-Americans were twice as likely, and Hispanics were 1.9 times more likely to have diagnosed diabetes.

These disparities are profoundly significant because of the seriousness and high incidence of the diseases and the large populations involved. To the extent these disparities are caused by socioeconomic status or by differences in access to health services based on race and ethnicity, they also violate fundamental principles of social justice. To address these disparities, the federal government should:

- Provide leadership to make reducing health disparities a central aim of the public health system.
- Continue to use the *Healthy People 2010* process to monitor and report on health disparities and relevant policies and actions by both public agencies and actors in the private sector.
- Invest in the research, data collection, and analysis required to better understand the basis for health disparities and craft effective interventions to reduce them.
- Develop a priority list of significant disparities associated with the major chronic diseases and develop specific goals, strategies, and action plans to reduce them.
- Fund demonstration projects that address the social context of health as a means for improving health outcomes, through CDC's REACH Across the U.S. program and other locally-based vehicles.

CONCLUSION

The enormity of the health and economic stakes involved in preventing chronic disease demands action. Wellness and prevention are achieved locally, but the transformation required to make it a national priority requires federal leadership and resources. Working in close collaboration with all stakeholders, public and private, the federal government can promote a new national vision of wellness and prevention, mobilize the needed resources, and generate the knowledge America needs to sharply reduce the human and economic burden of chronic disease.

APPENDIX 2

Agenda for Modernizing Public Health

HEALTHY ENVIRONMENTS FOR HEALTHY COMMUNITIES – ACTION TO PROTECT HEALTH FROM ENVIRONMENTAL HAZARDS

Background and Need for Action

The most fundamental elements of our environment – air, food, and water – are the building blocks of human life, but they can also jeopardize our health if contaminated with chemical, biological, or other hazards, whether naturally occurring or man-made. Other elements, such as the quality of social and built environments, dangers in the communities where Americans live, work, and play – as well as the changing global climate – can have equally profound impacts on the nation's health. The evidence is staggering:

- As much as 80 to 90 percent of cancer cases in the United States are related to such environmental factors as diet, tobacco, alcohol, radiation, infectious agents, and chemicals in air, water, and soil.
- Outdoor air pollutants cause an estimated 50,000 premature deaths and impose health costs estimated to be as high as $50 billion annually.
- Childhood asthma has more than doubled over the past two decades, with outdoor and indoor air quality being major risk factors.
- Mercury, dioxins, and many other persistent chemicals continue to contaminate food, water, and the breast milk of nursing mothers at levels that pose significant developmental and other risks to the fetus and young children.
- Food-borne illness associated with bacteria, viruses, and other pathogens routinely shake public confidence in the food supply.
- Conditions in the built environment, including homes, work places, transportation systems, playgrounds, and other public spaces, profoundly affect rates of illness and injury and levels of stress among children and adults in ways that are just beginning to be understood.
- The co-epidemics of diabetes and obesity are fueled by adverse environments for healthy nutrition and physical activity such as inadequate access to parks, playgrounds, and trails; long commutes to work and school; and overabundance of fast-food outlets that sell mostly unhealthy food amidst poor access to outlets for fresh produce.
- Income and other socioeconomic factors create disparities in environmental health impacts, as children in sub-standard housing are at greater risk of lead poisoning, and children who live close to highways are more likely to have lung development problems and serious respiratory disease later in life.
- Rising atmospheric carbon dioxide levels and higher air and water temperatures associated with global warming will likely increase respiratory disease rates, change the distribution and growth of chemical and infectious disease agents in air, water, and soil, and have other currently unknown and unpredictable impacts on human health risks.

These and many other environment-related health problems impose significant economic costs and threaten the security and well-being of every community. However, because environmental health problems are primarily a product of human activity, they are mostly preventable. But prevention requires a concerted

response, and the magnitude of the dangers our nation faces demands decisive action.

Preventing environmental health problems is no simple task, and it is complicated by the multiplicity of hazardous agents, exposure pathways, and potential health outcomes that must be considered. Health officials, private business, and average Americans are confronted by literally thousands of chemical, biological, and physical hazards that are present in air, water, food, waste, at work, and in many manufactured products. Some of these agents are man-made, while some occur naturally, but they all have the potential to cause a wide range of adverse effects both acute and chronic, and ranging from the minor to the severe. The upshot is that while the federal government must take the lead in informing and promoting action, it cannot solve environmental health problems alone. These are community problems that require community solutions.

The obstacles to reducing environmental hazards are also compounded by a universe of competing values and interests. For example, man-made chemicals and other potentially hazardous products deliver value to individuals and society, and efforts to clean them up or eliminate them impose costs. In this regard, health officials at all levels are challenged to assemble the knowledge needed to target and justify prudent action and provide the strong leadership required to change the status quo when doing so is necessary to protect health.

Adding to the complexity is that our nation has many different regulatory and research agencies at federal, state, and local levels charged with addressing environmental health problems. The Environmental Protection Agency (EPA) and CDC play key roles, but they are only two of many federal agencies with a role in environmental health.

Thousands of state and local agencies, including health, environment, and agriculture departments, play critical roles in environmental health, as frontline generators of knowledge through surveillance and inspection and as regulators, acting both as partners with the federal government and on their own. Also, as noted, the involvement of citizens, businesses, and community organizations is a precondition to solving environmental health problems.

However, it is the federal government that must provide the national leadership and resources necessary to create and disseminate necessary knowledge, and initiate the far-reaching action required to protect all Americans from environmental hazards. To meet its obligation, the federal government should take prompt action in the following areas:

Background and Need for Action

Progress on environmental health requires strong federal leadership and a sound strategic approach based on the core principle of prevention and wise targeting of efforts and resources to achieve maximum public health benefit. As currently structured and operating, the federal government cannot offer the strong leadership and strategic direction necessary to effectively protect Americans from environmental hazards. To do this, the federal government should:

- Designate environmental health as a crucial public health priority and commit to achieving measurable progress in reducing health risk in social and physical environments and improving disease outcomes based on effective prevention and control strategies.
- Strengthen federal leadership by designating a single official as the president's environmental health leader, with responsibility for developing a comprehensive environmental health strategy (including measures of progress), coordinating agencies to implement this strategy, and reporting to Congress and the public biennially on the state of environmental health and progress achieved.
- Bring public health departments, urban planners, transportation experts, manufacturers, developers, and the community

into collaborative efforts to prevent and solve environmental health problems, and provide adequate funding to do so.

- Ensure that environmental health considerations are incorporated into national security and preparedness planning, including plans to minimize the health impacts of terrorist attacks involving biological, chemical, and radiological agents.
- Work through CDC to invest in building state and local capacity for addressing environmental health problems, including a well-trained workforce and up-to-date information systems and technology.
- Create incentives and provide resources and technical assistance for states and localities to perform community environmental health assessments as the basis for action to improve environmental health. These would include assessments of the impacts of decisions related to the built environment. This process should include not only government agencies, but also business and community organizations.
- Consolidate America's food safety agencies, modernize food safety laws, and work closely with state and local officials to create an integrated, national food safety system, with a clear public health mandate, to reduce the risk of foodborne illness. A primary objective must be to build the principle of prevention into the nation's food production, processing, and marketing system. Expand inspection capabilities and strengthen standards for importation of food, as well as ensure safe agricultural practices and food production in countries from which U.S. food is imported.

Building and Disseminating Knowledge

The political will to act on environmental health problems depends in large part on having a clear understanding of their health and economic consequences. Effective action is then dependent on identifying the most important problems and most practical solutions. Only the federal government has the capacity to lead the development of such knowledge. Thus, to support the federal government's strengthened leadership role on environmental health and its capacity to help communities to solve problems, it should act to improve the development and dissemination of necessary information by:

- Fully funding and implementing CDC's National Environmental Public Health Tracking Program and Tracking Network, as described in CDC's August 2006 National Network Implementation Plan, and developing benchmarks and performance measures to ensure that it is fulfilling its mission.
- Working to better integrate disease surveillance systems and linking them to electronic health records so that more robust information is available on a timier basis to both better detect and understand current and emerging environmental health problems.
- Strengthening the biomonitoring program of CDC's Environmental Health laboratory by substantially increasing its funding; expanding the role of state and local agencies, community groups, and the private sector in the planning of data collection and analysis; and integrating biomonitoring results with surveillance results to produce more useful information.
- Improving scientific tools and elevating the priority of investigating disease clusters as potential indicators of significant environmental health hazards.
- Fostering enhanced safety testing of potentially toxic chemicals that are being released into the environment by actively supporting voluntary public-private initiatives, such as the High Production Volume Chemical Challenge, aggressively using the legal tools available under the Toxic Substances Control Act, and by crafting innovative new strategies, as illustrated by the European Union's Registration, Evaluation, Authorization and Restriction of Chemical substances (REACH) initiative.

- Continuing to fully fund the National Children's Study, under the direction of the National Institute of Child Health and Human Development (NICHHD), as a key contributor to the environmental health knowledge base.
- Increasing investment in innovative environmental research that addresses such issues as the social determinants of environmental health including health disparities based on race, income, and other societal factors; the impact of environment on mental health; and health impacts of the built environment.
- Launching a major new effort to understand and prepare to minimize the health impacts of climate change.
- Making all data and analysis from government tracking, surveillance, biomonitoring, research, and data programs more readily accessible in a useful form and on a timely basis to all interested parties, including health agencies at all levels of government, community organizations, researchers, and the public at large.
- Strengthening community right-to-know laws and aiding in their implementation to ensure that communities have the knowledge they need to devise locally appropriate prevention and response strategies.
- Ensure a trained workforce, adequate resources, and clear guidelines, including a legal framework for action, to build capacity to undertake remediation of environmental hazards.

Building and Disseminating Knowledge

Leadership and knowledge are the basis for action. Recognizing the range and diversity of environmental health problems, progress can best be achieved through concerted efforts to address the most significant problems. To this end, in addition to continuing its regular environmental health activities, the federal government should:

- Identify the ten most significant environmental health hazards and opportunities to reduce risk, taking into account the magnitude of the risk and the availability of interventions to reduce them.
- Set specific goals for reducing risk within specified time periods and develop and implement action plans to achieve them through a combination of traditional regulatory tools and incentive-based initiatives.
- Report to Congress and the American people biennially on progress and obstacles to achieving the goals.
- Make the prevention of adverse health impacts an integral component of decisions related to the built environment by requiring a federal health impact assessment in connection with the construction of new federally-funded transportation and building projects, and other major federal actions affecting the built environment, and provide incentives and technical assistance to states and localities to make similar assessments.
- Work with communities to minimize disparities in environmental health that are based on differences in income, class, race, job exposure, and other social determinants.

CONCLUSION

Progress in reducing the public health and economic burden of environmental health hazards is necessary and, with concerted and creative effort, possible. It's time for our nation to move beyond the status quo and adopt a more strategic and targeted approach to responding to environmental health challenges. Doing so requires a commitment by the federal government to offer new leadership, build and disseminate necessary knowledge, and target action to reduce risk. By working with the community, the federal government can help safeguard the health of all Americans.

APPENDIX 3

Agenda for Modernizing Public Health

PREVENTING INFECTIOUS DISEASE -- MEETING THE CHALLENGE OF A GLOBAL HEALTH AND ECONOMIC THREAT

Background and Need for Action

Infectious disease caused by bacteria, viruses, and other pathogens continues to pose a massive threat to public health and social and economic stability both in the United States and around the world. Globally, one-third of all deaths today are linked to infectious disease. Malaria, measles, and diarrhea remain leading killers while HIV/AIDS, the world's fourth-leading cause of death, is ravaging economies throughout Africa and Asia.

In the U.S., killers like malaria, smallpox, polio, and measles have largely been eliminated as a result of basic public health measures, such as improved sanitation, as well as the modern tools of surveillance, immunization, and antibiotic treatment. Despite these successes, flu still claims 50,000 American lives every year, 1 million Americans are infected with the HIV virus, and estimates suggest more than 19 million Americans are newly infected with a sexually transmitted disease (STD) each year.

However, the threat posed by infectious disease goes well beyond the present number of cases and is being shaped by three unavoidable facts:

1. Infectious disease is inherently dynamic.
New bacterial and viral threats are constantly evolving and new forms of infection emerge all the time. Thirty years ago, *E. coli* O157:H7 and the HIV/AIDS virus were largely unheard of. Today, they are recognized as serious public health problems.

2. Globalization expands the risk of disease exposure.
With expanded international trade and economic integration, Americans increasingly encounter people, food, and other goods from other countries and are often exposed to persistent and evolving infectious disease threats all over the world. For example, HIV/AIDS is thought to have originated in Africa, and new strains of flu virus emerge regularly from Asia.

3. Poverty fosters infectious disease.
Americans who are poor, under-educated, and under-employed, have poor nutrition, and live in areas plagued by blight, crime, and risky behaviors are more vulnerable to the incidence and spread of infectious diseases. Such populations are also less likely to have health insurance and primary health care providers.

Against this backdrop, protecting the health of Americans depends on our vigilance at home and abroad, and the capacity of federal, state, and local health agencies to anticipate, prevent, and contain infectious disease outbreaks. Absent this capacity, Americans remain vulnerable to health disasters of staggering proportions. Today, an influenza pandemic in the United States on the scale experienced in 1918 could afflict 90 million Americans and kill about two million Americans.[168]

America's economic security also hinges on our sustained vigilance and our nation's capacity to rapidly respond to infectious disease threats. It is estimated that a replay of the 1918 flu pandemic would now cost the U.S. economy $683 billion. Recent experiences have demonstrated that even much smaller infectious disease outbreaks originating overseas can have drastic economic consequences. For example, the 2003 outbreak of severe acute respiratory syndrome (SARS) began in Asia, spread to North America through travel of an infected individual, and emerged most prominently in Toronto. Three-hundred-seventy-five

cases and 44 deaths occurred in Ontario, but the economic cost to Toronto due to canceled travel and conventions and other disrupted business activity was devastating, amounting to 12,000 lost jobs, $1 billion in 2003 alone, and two years of a depressed economy.[170, 171, 172, 173] Similarly, in a globalized food system, animal-borne infections with the potential to cross over to humans can have devastating economic consequences, even if the number of human cases is relatively small. For example, avian flu has severely damaged the poultry industries in Vietnam and Thailand and could easily do so here without the effective prevention and control measures necessary to maintain public confidence in food safety. The upheaval in the U.S. beef industry in the wake of a 1990's outbreak of E. coli O157 and the damage to spinach and lettuce growers due to recent outbreaks reminds us how high the stakes are.

We know from experience what it takes (surveillance, immunization, treatment, and various public health measures) to prevent and contain the spread of many diseases. However, we too often forget that if America lets its guard down even past successes can be reversed. Tuberculosis (TB) illustrates the point. Through surveillance, screening, and new antibiotic treatments, the number of U.S. TB cases was steadily declining. For all practical purposes, Americans assumed TB had been beaten. But, we were wrong. Due to a dismantling of the infrastructure for TB care, prevention, and control, as well as globalization, drug resistance, and co-infection with other infectious diseases, new TB cases surged in the U.S. during the 1980s and early 1990s, to a peak of nearly 25,000 in 1993. With renewed efforts, cases declined to fewer than 14,000 in 2006.[175] Now, even more virulent strains of extensively drug resistant TB (XDR-TB) are circulating globally and could pose a renewed threat to the U.S. at a time when funding for TB control at the state level has been flat or has declined.

Across the board, our nation's capacity for preventing and containing infectious disease outbreaks is far less than it must be. It does not have to be this way. With leadership from the federal government, America can meet the new threat posed by infectious diseases by:

- Modernizing and integrating surveillance systems to rapidly detect, report, and analyze outbreaks.
- Increasing the supply of critically important vaccines and anti-viral drugs that are chronically in short supply.
- Immunizing all children and adults.
- Advancing research and development of new and improved diagnostics, drugs, and vaccines.
- Expanding public access to the care necessary to prevent the spread of HIV/AIDS and other infections.
- Funding the state and local governmental workforce that identifies these diseases, tracks their movement through communities, provides treatment, contact tracing, and follow-up care, and works to prevent further infection.

America cannot create the capacity necessary to prevent and contain infectious outbreaks absent a sustained commitment by policymakers. Leadership to maintain global vigilance and build the human and technical capacity for prevention must come largely from the federal government.

Strengthening Surveillance and Outbreak Response

Preventing and containing infectious disease hinges on robust surveillance to detect outbreaks and the capacity to respond to them. Both require effective reporting and active surveillance mechanisms, laboratory capacity, and investigative resources. Without these, it is impossible to contain outbreaks, discover root causes, and devise preventive measures. Additionally, because infectious disease respects no border, our surveillance and investigation capacity must be global in its scope.

In the U.S., infectious disease surveillance and outbreak response is implemented primarily by state and local health agencies and health care providers, with the CDC playing a coordination and support role. Significantly, CDC also plays a key leadership role internationally, working

with the World Health Organization (WHO), regional health bodies, and national governments to provide training, expertise, and direct support to surveillance activities and major outbreak investigations.

To strengthen these efforts, the federal government should:

- Develop and implement, in close collaboration with state and local health agencies, a national strategy to modernize domestic surveillance systems and ensure the best use of surveillance resources.
- Promote the integration of current surveillance systems where possible, including the sharing of data among systems, the use of Internet-based data entry, the introduction of automated electronic laboratory results reporting, and encourage the use of electronic health records to simplify and enhance public health surveillance.
- Develop a financing plan and funding mechanism to ensure that all states and localities can achieve a minimum acceptable standard of surveillance capacity, including a well-trained and equipped workforce and adequate laboratory capacity.
- Consistent with national security and legitimate privacy concerns, promote transparent and rapid data sharing so that federal, state, and local officials, and other stakeholders, can take full advantage of disease surveillance investments.
- Bolster CDC's international leadership role in improving global disease surveillance by providing the resources necessary to support the development of key regional and disease-specific surveillance systems.
- Develop a world-wide "network of networks" to foster more rapid information sharing and early detection of emerging threats, making it a national priority.
- Improve CDC's contribution to international outbreak assistance by strengthening its operating procedures, human resources, and laboratory capacity.

Pandemic Influenza Preparedness

The inevitability of a global influenza pandemic makes preparedness fundamental to our nation's health and economic well-being. Much effort is underway at government health departments nationwide, but true preparedness requires sustained leadership by the federal government. Broadly, the federal government should update as needed, fully fund, and promptly carry out the President's National Strategy for Pandemic Influenza Implementation Plan.

More specifically, priority action should be taken to:

Strengthen International Collaboration

- Strengthen international surveillance systems and working relationships to better identify and respond to flu outbreaks.

Support Medical Interventions

- Develop a Pandemic Vaccine Research and Development Master Plan that clearly assigns leadership and accountability for ensuring an adequate supply of vaccines for seasonal and pandemic flu, and the development of innovative new vaccines, with the ultimate goal of developing a universal flu vaccine that can prevent all strains of the virus.
- Accept shared responsibility for containing a pandemic globally by replacing the current goals from the U.S Department of Health and Human Services (HHS) (enough supply for the U.S. population within six months of the onset of an influenza pandemic) with a far more ambitious goal for the production of a pandemic vaccine.
- Streamline the Food and Drug Administration's (FDA) licensing process for flu vaccine, increase seasonal flu vaccination rates, and create added capacity for vaccine manufacturing and distribution.
- Implement at CDC a nationwide, real-time system to track the use, safety, and effectiveness of vaccines and foster the most efficient use of available vaccine supplies.

- Increase the amount of federally funded antiviral medication in the Strategic National Stockpile (SNS) to be able to treat 25 percent of the U.S. population, and enhance the SNS to include sufficient masks and respirators, gloves, syringes, and other critical medical supplies, including chronic disease medications that may be in short supply during a pandemic. Consideration should also be given to making shelf-life extensions available for certain pharmaceuticals owned and managed by states as part of their emergency stockpiles to reduce potential waste and increase availability of critical materials.
- Address problems related to medical surge capacity, including identifying alternative sites for triage and care, and health care worker protections (such as vaccination) and other incentives to stay on the job (such as adequate and affordable insurance coverage).
- Develop cost-effective, easy-to-use, point-of-care diagnostics to speed diagnosis and ensure appropriate care. This is also key to meaningful, real-time surveillance.
- Create an emergency health benefit to ensure that the public receives needed countermeasures and care in an influenza pandemic (or similar public health emergency) regardless of their insurance coverage.

Foster Community Preparedness

- Engage schools, businesses, community-based service organizations, and other stakeholders in planning for implementation of non-medical interventions to prevent and contain an influenza pandemic, including school and business closings, isolation, and quarantine. A particular focus should be on vulnerable populations whose additional needs during a pandemic should be anticipated.
- Fund and implement a multi-lingual, culturally-appropriate risk communications strategy well in advance of a pandemic.
- Harmonize communications among layers of government and among sectors of society and conduct joint exercises to better understand roles and responsibilities in a pandemic emergency.
- Confront "diminished standards of care," and resolve liability issues and other concerns related to health care that are anticipated during a pandemic and communicate about these problems with the public.

Immunization

Immunization through vaccination of children and adults is effective as a means to prevent some of the most serious infectious diseases and should remain a public health priority. To ensure that the benefits of immunization are fully realized, the federal government should:

- Fully fund all of CDC's immunization programs and take other actions to improve access and public support for vaccination, with the goal of achieving a 100 percent vaccination rate among all Americans.
- Take other specific steps to achieve 100 percent immunization, including:
  - ▲ Expand access through the Vaccines for Children Program;
  - ▲ Require insurers to cover all Advisory Committee on Immunization Practices (ACIP)-recommended vaccinations without deductible or co-pay;
  - ▲ Expand public education and awareness to promote childhood vaccination;
  - ▲ Make immunization a prerequisite condition for pre-school-age child care; and
  - ▲ Enhance the development and use of electronic immunization registries to monitor progress and target interventions.
- Foster the development of innovative new vaccines by directly funding research and by strengthening regulatory and economic incentives for private-sector investment in vaccine research and development.

Antibiotic Resistance

Antibiotics are an essential weapon in the fight against infectious disease. However, the natural evolution of resistance in bacteria to many antibiotics undermines their effectiveness. For example, some strains of the foodborne pathogens *Salmonella* and *Campylobacter* are now resistant to multiple antibiotic drugs. To address this growing problem, the federal government should:

- Strengthen strict FDA oversight of the use of antibiotics in animal production to minimize the development of resistance.
- Develop incentives and standards to minimize overuse of antibiotics in clinical settings, and increase awareness about appropriate use among practitioners and the public.
- Provide regulatory and economic incentives for the development of new antibiotics by the pharmaceutical industry.

Preventing HIV/AIDS

Despite significant advances in prevention, early diagnosis, and treatment, HIV/AIDS remains a serious public health problem in the United States. More than one million people are living with HIV, but roughly one quarter of them are unaware of their infection. Thus, continued vigilance and stepped up efforts to prevent and treat the disease are critical public health priorities. Specifically, the federal government should act to:

- Significantly enhance early diagnosis of HIV positive individuals by:
  - Educating the public on the value of HIV testing;
  - Incorporating HIV testing as a routine part of care in traditional medical settings; and
  - Implementing new models for diagnosing HIV infections outside medical settings, including the use of rapid testing methods, to make testing more accessible.
- Reinvigorate behaviorally-based HIV prevention programs that are targeted to individuals and communities at risk.
- Fund broad access to proven preventive interventions in public health and health care settings, including use of condoms and clean syringes.
- Support enhanced research into anti-HIV vaccines and other preventive measures such as microbicides.
- Ensure access to treatment for all uninsured persons with HIV in the U.S. and ensure treatment through appropriate expansions of HIV-specific and public insurance programs.
- Support continuation and expansion of U.S. support for global programs to prevent and treat HIV.

CONCLUSION

Reducing, and in some cases eradicating, infectious diseases is one of the American public health system's greatest triumphs. It also remains one of our nation's most important challenges as our past success has too often been allowed to foster complacency. We must build on what we have learned about surveillance, immunization, and treatment. This is a challenge we can meet if our leaders renew America's commitment to public health, mount sustained efforts, and do what we know works to prevent infectious disease.

APPENDIX 4

Agenda for Modernizing Public Health

DISASTER PREPAREDNESS AND EMERGENCY RESPONSE -- BUILDING THE CAPACITY OF THE PUBLIC HEALTH SYSTEM

Background and Need for Action

The September 11 attacks, Hurricane Katrina, the potential of pandemic flu, and the ongoing threat of bioterrorism make clear the need to be prepared for the public health consequences of extraordinary events. Failing to prepare can transform a crisis into a health disaster and lead to human suffering and economic losses that could have been avoided.

The federal government recognizes this fact, as evidenced by the passage of the Public Health Security and Bioterrorism Act of 2002 and the Pandemic and All-Hazards Preparedness Act of 2006 (All-Hazards Act). In the All-Hazards Act, Congress directed the Secretary of Health and Human Services (HHS) to, among other things, develop a National Health Security Strategy to integrate public and private medical capabilities with other first responder systems and bolster the emergency response capacity of federal, state, and local health agencies.

The All-Hazards Act affirms the fact that, to be truly effective, public health preparedness and emergency response planning must be community undertakings. While the federal government can – and must – provide critical leadership and financial support, America's success in preparing for, and responding to, emergencies hinges on public-private collaboration in every city and town and will ultimately succeed or fail locally. While considerable progress has been made, much remains to be done to achieve an acceptable level of preparedness on a consistent, sustained basis nationwide.

Today, some 3,000 state and local agencies share the responsibility of providing the vital public health services that are fundamental to effective emergency response. These agencies are so chronically under funded that they often lack the human resources, laboratory capacity, and other tools necessary to perform their routine work. Now they are being asked to prepare for the extraordinary demands they may face in a disaster or other emergency.

Since 2002, Congress has appropriated about $1 billion annually for public health preparedness purposes, although funding for state and local preparedness activities has declined significantly over the past several years. These resources and the efforts of many state and local officials made a positive difference in preparedness planning, training, and exercising; building necessary stockpiles of vaccines and other medical supplies; building laboratory and surveillance capacity; vaccinating at-risk populations; and building surge capacity in hospitals. The pace of progress varies across the country, however, and, across the board, much more needs to be done. Strong federal leadership and sustained and expanded financing will be required.

The All-Hazards Act offers a useful framework and the tools needed for this effort, but its promise cannot be fully realized until the federal government fully funds and imple-

ments it. In addition, federal policymakers should address a series of other priorities: leadership and accountability; surge capacity and the workforce; technology and equipment; and broader partnerships with the public. Some of these issues are addressed in the All-Hazards Act, but our leaders will need to build on it if America is to have the robust preparedness and emergency response capacity our nation needs.

Leadership and Accountability

In a public health system as decentralized as ours, national leadership is essential to ensure that disaster and emergency threats are properly assessed and that standards for preparedness are set and maintained. At the same time, state and local governmental leadership, supported by sufficient federal funding, is needed to create and sustain local response capacity. The system as a whole must be transparent and fully accountable for making the best use of limited resources. To achieve these goals, the federal government should:

- Designate a single official in HHS to be responsible, accountable, and fully empowered to plan and coordinate implementation of the National Health Security Strategy called for by the All-Hazards Act; this official should either perform or oversee all the preparedness-related activities of the new Assistant Secretary for Preparedness and Response, the Assistant Secretary for Health, and all other components of HHS. Further, he or she must ensure the needed coordination and integration across all the agencies that have a role to play.
- Foster community-based planning, public-private collaboration, and regional cooperation (such as through the Emergency Management Assistance Compact) to prepare for and respond to health emergencies.
- Establish measurable, optimally achievable preparedness performance standards that all federal agencies and federally-funded states and localities should be held accountable for achieving.
- Require regular testing and assessment on a community-wide basis to measure progress in satisfying the performance standards.
- Ensure that the results of such testing and assessments are easily accessible to policymakers and the public in a timely manner.
- Make federal funding of programs contingent on satisfactory progress toward preparedness standards and limit carry-over funding in states that have failed to meet this requirement.
- Partner with states to design a stable, long-term funding mechanism for disaster preparedness and emergency response that incorporates both federal funds and state matching funds.

Surge Capacity and the Workforce

Emergencies place a tremendous strain on an already over-stretched public health workforce, including first responders, lab personnel, doctors, and nurses, and on the capacity of hospitals. It is thus essential to pay special attention to the surge capacity of the public health workforce and the nation's hospitals and clinics. To this end, the federal government should:

- Strengthen the federal, state, and local regular public health workforce by fully funding and implementing the workforce enhancement provisions of the All-Hazards Act and strengthening incentives for trained personnel to commit themselves to public health and emergency response roles.
- Provide for a supplemental, volunteer workforce trained to assist in large-scale emergencies by enhancing recruitment, training, and retention of volunteer medical personnel in the National Disaster Medical System and the Medical Reserve Corps. Ensure funding to support the costs of training, administering, and organizing the volunteer workforce.
- Increase funding and accelerate implementation of the Health Resources and Services Administration's (HRSA) Emergency System for Advance Registration of Volunteer Health Professionals.
- Improve hospital surge capacity by fully funding and implementing the authority in the All-Hazards Act to establish partnerships among medical facilities, including hospitals, clinics, and nursing homes, and state and local governments aimed at improving overall preparedness and surge capacity for public health emergencies.
- Establish standards in public health training and curricula, and incorporate into accreditation for schools of public health and other settings where the public health workforce is educated, so that future public health practitioners have the skills and knowledge they need to protect the public's health in both emergency and day-to-day situations.

Technology and Equipment

State-of-the-art surveillance techniques and ready access to needed vaccines and treatment drugs are fundamental to protecting the public from acts of bioterrorism, natural disasters, and emerging disease threats. Thus, the federal government should:

- Continue working toward modernized surveillance systems that are interoperable among agencies at all levels of government.
- Continue funding for maintenance and resupply of equipment and drugs now in use for surveillance and treatment.
- Improve laboratory capacity to test for chemical and biological hazards, including improved test methods and adequate supplies of reagents.
- Expand research and development of vaccines, diagnostics, and other countermeasures by fully funding and implementing the mandates of the Biomedical Advanced Research and Development Authority (BARDA).
- Bolster the Strategic National Stockpile of medicines, equipment, and lab supplies needed to respond to emergencies through research, development, production and acquisition of needed items.

Community Involvement

Generating public awareness and understanding of potential emergencies and the role of federal, state, and local governmental public health authorities in responding to them is essential to the success of even the best-funded initiatives. Business and community groups are also important players because of their strong links as service providers or sources of information for millions of people. The federal government, together with state and local agencies, should view the public as a partner in responding to emergencies and bolster that partnership by taking actions to:

- Actively reach out to business, community groups, and other stakeholders, including the media, to involve them in shaping preparedness and emergency response plans.
- Work with state and local governments to ensure they have the necessary legal authority and procedures to respond rapidly to public health emergencies.
- Modernize risk communication to improve the dialogue with groups and individual members of the public, not only to provide factual information, but to foster cooperative involvement in emergency response.
- Reach out to and better address the special needs of vulnerable populations, including children, the elderly, and those with chronic disabling diseases.
- Establish a temporary "state of emergency" health benefit to encourage the uninsured or underinsured to obtain proper diagnosis and treatment in public health emergencies without regard to insurance coverage.
- Establish stable and secure sources of funding for state and local governmental public health departments to facilitate the development and maintenance of community involvement.

CONCLUSION

Human nature makes it difficult to maintain a steady focus on preparing for future emergencies as memory of the last one fades. The intensity of recent experiences has brought a strong response from Congress, but sustaining the priority and commitment that preparedness now enjoys will depend on farsighted political leadership and excellent implementation of preparedness initiatives by governmental and non-governmental health agencies in federal, state, and local jurisdictions. The pay-off will come in both reducing the toll of future disasters and emergencies and strengthening the overall capacity of the public health system to meet the nation's ongoing health needs.

Endnotes

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