
VISION FOR A HEALTHIER AMERICA

A Healthier America: A New Vision and Agenda (September 2007)

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 health, health care, and public health services, regardless of who they are or where they live.

To realize these goals, our nation must strengthen America's public health system in order to: 1) provide people with the information and resources 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, environmental risks, and infectious disease outbreaks. Achieving this vision will not only require the combined efforts of federal, state, and local governments, but also new partnerships with businesses, communities, and citizens. The time for action is now; we don't have a moment to lose.

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The Problem and Need for Action

America should be the healthiest nation in the world. But today, serious gaps exist in our ability to safeguard health, putting our families, communities, states, and nation at risk.

To meet this challenge, health experts from over 35 organizations came together in March 2007 to develop this working paper, *A Healthier America: A New Vision and Agenda*, a companion background paper to the sign-on document, *Our Vision for a Healthier America*. While the latter has been endorsed by individual organizations, this paper is a “work in progress” intended to provide a more detailed discussion of critical issues and will be modified over time. Both are part of the Healthier America project which addresses the importance of revitalizing our nation’s public health system at a time when:

- Almost six years after the September 11th attacks and almost two years after Hurricane Katrina, our nation is not ready to respond to large-scale health emergencies. Our local, state, and federal governments are not fully prepared to protect citizens from disease outbreaks, natural disasters, or acts of bioterrorism. The result is that Americans remain unnecessarily vulnerable to these threats.
- Tens of millions of Americans are suffering everyday with terrible diseases like cancer and Alzheimer’s, and America is spending \$2 trillion annually on medical care, which is more than any other nation in the world.¹ An increased emphasis and intense focus on prevention efforts could significantly reduce this burden of disease – helping avoid unnecessary financial costs and suffering.²
- Our nation’s poor health is jeopardizing America’s economic security. Skyrocketing costs of health care threaten the financial security of American governments and businesses alike, causing a failure of governmental systems and a further erosion of in government and its essential services. In the private sector, some companies are sending jobs to other countries where costs are lower, further eroding the American economy. Helping people to be healthier is one of the best ways to keep health care costs down. Keeping the American workforce well is one of the most important ways to help American businesses remain competitive in the global economy.

America faces a major health crisis. We must provide quality, affordable health care to every individual. But that’s not enough. A strong public health system focused on prevention must be part of the solution. We need to do more to keep Americans healthy. We cannot thrive as a country if our citizens are sick.

The health crisis calls for urgent action. Our national well-being and security depend on it. It requires a new vision and agenda to protect the health of America’s families and communities – a vision that puts prevention at the center of the nation’s health strategy.

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.

America must have a public health system that:

1. Prepares communities and the nation to meet the threat of infectious diseases, terrorism, and natural disasters.

- Our leaders have an obligation to protect us from bioterrorism and infectious disease outbreaks, keep our air and water clean, and our food supply safe.
- Infectious diseases, from influenza to severe respiratory syndrome (SARS) to E.Coli, should be treated proactively instead of reactively.

2. Prevents chronic disease and promotes wellness.

- Chronic diseases cause 70 percent of deaths in the U.S. and are responsible for three-quarters of health care spending.^{3, 4, 5, 6} Our support for health care has focused for too long on caring for people after they become sick or harmed. Experts estimate that many of these illnesses could be prevented. An emphasis on prevention and wellness would mean improving the quality of people's lives, making the workforce more productive, sparing individuals from needless suffering, and eliminating unnecessary costs from our health system.

- One in two men and one in three women will develop cancer.⁷
- One in four Americans has heart disease.⁸
- Two out of three Americans are overweight or obese.⁹
- One in twelve Americans has asthma.¹⁰
- One in fourteen Americans has diabetes.¹¹
- One in seven seniors has Alzheimer's.¹²
- Baby boomers may be the first generation to live less healthy lives than their parents according to a recent study.¹³
- Childhood obesity has more than tripled since 1980, putting our nation's children at risk for unprecedented levels of major diseases like diabetes and heart disease earlier in life.¹⁴

- The government must also do a better job of helping people make healthier choices. We must each take personal responsibility to strive to be as healthy as we can be. However, by supporting policies and programs like promoting healthier schools and increasing the kind of community development that encourages people to walk, the government can do more to meet its responsibility to help citizens lead healthier lives. The federal government also has a responsibility to conduct more effective research, not only looking into the causes of disease, but also into ways to keep us from getting sick in the first place.

3. Ensures that the places where we live, work, and play are healthy and safe.

- The federal government should take the lead, in collaboration with states and localities, to protect food, air, and water; minimize chemical and other harmful exposures; and make communities healthier and safer.
- The federal government should take the lead in implementing policies and providing resources to communities in partnership with state and local governments to promote access to nutritious food and safe places for physical activity.
- The federal government has a particular responsibility to assure that all Americans are protected from bioterrorist and other threats and to provide adequate resources to state and local governments engaged in this effort.

4. Ensures results and is accountable to the American people, where investments made lead to real, demonstrable improvements to the health of Americans.¹

- The federal government's role is to assure that all parts of the public health system, including state and local health departments, have sufficient resources and meet basic standards for assuring the public's health. The federal government must also be held accountable for the spending of public health dollars; it must show that it's spending every one of those dollars effectively and in a way that really improves the health and safety of the American people.

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.¹

¹ As used here, the term "health system" refers broadly to health care providers, governmental public health agencies, and the many other institutions and activities of society that affect our health, including business, education, transportation, and community planning. "Health care providers" include doctors, hospitals, public clinics, insurers, and other organizations involved in providing and paying for individual medical treatment and other individual health care services, including preventive health care services. "Public health agencies" include federal, state, and local agencies, such as health departments and laboratories, that focus on the health of the population and conduct health surveillance, investigate and manage illness outbreaks and other health problems, and generate knowledge and manage programs to prevent illness within the population.

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.

1. 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: financing 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.
2. **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; assure food and water safety; and protect against environmental health hazards.
3. **Businesses** must provide employees with health promotion and disease prevention benefits and healthy work environments and working conditions. They 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 their bottom-line.
4. **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.
5. **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.

From Principles to Policies: A National Prevention Strategy

The nation must develop a National 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.
- Ensure essential prevention services are delivered nationwide in accordance with minimum national standards.

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

The following are key components of a National Prevention Strategy. (See appendices for more detail.)

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 Prevention Strategy

The HHS Secretary, in close collaboration with all elements of the health system, should determine the funding requirements to implement the National 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 include 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 assure adequate federal, state, and local funding of wellness and prevention efforts.

3. Tools and Knowledge Needed for Implementing the National Prevention Strategy

As part of the National 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 mandate that:

- The Center 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 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 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.
- 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 co-pay 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 such 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 over 400,000 people annually.¹⁵
- *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 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 in 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 into collaborative efforts 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 United States, with 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 over 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.¹⁶ 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 aim 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 assure that state and local governments have the capacity to deliver these countermeasures.

8. Health Disaster Preparedness

The September 11th 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 A

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 also 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.^{17, 18, 19, 20, 21}

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.²² Breast cancer now strikes almost 180,000 women annually and kills 40,000.²³ 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 going overseas.²⁴

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.²⁵ The recent success of smoking cessation programs demonstrates that rates of smoking, especially among the young, can be reduced, thus saving lives.

Sadly, 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 five 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 INShape Indiana program to combat obesity and smoking.²⁶ 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 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 non-profit 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 or deductibles.
- 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.
- 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.^{27, 28, 29, 30} In addition, one in every two men and three women will develop cancer, and one in four Americans has heart disease.^{31, 32, 33} 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 assure 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 of 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, policymakers, 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 Department of Health and Human Services’ Healthy People 2010 process has 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.³⁴
- 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.³⁵

- 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.³⁶

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 B

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 80-90 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.³⁷
- Outdoor air pollutants cause an estimated 50,000 premature deaths and impose health costs estimated to be as high as \$50 billion annually.³⁸
- Childhood asthma has more than doubled over the last two decades, with outdoor and indoor air quality being major risk factors.³⁹
- 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.
- Foodborne 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 to 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 the Centers for Disease Control and Prevention (CDC) play key roles, but they are only two of many federal agencies with a role in environmental health.¹¹

¹¹ Other federal regulatory agencies with environmental health responsibilities include the Occupational Safety and Health Administration, the Food and Drug Administration, and multiple components of the Department of Agriculture. A host of federal agencies play important roles in developing the knowledge needed to identify environmental hazards and assess their risks, including CDC's National Center for Environmental Health (NCEH), Coordinating Center for Infectious Diseases (CCID), and National Institute for Occupational Safety and Health (NIOSH); the Agency for Toxic Substances and Disease Registry (ASTDR); the National Institute of Environmental Health Sciences (NIEHS); and FDA's National Center for Toxicological Research (NCTR).

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, at the end of the day, it is the federal government which 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:

Providing Leadership

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 effective 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 more timely 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 REACH initiative.
- Continuing to fully fund the National Children’s Study, under the direction of the National Institute of Child Health and Human Development (NICHD), 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.

Taking Action

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 C

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. Nevertheless, despite these successes, flu still claims 50,000 American lives every year, 1,000,000 Americans are infected with the HIV virus, and estimates suggest more than 19 million Americans are newly infected with an 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, 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 of our fellow citizens.⁴⁰

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.⁴¹ Recent experiences have demonstrated that even much smaller infectious disease outbreaks originating overseas can have drastic economic consequences. For example, the 2003 outbreak of SARS (severe acute respiratory syndrome) 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.^{42, 43, 44, 45}

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 1993.⁴⁶ With renewed efforts, cases declined to just under 14,000 in 2006.⁴⁷ 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. Absent 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 Centers for Disease Control and Prevention (CDC) playing a coordination and support role. Significantly, CDC also plays a key leadership role internationally, working with the World Health Organization, 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 (ELR) 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 HHS goal (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 vaccine 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. Over 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.
- Assure access to treatment for all uninsured persons with HIV in the U.S. and assure 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 D

Disaster Preparedness and Emergency Response: Building the Capacity of the Public Health System

Background and Need for Action

The September 11th 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 both 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 last several years.⁴⁸ 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 implements 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.
- Assure 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. Assure 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 disease.
- 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.

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