Centers for Disease Control and Prevention

Safeguarding Public Health in the 21st Century

The Centers for Disease Control and Prevention (CDC) is the lead federal agency protecting the health and safety of Americans and people around the world—not just from headline-making diseases like SARS and monkeypox, but from countless other diseases and health threats. CDC promotes health through strong partnerships with state and local health departments, academia, health care organizations, the private sector, community organizations and many others working to make a difference in peoples well-being.

The work of the CDC has never been more important. Our nation faces increasingly diverse threats to health—terrorism, emerging infections and diseases, the obesity epidemic, the aging of the population. There are also expanding opportunities to improve health by investing in programs we know work, funding the science that can help generate more solutions, and leveraging technology and communications to expand the reach and effectiveness of public health information.

Funding for CDC is not keeping pace with new threats to health and safety. Tremendous opportunities to improve health and reduce health care costs go unaddressed. The gaps in the system warrant urgent remedy. It is time to adequately fund the Centers for Disease Control and Prevention. CDC needs at least $1 billion in additional funds in fiscal year 2005, and $15 billion by 2008.

- CDC's annual budget for fiscal year 2004 totaled $7.1 billion
- In FY 03, CDC provided about $5 billion to state and local health organizations, academic institutions, and other public health partners
- CDC awarded 2,700 public health grants to more than 1,800 different external organizations in FY03

Returns on Investment

Saving Lives: Cost-Effective Programs that Improve the Health and Safety of People in all Communities

CDC could achieve substantial improvements in the public's health by implementing evidence-based programs through state and local health agencies that we already know are working.

- If every state adopted the programs we know can control the onset and severity of diabetes, we could prevent 10,000 to 21,000 cases of eye diseases and blindness, 165,000 cases of kidney failure, and up to 43,000 amputations.
- If every state implemented the programs we know can reduce obesity at full capacity, we could effect a substantial reduction in the prevalence of obesity, which costs the health care system an estimated $93 billion each year, and a corresponding reduction in the incidence of associated conditions like diabetes, heart disease, osteoarthritis, and cancer.
- At full capacity, CDC's domestic HIV prevention programs could cut in half the number of new HIV infections in the US, from an estimated 40,000 per year to 20,000 per year; increase to 95% the proportion of HIV-infected people who know they are infected; and link eight out of ten HIV-infected people in the US to appropriate treatment services.

- CDC studies find that we can reduce the risk of alcohol-exposed pregnancies by 2/3 with full implementation of programs that counsel high-risk women.
- Full implementation of CDC's injury prevention work promoting restraint use among motor vehicle occupants could save up to 9,000 lives and prevent as many as 160,000 non-fatal injuries each year.
- Full implementation of CDC's occupational safety and health initiatives would reduce the direct costs of occupational injuries, which Liberty Mutual's 2002 Workplace Safety Index estimates at more than $40 billion.
- Putting a comprehensive environmental health program into every state would eliminate childhood lead poisoning, which affects more than 1 million children under the age of six, by the year 2010. Eliminating lead poisoning would reduce the prevalence of learning disabilities, behavior problems, and other serious problems associated with high blood lead levels.
- Doubling funding for CDC's antibiotic resistance surveillance and education programs to $50 million annually could significantly reduce the U.S. annual cost of treating antibiotic-resistant infections (estimated at $30 billion) as well as limit mortality and hospital stays, both of which are at least doubled for resistant strains of some organisms compared to susceptible ones.

Protecting People: Preparing for Health Threats at Home and Abroad

Investments in state-of-of the art all-hazards terrorism and emerging infections preparedness and response capabilities is vital to the security of our country and to protecting the American people. CDC has taken substantial strides to strengthen the system, yet much work remains. For example, additional funds are needed to address:

- Comprehensive regional preparedness planning and exercise, including plans for isolation and quarantine of potential infected persons.
- Further improvement of CDC and regional laboratories to provide coordinated surge capacity in times of pandemic or terrorist attack.
- A nationwide electronic data system to detect emerging threats.
- Comprehensive network of satellite communication and other communications capacity to ensure health information can reach clinicians in times of crisis.
- Additional technical support to ensure clinicians and labs around the globe can diagnose emerging infectious diseases.
- A system to link clinicians and labs via secure methods with CDC and the World Health Organization (WHO) to ensure real-time reporting of emerging threats.
- Support for sentinel sites in key regions around the globe to ensure in-country disease detection

In fiscal year 2003, CDC allocated more than $1 billion to upgrade state and local public health agencies' readiness to respond to events such as bioterrorism, infectious disease outbreaks, and other public health emergencies. Program resources target 7 critical areas:

1. Preparedness Planning and Readiness Assessment
2. Surveillance and Epidemiology
3. Laboratory Capacity—Biologic Agents
4. Laboratory Capacity—Chemical Agents
5. Health Alerting/Communications and Information Technology
6. Communicating Health Risks and Health Information Dissemination
7. Education and Training

and reporting and prompt referral to a regional laboratory service.
- Provisions for emergency transport of infectious specimens, evacuation of contagious patients, and movement of CDC's emergency response teams worldwide.

Safeguarding Public Health in the 21st Century—Staying Ahead of the Curve

In today's world, new health threats are appearing at an alarming pace. It is critical that we invest in the science and systems to stay ahead of the curve. Public health research, innovative information technology and state-of-the art facilities are essential.

- Public health research helps to define the best strategies for detecting new diseases, assessing the health status of populations, motivating healthy lifestyles at all life stages, communicating effective health promotion messages, and acquiring and disseminating information in times of crisis. Public health research can help overcome barriers that prevent people in every community from benefiting from the interventions we already know are effective.
- Additional funds are needed to build a comprehensive public health research agenda to prepare the nation for the threats of the new century.
- A comprehensive Public Health Information Network is needed to seamlessly connect people across our nation with CDC other HHS Agencies, state and local public health agencies, health-care organizations and other stakeholders. The network should serve as a backbone for emergency health alerts, distance learning, knowledge management, disease detection, reporting and surveillance functions, health tracking, secure data transmission and many other functions important to public health.
- Sustained investment in buildings and facilities improvement could allow CDC to recruit and retain world-class scientists and support them with state-of-the-art laboratory and research facilities.

The CDC Coalition is an advocacy group of more than 100 organizations collectively representing millions of public health and health care professionals, academicians and consumers. The CDC Coalition's Mission is to support a funding level for the Centers for Disease Control and Prevention that enables it to carry out its mission to protect and promote good health and to ensure that research findings are translated into effective state, local and community programs.

For more information:
www.cdccoaltion.org
202.777.2510

Next Page: Statistics taken from "The State of the CDC, Fiscal Year 2003."

Number of reported deaths, worldwide, from SARS, January–September 2003: **774** Number of SARS deaths in the United States, 2003: **0**
Number of domestic and international health investigations conducted by CDC's Epidemic Intelligence Service officers in FY 03: **77**
Number of EIS officers — the nation's disease detectives — deployed on those investigations: **116**
Americans affected by foodborne illness, annually: **76,000,000**
Estimated medical costs and lost wages due to salmonella contamination in food, yearly: **$1,000,000,000+**
Annual number of work-related fatalities in the United States: **5,500+**
Annual number of private-sector nonfatal work-related injuries and fatalities: **5,200,000+**
Estimated annual cost of occupational injuries in the United States: **$240,000,000,000+**
Annual number of alcohol-impaired driving incidents in the United States: **120,000,000**
Average frequency of injuries sustained in motor vehicle crashes involving alcohol: **every 2 minutes** Of deaths: **every 30 minutes**
Percentage decrease in fatal alcohol-related crash rates among drivers 16–20 years of age in the last 20 years: **–60%**
Top three causes of death for Americans ages 15–19, in order: **unintentional injuries, homicide, suicide**
Percentage of all deaths in this age range of each, in order: **50, 14, 12**
Americans who die each year from vaccine-preventable diseases: **48,000**
Estimated percentage of children worldwide not reached by vaccination programs: **30%**
Childhood deaths worldwide from vaccine-preventable diseases, annually: **2,400,000**
Estimated percentage of the world's 42 million people infected with HIV or living with AIDS who live in a country served by CDC's Global AIDS Program: **90%**
Proportion of the world's population infected with the bacterium that causes tuberculosis: **One-third**
Without prevention and treatment, predicted annual number of new TB infections, illnesses and deaths, worldwide, by 2020, respectively: **1,000,000,000; 200,000,000; 35,000,000**
Estimated annual percentage of U.S. health care costs attributable to chronic diseases: **75%+**
Rank of birth defects among leading causes of infant mortality in the United States: **1**
Estimated annual direct and indirect costs to the U.S. economy of the 17 most common birth defects: **$8,000,000,000+**
Percentage of American children with a developmental disability whose disability is not identified before they enter school: **50%+**
Number of Americans currently living with a disability: **54,000,000+**
Percentage decrease in the number of children attending physical education classes daily over the past 10 years: **–24%**
Percentage of overweight children and adolescents: **15%** Annual cost of diseases associated with obesity, U.S.: **$117,000,000,000**
Number of Americans who have diabetes: **18,000,000+** Direct and indirect annual costs of diabetes, United States: **$132,000,000,000**
Estimated number of individuals in the United States diagnosed with asthma during their lifetime: **31,000,000+**
Yearly hospitalizations, emergency room visits, missed school days, and days of restricted activity caused by asthma, respectively: **465,000; 1,800,000; 14,000,000; 100,000,000**
Estimated cost of asthma to the U.S. economy, per year: **$13,000,000,000+**
Rank of heart disease in leading causes of death for all Americans: **1**
Estimated cost of cardiovascular disease in the United States, 2003: **$351,000,000,000**
Percentage of deaths among women 40 years and older that could be prevented by timely mammography: **16%**
Number of Americans who die each day of some form of cancer: **1,500+**
Percentage of the American population covered by CDC's National Program of Cancer Registries, which collects information about cancer occurrence, types of cancers and their locations within the body, disease stage at diagnosis, and the kinds of treatment patients receive: **96%**
Registered voters in the United States who believe that the environment plays a significant role in their health: **90%**
Number of chemical agents in human blood and urine detected by CDC's Rapid Toxic Screen, giving medical and public health personnel rapid access to critical exposure information during chemical emergencies: **150**

Vital Statistics.

The format of this index was used with permission from Harper's Magazine.