Part II.
Goal-by-Goal Performance Measurement

Performance Measurement Legend

Budget Page Number	**B**
Healthy People	**HP**
National Health Nutrition and Examination Survey	**NHANES**
HHS Strategic Plan Goal/Objective	**HHS #**
President's Management Agenda 1. Strategic Management of Human Capital 2. Increased Competitive Sourcing 3. Improved Financial Management 4. Expanded E-government 5. Enhanced Budget and Performance Integration	**#**

Total Funding
(Dollars in Thousands)

FY 2004:	$ 87,462	Estimate
FY 2003:	$ 89,455	President's Budget
FY 2002:	$ 89,946	Enacted

II-A. Birth Defects, Developmental Disabilities Prevention, and Disabilities and Health

Goal-by-Goal Performance Measurement

Birth Defects and Developmental Disabilities Prevention

1. Performance Goal: Prevent birth defects and developmental disabilities.

Performance Measure	Targets	Actual Performance	Reference
1. Decreasing the percentage of women who report any alcohol consumption during pregnancy.	**FY 04:** 10.0 % **FY 03:** 11.5 %	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 99:** Baseline: 12.8 %	**B -** 50
2. Reduce by 1% per year the number of children born with spina bifida and anencephaly through promotion of folic acid consumption by women of reproductive age.	**FY 04:** 2% reduction **FY 03:** 1% reduction	**FY 04:** 10/2004 **FY 03:** 10/2003 **FY 02:** Baseline: 2,151	**B -** 50 **1**
3. Increase the number of states collecting community-based data on autism and other developmental disabilities.	**FY 02:** 10	**FY 02:** 13 **FY 01:** Baseline: 4	**B -** 50
4. Increase the number of CDC-sponsored studies being conducted to find causes of autism, cerebral palsy, and mental retardation.	**FY 02:** 4	**FY 02:** 7 **FY 01:** Baseline: 2	**B -** 50
5. Increase the number of American births covered by birth defects monitoring programs, which use these data to plan services for children and evaluate prevention strategies.	**FY 04:** 2,700,000 **FY 03:** 2,600,000 **FY 02:** 2,500,000	**FY 04:** 10/2004 **FY 03:** 10/2003 **FY 02:** 2,540,730 **FY 01:** 2,096,988	**B -** 50

Disabilities and Health

2. Performance Goal: Improve the health and quality of life of Americans with disabilities.

Performance Measure	Targets	Actual Performance	Reference
1. By 2010, decrease the percentage of newborns who screen positive for hearing loss but are lost to follow-up to 10%.	**FY 04:** 30% **FY 03:** 35%	**FY 04:** 10/2004 **FY 03:** 10/2003 **FY 00:** Baseline: 43.6%	**B -** 50 **5**
2. Decrease the overall health disparity experienced by people with disability by increasing the number of states that implement a health promotion program to improve the health and quality of life for persons with disability.	**FY 04:** 7 **FY 03:** 6 **FY 02:** 5	**FY 04:** 10/2004 **FY 03:** 10/2003 **FY 02:** 7 **FY 01:** Baseline: 1	**B -** 50

Program Description and Context

More than 120,000 infants are born with birth defects each year in the United States. The 17 most common birth defects cost approximately $6 billion for children born in a single year. With medical advances, more babies with serious birth defects are surviving, and many experience lifelong disabilities, illness, and social challenges. In addition, 17% of U.S. children under the age of 18 have some type of developmental disability. Children and adults living with disabilities often suffer from secondary medical, social, emotional, family, and community problems. Causes of birth defects and developmental disabilities are unknown for about 75% of cases.

In response to these public health challenges, CDC seeks to promote the health of babies, children, and adults, and enhance the potential for full, productive living. This is accomplished through conducting research to identify the causes of birth defects and developmental disabilities, designing interventions to help children develop and reach their full potential, and promoting health and well-being among people of all ages with disabilities. To facilitate this work and to measure performance over time, CDC supports monitoring programs for birth defects and developmental disabilities and is working to ensure that disability status is included in all major health surveys. However, because of the need to monitor very large numbers of births to draw conclusions about changes in rates, changes in the prevalence rates of many of these conditions often take time to detect. CDC is also collecting data on behavior associated with the risk factors for specific birth defects and developmental disabilities.

Lack of health promotion and disease prevention activities targeting individuals with disabilities has allowed these individuals to continue to experience medical, social, emotional, family, or community problems that can be prevented. Increased understanding of these preventable conditions may yield promising prevention approaches that can improve the quality of life for individuals living with disabilities. CDC is therefore focusing on preventing these secondary conditions, promoting health, and improving the quality of life among persons with disabilities. Activities include monitoring health status, conducting research on cost-effectiveness, identifying risk and protective factors, and implementing health promotion strategies that are proven effective.

Most CDC programs in these areas are relatively new and are building a foundation for future growth and development. The real impact of these programs will be felt in the next 10 years.

Program Performance Analysis

CDC has major prevention programs underway in two areas – folic acid for prevention of spina bifida and fetal alcohol syndrome (FAS) prevention. Fortification of the food supply with folic acid (a B vitamin) has made possible major reductions in the rates of serious birth defects of the spine (spina bifida) and brain (anencephaly). However, the reductions are still less than is possible if all women of reproductive age consumed adequate amounts of folic acid before and during pregnancy. CDC is working with a variety of public and private partners to promote the use of folic acid. Two efforts in particular focus on increasing knowledge and awareness of folic acid among Hispanic women and among women who have had a previous pregnancy affected by spina bifida or anencephaly. CDC has also conducted and published the results of research demonstrating that folic acid may also reduce the occurrence of other birth defects.

In terms of FAS prevention, a great deal has been accomplished since the new objective on FAS prevention was added this year. Project CHOICES–a CDC-funded FAS intervention study–is moving forward rapidly. This research effort has shown that women in certain community-based settings, such as prisons and alcohol treatment facilities, have a seven-fold increased risk for having an alcohol-exposed pregnancy. In addition, a pilot intervention study in these settings has been shown to result in significant decreases in risk. A randomized controlled trial of this intervention is now under way. Two additional epidemiologic and intervention studies related to alcohol use and pregnancy among Latina women are also being implemented. In addition, a targeted media campaign geared toward African-American women is under way in Saint Louis, campaigns are also planned in Iowa and California, and plans for developing training and educational materials for professionals in health and social service agencies, law enforcement, and school systems are also moving along smoothly. This combination of activities along with enhanced monitoring efforts should position CDC to achieve its performance targets.

CDC conducts a model birth defects monitoring program in the metropolitan Atlanta area and supports monitoring programs in 35 states through cooperative agreements. Increasing the number of births covered by such programs increases the representativeness of the data, and allows it to be used more effectively to draw programmatic and scientific conclusions. Our goals to establish prevalence rates will help us to more effectively allocate resources, develop prevention strategies, and evaluate the effectiveness of prevention efforts. Similarly, the ability to detect regional differences in prevalence rates will provide us with important clues about risk factors and causes of birth defects.

To look for causes and risk factors for birth defects, CDC has funded 7 Centers for Birth Defects Research and Prevention to conduct a large collaborative study of the causes of birth defects, the National Birth Defects Prevention Study. The Centers have developed a surveillance system to identify infants born with (case) and without (control) a selected list of birth defects. Through telephone interviews with the infant's mother, questions were asked about the pregnancy and mother's medical history, lifestyle, diet, medication use, and occupational and environmental exposures. All of the summary data from cases and controls are compared to identify any environmental and genetic factors that increase or decrease the risk of a birth defect. The database will continue to grow but it is sufficiently large now to be analyzed to look for differences in cases of specific birth defects and controls that may provide clues to causes for those birth defects. Researchers can now submit a proposal to the Centers' Data Sharing Committee to acquire access to the data. Because of the nature of research, we cannot promise when, or even if, we will find new causes of birth defects. Therefore, the performance measure is for the growth of the database and the number of researchers using the data since these are the activities that will eventually lead to discovery of causes of birth defects.

CDC efforts to monitor prevalence and to look for causes for developmental disabilities is not yet as well developed as the efforts for birth defects, but this program is now beginning to grow rapidly. We have performance measures for the growth of the program since it is too soon for the program to have an impact on health outcomes.

CDC is collaborating with the Health Resources and Services Administration (HRSA) to assist states in implementing a new program, the Early Hearing Detection and Intervention (EDHI) program. CDC's role is to help states establish programs to track the children who screen positive for hearing loss and ensure that these children get follow-up diagnostic testing and, if needed, enter early intervention programs. This tracking program can also be used to provide data for research into causes of hearing loss and for cost-benefit studies. Some states have already seen declines in the average age of diagnosis for hearing loss as a result of this program. A particular focus of our current efforts is to reduce the number of children who are lost to follow up.

Birth Defects /Disabilities and Health

CDC has, at the direction of Congress, implemented programs to improve the health and quality of life for people living with disabilities. There are 2 major types of program activities. One program supports research to identify risk and protective factors, prevention effectiveness strategies, and cost effective health promotion interventions. The other activity supports state efforts to implement health and wellness programs for people with disability. One program developed by the research program, "Living Well with a Disability," has been proven to improve health and reduce medical costs and is now being implemented in several states.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 834,047	Estimate
FY 2003:	$ 710,492	President's Budget
FY 2002:	$ 746,731	Enacted

II-B. Chronic Diseases Prevention and Health Promotion

Goal-by-Goal Performance Measurement

Early Detection of Breast and Cervical Cancer

1. Performance Goal: Increase early detection of breast and cervical cancer by building nationwide programs in breast and cervical cancer prevention, especially among high-risk, underserved women.

Performance Measure	Targets	Actual Performance	Reference
1. Excluding breast cancers diagnosed on an initial screen in the NBCCEDP, diagnose at least 70% of women aged 40 and older at the localized stage.* (* first mammogram provided through CDC's NBCCEDP)	**FY 02:** 70% **FY 01:** 69% **FY 00:** 72% **FY 99:** 71%	**FY 02:** 4/2003 **FY 01:** 64% **FY 00:** 66% **FY 99:** 70% **FY 98:** 70% **FY 95:** 70%	**B** - 57
2. Excluding invasive cervical cancers diagnosed on an initial screen in the NBCCEDP, lower the age-adjusted rate of invasive cervical cancer in women aged 20 and older.* (* first Pap test provided through CDC's NBCCEDP)	**FY 04*:** ≤15/100,000 **FY 03*:** ≤16/100,000 **FY 02:** ≤22/100,000 **FY 01:** ≤22/100,000 **FY 00:** ≤22/100,000 **FY 99:** ≤22/100,000 *FY rate based on three years of data - see text.	**FY 04*:** 4/2005 **FY 03*:** 4/2004 **FY 02:** 4/2003 **FY 01:** 14/100,000 **FY 00:** 16/100,000 **FY 99:** 19/100,000 **FY 98:** 23/100,000 **FY 95:** 26/100,000 *FY rate based on three years of data - see text.	**B** - 57

2. **Performance Goal:** Expand community-based breast and cervical cancer screening and diagnostic services to low income, medically underserved women. For women diagnosed with cancer or pre-cancer, assure access to treatment services.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of women screened. Breast: mammogram or CBE Cervical: Pap Smear	**FY 04:** 381,682 breast/ 275,000 cervical	**FY 04:** Mid- 2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** 356,395 breast/ 265,306 cervical **FY 00:** Baseline: 229,000 breast/ 247,192 cervical	**B** - 57
2. Maintain the percentage of newly enrolled women who have not received a Pap test within the past five years.	**FY 04:** 22.5% cervical	**FY 04:** 10/2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** 22.9% **FY 00:** Baseline: 21.7% cervical	**B** - 57
3. Increase the percentage of women with abnormal results* who receive a final diagnosis within 60 days of screening. *Breast - abnormal mammogram (suspicious of abnormality, highly suggestive of malignancy, or assessment incomplete) and/or abnormal CBE. *Cervical - abnormal Pap includes high grade SIL, squamous cancer, or abnormal glandular cells.	**FY 04:** 86.5% breast/ 64% cervical	**FY 04:** 10/2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** 83.6% breast/ 61.9% cervical **FY 00:** Baseline: 82.2 % breast/ 61.2 % cervical	**B** - 57
4. Increase the percentage of women with cancer who start treatment within 60 days of diagnosis.	**FY 04:** 95% breast/ 92% cervical	**FY 04:** 10/2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** 93.1% breast/ 88.5% cervical **FY 00:** Baseline: 94% breast/ 88% cervical	**B -** 57

Breast and Cervical Cancer Continued

Performance Measure	Targets	Actual Performance	Reference
5. <u>Cervical</u>: Increase the percentage of women with precancerous lesions* who start treatment within 90 days of diagnosis *includes CIN II, CIN III, and CIS	**FY 04:** 94%	**FY 04:** 10/2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** 91.7% **FY 00:** Baseline: 92.4%	**B** - 57

Tobacco Use Prevention

Performance Goal: Reduce cigarette smoking among youth.

Performance Measure	Targets	Actual Performance	Reference
Reduce the percentage of youth (grades 9-12) who smoke.	**FY 03:** 26.5%** **FY 01:** 34.2%* **FY 99:** 36.4%	**FY 03:** 5/2004 **FY 01:** 28.5% **FY 99:** 34.8% **FY 97:** 36.4% **FY 95:** 34.8% **FY 93:** 30.5% **FY 91:** 27.5%	**B** - 57 **1**

*YRBSS data released in June 2000 indicated achievement of the FY 01 target, and CDC revised the teen smoking projections.

Community-Based Prevention Research

Performance Goal: Support prevention research to develop sustainable and transferable community-based behavioral interventions.

Performance Measure	Targets	Actual Performance	Reference
1. Ensure that at least one PRC in each DHHS region establishes research priorities and develops interventions in collaboration with a constituent community.	**FY 02:** At least 1 research project per PRC that reflects community-based participatory research **FY 01:** At least 1 research project per PRC that reflects community-based participatory research **FY 00:** At least 1 research project per PRC that reflects community-based participatory research **FY 99:** 1 PRC in each region	**FY 02:** 6/2003 **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 98 :** >24	**B -** 57
2. Ensure that PRCs work toward closing the gap between research findings and public health practices.	**FY 02:** At least 1 research project per PRC aimed at closing the gap between research and practice.	**FY 02:** 6/2003 **FY 01:** 1 **FY 00:** Baseline: 1	**B** - 57

Heart Disease and Stroke

1. **Performance Goal:** Increase the capacity of state cardiovascular health programs to address prevention of cardiovascular disease at the community level.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of states with five of the seven heart disease and stroke prevention capacities.	**FY 02:** 20 states **FY 01:** 15 states **FY 00:** 11 states **FY 99:** 8 states	**FY 02:** 6/2003 **FY 01:** Exceeded/18 **FY 00**: Exceeded/15 **FY 99:** Exceeded/11	**B** - 57

2. **Performance Goal:** Reduce death and disability due to heart disease and stroke and eliminate disparities.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce the proportion of heart disease and stroke deaths that occur before transport to emergency services.	**FY 04:** Heart Disease Deaths 45% Stroke Deaths 45%	**FY 04:** 6/2004 **FY 99:** Baseline: Heart Disease Deaths 47% Stroke Deaths 48%	**B** - 57 **1**
2. Reduce the prevalence of uncontrolled high blood pressure (BP≥140/90), among patients with hypertension, especially among populations at high risk, in states that collaborate with community health centers.	**FY 04:** 45%	**FY 04:** 6/2004 **FY 02:** Baseline: 50%	**B -** 57 **1**

Diabetes

Performance Goal: Increase the capacity of state diabetes control programs to address the prevention of diabetes and its complications at the community level.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the percentage of diabetes control programs that adopt, promote, and implement guidelines for improving the quality of care for persons with diabetes.	**FY 02:** 100% **FY 01:** 100% **FY 00:** 100%	**FY 02:** 100% achieved **FY 01:** 100% achieved **FY 00:** 85% **FY 99:** 70% **FY 98:** 60%	**B -** 57
2. Conduct studies on translating research findings into clinical and public health practice, and publish results in peer-reviewed journals.	**FY 02:** 8 studies **FY 01:** 8 studies **FY 00:** 7 studies **FY 99:** 5 studies	**FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** 4 studies	**B -** 57
3. For states receiving CDC funding for diabetes control programs (DPCPs), increase the percentage of persons with diabetes who receive annual eye and foot exams. * Refers to basic implementation states (formerly comprehensive) only.	**FY 04:** Eye/72%; foot/62% (Increase baseline by 10%) **FY 03*:** Eye/72%; foot/62% (Increase baseline by 10%) **FY 02*:** Eye/72%; foot/62% (Increase baseline by 10%) **FY 01*:** Eye/72%; foot/62% (Increase baseline by 10%) **FY 00*:** Eye/72%; foot/62% (Increase baseline by 10%)	**FY 04:** 10/2004 **FY 03*:** 10/2004 **FY 02*:** 10/2003 **FY 01*:** Eye/69.8%; foot/65.3% **FY 00*:** Eye/69.0%; foot/62.4% **FY 99*:** Eye/67.3%; foot/57.8% **FY 98*:** Eye/64.7%; foot/56.5% **FY 97*:** Eye/65.6%; foot/56.6% **FY 96*:** Baseline: Eye/61.7%; foot/52.4%	**B -** 57 **1**

Diabetes Continued

Performance Measure	Targets	Actual Performance	Reference
4. Increase the percentage of DPCPs with one capacity in all key areas (e.g. surveillance, partnerships, communication networks, assessment of quality care, public awareness).	**FY 02:** 100% **FY 01:** 100% **FY 00:** At least 85% **FY 99:** At least 75%	**FY 02:** 80% - 100% **FY 01:** 80% - 100% **FY 00:** 75% - 100% **FY 99:** 69% - 100% **FY 94:** 36%	**B** - 57
5. For states receiving CDC funding for diabetes prevention and control programs (DPCPs), increase the percentage of persons with diabetes who receive at least two A1c measures per year.	**FY 04:** 72.5%	**FY 04:** 10/2005 **FY 01:** 63.3% **FY 00:** Baseline: 62.0%	**B** - 57 **1**
6. Increase the number of DPCPs that promote health system approaches to identifying persons who are at high risk for developing diabetes (e.g. obese and/or impaired glucose metabolism). *New initiative	**FY 04:** 5	**FY 04:** 10/2005 **FY 02:** Baseline: 0	**B -** 57
7. By 2009, decrease by 25% the number of people with pre-diabetes who advance to diabetes among states with pre-diabetes programs. *New initiative	**FY 04:** Establish baseline	**FY 04:** 10/2005	**B** - 57 **1**

Arthritis

Performance Goal: Increase the capacity of state arthritis programs to address the prevention of arthritis and its complications at the community level.

Performance Measure	Targets	Actual Performance	Reference
1. Enhance state-based arthritis surveillance by increasing the number of states using BRFSS modules on arthritis and quality of life.	**FY 02:** 28 states **FY 01:** 35 states	**FY 02:** 29/arthritis; 22/quality of life **FY 01:** 50/arthritis; 15/quality of life **FY 00:** 36/arthritis; 19/quality of life **FY 99:** 8	**B -** 57
2. Increase the number of states addressing arthritis at the capacity building level.	**FY 02:** 8 states **FY 01:** 8 states	**FY 02:** 8/Achieved **FY 01:** 8/Achieved **FY 00:** 8	**B -** 57

National Program of Cancer Registries

Performance Goal: Improve the quality of state-based cancer registries.

Performance Measure	Targets	Actual Performance	Reference
Increase the percentage of states funded by CDC's NPCR that report at least 95% of unduplicated, expected cases of reportable cancer in state residents in a diagnosis year.	**FY 02:** 80% **FY 01:** 75% **FY 00:** 60% **FY 99:** 30%	**FY 02:** 6/2003 **FY 01:** 65% **FY 00:** Exceeded/70% **FY 99:** Exceeded/60% **FY 98:** 29% **FY 97:** 17%	**B -** 57 **4**

HIV Prevention among School-Aged Youth

Performance Goal: Reduce the percentage of HIV/AIDS-related risk behaviors among school-aged youth through dissemination of HIV prevention education programs.

Performance Measure	Targets	Actual Performance	Reference
1. Achieve and maintain the percentage of high school students who are taught about HIV/AIDS prevention in school at 90% or greater.	**FY 03:** 90% or more **FY 01:** 90% or more **FY 99:** 90% or more	**FY 03:** 7/2004 **FY 01:** 89% **FY 99:** Achieved/91% **FY 97:** 92% **FY 95:** 86%	**B** - 57
2. Increase the proportion of adolescents (grades 9-12) who abstain from sexual intercourse or use condoms if currently sexually active.	All adolescents **FY 03:** 89% **FY 01:** 89% Black or African-Americans adolescents **FY 03:** 87% **FY 01:** 87% Hispanic or Latino adolescents **FY 03:** 88% **FY 01:** 88%	All adolescents **FY 03:** 7/2004 **FY 01:** 86% **FY 99:** 85% **FY 97:** 85% **FY 95:** 83% (YRBSS) Black or African-Americans adolescents **FY 03:** 7/2004 **FY 01:** 85% **FY 99:** 83% **FY 97:** 80% **FY 95:** 82% (YRBSS) Hispanic or Latino adolescents **FY 03:** 7/2004 **FY 01:** 84% **FY 99:** 84% **FY 97:** 82% **FY 95:** 77% (YRBSS)	**B** - 57

Monitoring Risk Behaviors (Behavioral Risk Factor Surveillance System)

Performance Goal: Help states monitor the prevalence of major behavioral risks associated with premature morbidity and mortality in adults to improve the planning, implementation, and evaluation of health promotion and disease prevention programs.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of states participating in the BRFSS that complete 4,000 telephone interviews per year.	**FY 02:** 18 states **FY 01:** 18 states	**FY 02:** 4/2003 **FY 01:** 18 Achieved **FY 00:** 18 **FY 99:** 9	**B -** 57

Nutrition, Physical Activity and Obesity

Performance Goal: Decrease levels of obesity or reduce the rate of growth of obesity in communities reached through nutrition and physical activity interventions.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of nutrition and physical activity interventions that are implemented and evaluated in funded states.	**FY 04:** 12 interventions	**FY 04:** 12/2005 **FY 02:** 0 interventions	**B** - 57

Program Descriptions, Context, and Analyses

Early Detection of Breast and Cervical Cancer
Program Descriptions and Context

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP) was created by Congress with the passage of the Breast and Cervical Cancer Prevention Mortality Act in 1990. This legislation authorized CDC to establish the first national chronic disease program to increase access to and use of breast and cervical cancer screening services for low-income women who are uninsured or under-insured.

Breast cancer is the most commonly diagnosed nondermatologic cancer and the second leading cause of cancer deaths among women in the United States. In 2002, it was estimated that 203,500 new cases and 39,600 deaths would occur. Cancer of the uterine cervix would claim the lives of 4,400 women, and 12,900 new cases would be diagnosed. Research suggests that precancerous conditions and invasive cervical cancer are more likely to be found in women who have not ever been screened or have not been screened in the past five years and that women over 50 years of age are at increased risk of breast cancer. However, virtually all deaths from cervical cancer and more than 30% of deaths from breast cancer among women 50 years and older could be prevented through the widespread use of Papanicolaou (Pap) tests and screening mammography.

CDC's NBCCEDP provides cancer screening for under-served women, particularly low-income women, older women, and members of racial/ethnic minorities. This program creates the foundation for an aggressive response to this health problem and ensures the delivery of quality screening services. CDC supports activities at the state, tribal, territorial and national levels in the following areas: screening; tracking, follow-up and case management; quality assurance; public and professional education; evaluation and surveillance; and partnership development. For women screened through the NBCCEDP with abnormal screening results and/or a diagnosis of cancer, assuring timely access to diagnostic and treatment services is critical. Although the NBCCEDP does not provide funding for treatment services, the Breast and Cervical Cancer Prevention and Treatment Act of 2000 ensures Medicaid services for women screened through the program if they are a U.S. citizen or a qualified alien.

Early Detection of Breast and Cervical Cancer Program Performance Analysis

Through September 2001, the NBCCEDP has provided more than 3.6 million screening tests to over 1.4 million women. The program has diagnosed almost 12,000 breast cancers, 48,170 precancerous cervical lesions, and over 800 cases of invasive cervical cancer.

The first GPRA measure relates to diagnosing at least 70% of women aged 40 and older at the localized stage for breast cancer. In 2001, 62% of women in this group were diagnosed at the localized stage; this is below our target of 69% for 2001. Based on a recent study, problems were identified in grantee programs accurately reporting stage data. Studies have been initiated this year to better understand the problem including a linkage study among seven states that will compare our NBCCEDP stage data with cancer registries' data and a validation study to examine the reliability of the overall NBCCEDP MDE data. Due to our concerns about data quality, CDC will drop this measure after reporting in 2002. Based on results of the studies noted above, corrective actions will be implemented.

CDC continues to meet the established target for an age-adjusted rate of invasive cervical cancer in women aged 20 and older to not more than 22 per 100,000 Pap tests provided. For fiscal year 2001, the age-adjusted rate was 14 per 100,000.

CDC will make a slight revision to this measure beginning in FY 2003. Currently, the measure is calculated as a cumulative rate. A cumulative rate is used because the number of annual invasive cervical cancers is small and a rate based on a single year cannot be calculated with statistical stability. However, as the program has matured and more Pap tests have been provided, we can now assess this rate for a more recent time frame to provide more relevant data. Beginning in FY 2003, the rate will be based on a rolling three-year time frame rather than cumulative data (for instance, FY 2003 rate will reflect data for the time period 2001-2003). Using a three-year period assures statistical stability in the rate. CDC will continue to report data through FY 2002 based on the cumulative rate and existing target of less than or equal to 22 per 100,000 Pap tests. CDC has adjusted targets for FY 2003 and 2004 based on the revised time period and to reflect more ambitious goals.

CDC continues to increase the number of women screened through the NBCCEDP program. In fiscal year 2001,CDC screened 356,395 women for breast cancer and 265,306 for cervical cancer. CDC has included unduplicated women who receive either a mammogram and/or clinical breast exam (CBE) in the total number of screenings for breast cancer. CDC has adjusted the target for 2004 for breast cancer screening to 381,682 because the earlier target did not include women who have received a CBE.

CDC encourages programs to reach underserved women for screening, including women who are rarely or never screened for cervical cancer. CDC defines this as women who have not had a Pap test within the past five years. These women are often referred to as "hard to reach." In FY 2001, 22.9% of newly enrolled women were rarely or never screened, just exceeding our target of 22.5%. Because the measure relates only to newly enrolled women, projects must enroll NEW rarely and never screened women each year to meet this target. Therefore, the target for this measure will be quite challenging over time for our programs to meet because they must continually tap into communities of hard to reach women to identify those who are rarely and never screened. It is important to maintain an annual target at a level of 22.5%.

A parallel measure for breast screening is not included as a GPRA measure because CDC encourages programs to focus outreach for breast cancer screening to women aged 50 and older. This population represents those women at greatest risk for breast cancer. In addition, our priority has been to encourage re-screening among those women.

As for timely access to diagnostic services, 84% of women with abnormal breast cancer screening results and 62% of women with abnormal cervical cancer screening results received a final diagnosis within 60 days. The lower percentage for cervical cancer screening reflects challenges facing our programs including delays in Pap results reporting from laboratories, long waiting periods for appointments for diagnostic services, and difficulties in tracking "harder to reach" women. These figures for FY 2001 represent slight increases over FY 2000 figures. We have adjusted our FY 04 targets upward from 85% to 86.5% for breast screening and from 63% to 64% for cervical screening.

Ninety-three percent of women diagnosed with breast cancer and 89% of women diagnosed with invasive cervical cancer initiated treatment within 60 days while 92% of women with precancerous lesions initiated treatment within 90 days. These data have remained steady during FY 2000 and FY 2001. CDC has adjusted the cervical cancer FY 04 target upward from 90% to 92% and treatment of precancerous cervical cancer from 93.5% to 94%. In regard to these timeliness-related measures, relatively small percentage increases are proposed as targets. For the measures reflecting treatment initiation, our current performance is over 90%. CDC believes that, realistically, programs will likely not achieve results over 94-95% for these measures due to conditions outside of their control. For the timeliness measures related to time between abnormal results and final diagnosis, similar small increases are proposed. As noted above, several challenges confront programs in relation to this measure. These include delays in receiving lab results for Pap testing, waiting periods for diagnostic services, and challenges in tracking "hard to reach" women.

CDC continues to support activities to improve the quality and effectiveness of NBCCEDP. To that end, CDC is examining: 1) improved use of geographic information system (GIS) for targeting women for screening; 2) the reliability of the NBCCEDP surveillance data; 3) the impact of a case management policy on the program, including timeliness measures; and 4) the impact of the new Breast and Cervical Cancer Prevention and Treatment Act of 2000. CDC is confident that continued improvement in screening utilization will contribute to reducing cancer death rates and eliminating disparities in cancer death rates among women nationwide.

Tobacco Use Prevention
Program Description and Context

Tobacco use is the leading preventable cause of disability and death, directly contributing to the deaths of more than 440,000 Americans each year and costing more than $75 billion annually in direct medical costs. Every day, more than 5,000 young people try cigarettes for the first time. Of today's children, 6.4 million can be expected to die prematurely if current smoking trends continue. CDC is committed to reducing tobacco use, with an ultimate goal of reducing the burden of tobacco-attributable disease. Comprehensive state programs, including school-based programs and local outreach efforts, have been shown to be effective in reducing the prevalence of tobacco use.

Through the National Tobacco Control Program (NTCP), CDC funds all 50 states, 7 territories, and the District of Columbia. The purpose of the NTCP is to build and maintain tobacco control programs within state and territorial health departments for a coordinated national program to reduce the health and economic burden of tobacco use. The NTCP has four goals: 1) preventing initiation of tobacco use among young people, 2) promoting cessation of tobacco use among youth and adults, 3) protecting the public from exposure to secondhand smoke, and 4) identifying and eliminating disparities in tobacco use among populations groups.

Each of these goals relates directly to the 21 Healthy People tobacco objectives. *Best Practices for Comprehensive Tobacco Control Programs* is a guidance document that translates the Healthy People objectives into specific, science-based program components, creating the structure for states to build upon. These components include:

- Community Programs to Reduce Tobacco Use;
- Chronic Disease Programs to Reduce the Burden of Tobacco-Related Diseases;
- School Programs;
- Enforcement;
- Statewide Programs
- Counter-Marketing;
- Cessation Programs;
- Surveillance and Evaluation; and
- Administration and Management.

As a result of the 1998 settlement agreement with the tobacco industry, states now have additional resources available to devote to tobacco control. As of April 12 2002, of the 48 states and the District of Columbia for which data were available, 42 states have invested $637.2 million in FY 2002 from settlement revenues, and 3 states have invested an additional $123.9 million from cigarette excise tax revenue. Another $13.6 million in general revenues was invested by 9 states. State investment in tobacco control totals $774.7 million in FY 2002. National funders of state tobacco control programs include federal agencies and private foundations. National funders, including CDC, continue to play an important role in state-level tobacco control efforts, with investments totaling $89.8 million in FY 2002. In Tennessee and

the District of Columbia, funds from national sources are the only funds being invested in tobacco control. In 12 states, funding from national sources accounted for 50% or more of the funds being invested in that state. For the nation as a whole, combined resources from state and national sources for state-level tobacco control efforts in FY 2002 total $861.9 million, representing $3.16 per capita. However, only at least 6 states are meeting or exceeding the *Best Practices* lower-estimate funding recommendation. Two states (Arizona and Massachusetts) were not analyzed because their state budgets had not been finalized at the time of this report.

Tobacco Use Prevention
Program Performance Analysis

Between 1991 and 1997, cigarette use among youth (grades 9-12) increased from 27.5% to 36.4%, although the rate of increase in youth smoking slowed from 1995 - 1997. Data released from CDC's Youth Risk Behavior Survey in May 2002 indicate that the percentage of youth (grades 9-12) who smoke then dropped slightly to 34.8% in 1999, and dropped more significantly to 28.5% in 2001. Success in reducing the youth smoking rate is attributed to restrictions on the tobacco industry, increased state funding for tobacco control programs, technical assistance from the federal government to determine effective tobacco-control strategies, and coordination of tobacco-control efforts among public agencies and non-governmental organizations. Therefore, for FY 03, CDC has revised its target from 32.3% to 26.5%.

Community-Based Prevention Research
Program Description and Context

The Prevention Research Centers were first authorized by Congress in 1984. CDC's Health Promotion and Disease Prevention Research Center (PRC) program integrates the resources of 26 academic centers to develop and implement community-based prevention research interventions to remediate the nation's primary causes of death and disability. Each center, selected through a competitive process, conducts at least one core research project within an under served population that has a disproportionately large burden of death and disability. The centers work with groups as diverse as women, adolescents, and the elderly, and in areas as geographically distinct as Harlem, Appalachia, and the Southwest.

Expertise from the university-based PRCs is made available to health agencies, community-based organizations, and national nonprofit organizations. The link between university research and grassroots organizations helps promote the application of findings and results in practical, cost-effective, and innovative community programs. CDC's PRC program's collaborative efforts are highlighted in an article entitled "Observations from the CDC: Community Prevention Study (CPS): Contributions to Women's Health and Prevention Research." NIH's multi-year Women's Health Initiative (WHI) is one of the largest U.S. studies of women's health. A review of the WHI CPS's contributions indicates that this CDC-NIH collaboration is a model for advancing the research agenda in women's health especially because it helped accelerate action to promote women's health in diverse populations. Seven of the 26 PRCs also created models for preventing heart disease, diabetes, and the consequences of osteoporosis; detecting breast and cervical cancer; and evaluating hormone replacement therapy, and dietary and vitamin supplement use in women.

The PRCs' future is shaped by two main endeavors: evaluation and expanded collaboration. A project is now underway to evaluate the CDC's PRC program. Through the evaluation project, the centers and their partners are developing models to describe the centers' collective attributes, designing templates for documenting the effects of the centers' work, and establishing criteria for judging how well aims were achieved. This evaluation plan will be used to improve program operations and meet the accountability requirements of the program's diverse local and national stakeholders. Initiatives are also underway to increase collaboration with federal and non-federal partners. For example the PRCs are developing ways to strengthen partnerships with the Association of State and Territorial Chronic Disease Directors and the Association of State and Territorial Directors of Health Promotion and Public Health Education. The PRCs also continue to encourage community partners throughout the country to contribute to prevention research.

Community-Based Prevention Research
Program Performance Analysis

CDC achieved the FY 2001 target of community-based, participatory research projects in every PRC. Based on a review of PRC demonstration projects and continuation applications, CDC believes that the PRCs will continue to conduct research projects that reflect the needs of their communities. This performance measure will be eliminated effective FY 2002.

CDC achieved the FY 2001 target of ensuring that at least one research project per PRC is aimed at closing the gap between research and practice. In an effort to move from process oriented measures, this measure will be eliminated effective FY 2003. However, CDC will continue to monitor progress in this area internally.

Heart Disease and Stroke
Program Description and Context

Cardiovascular disease (CVD)--primarily heart disease and stroke--is the nation's number-one killer of men and women across all racial and ethnic groups. More than 40% of deaths in the United States–900,000 each year–are directly attributable to heart disease and stroke, and CVD is the leading cause of death in all states. Associated annual costs exceed $329 billion. Major disparities exist among population groups, with a disproportionate burden of death and disability from heart disease and stroke in racial/ethnic populations such as African-Americans. The number of people with CVD is likely to increase as the population ages, particularly in populations with uncontrolled high blood pressure, a major risk factor for both heart disease and stroke. While high blood pressure cannot be cured, levels can be controlled with appropriate treatment. Among hypertensive patients, the prevalence of uncontrolled high blood pressure is 50%: there is evidence that many high risk patients do not receive medication. Treatments exist for both heart attack and stroke, but prompt emergency treatment within a few hours after the onset of symptoms is key to reducing disability and death. Almost 47% of heart disease deaths and 48% of stroke deaths occur before emergency services arrive; many of these deaths could be reduced if the public recognized symptoms and responded quickly by seeking emergency care.

Scarce public health resources have prohibited the development of an effective nationwide cardiovascular health (CVH) program. Such a program is needed that promotes health systems policy changes that encourage the appropriate treatment of high blood pressure, high cholesterol levels, stroke, and heart disease. CDC partners and collaborates with national organizations and other federal agencies to increase public awareness of symptoms for both heart attack and stroke, to promote standard of care guidelines among health care providers for the treatment of high blood pressure, high cholesterol, heart disease, and stroke, and to educate patients to have a more informed role in treatment management.

CDC is building a nationwide CVH state program to place an additional focus on stroke treatment and prevention, which includes preventing the major risk factor for stroke--uncontrolled high blood pressure. Because there is little state and national data to monitor improvements in heart disease, stroke, high blood pressure, and high cholesterol, CDC will be developing registries and new surveillance systems to increase the surveillance capacity of state programs. CDC's crosscutting approach to the prevention of both heart disease and stroke includes collaboration with other CDC Divisions on the prevention of behavioral risk factors such as tobacco use, physical inactivity, and poor nutrition, and on the control of diabetes.

In the first four years, the CVH state program funded states to focus on policy and environmental actions to increase nutrition and physical activity and promote cardiovascular health. This focus which has been expanded to emphasize the prevention and treatment of high blood pressure, high cholesterol, heart disease, and stroke requires new performance measures to evaluate each state's ability to promote changes in the public, high risk patients, health care providers, and health care systems about prevention and treatment of these outcomes. New performance measures for FY 04 will include: (1) decreasing the proportion of heart disease and stroke deaths that occur pre-transport through national and state-level health communication programs about symptom awareness and the need to call 9-1-1 for emergency transport; and (2) reducing the prevalence of uncontrolled high blood pressure through a collaboration between states and their Federally Qualified Community Health Centers, which provide health care to underserved, uninsured, and minority populations.

Heart Disease and Stroke
Program Performance Analysis

CDC has expanded its efforts to protect Americans from cardiovascular disease. In FY 1998 (the program's first year of funding), CDC funded 8 states, 7 of which achieved five of the seven capacities. In FY 1999, it funded a total of 11 states and all 11 states met at least five capacities. In FY 2000, CDC funded a total of 25 and a total of 15 met the performance measure. In FY 2001, CDC funded an additional 3 states, bring the number of states to 28, with 22 receiving capacity building funds and 6 receiving basic implementation funds. CDC exceeded the 2001 target with 18 states achieving five of the sever heart disease and stroke prevention capacities. FY 2002 performance data will be available June, 2003. In FY 03 this capacity performance measure will be eliminated because new goals for performance measures have been added that measure the impact or outcomes of the program (see Program Description and Context section above).

States are already documenting prevention achievements. Intra- and inter-state stroke networks and coalitions have been developed. States will begin assessing public awareness of stroke and heart disease symptoms at the state level in 2003. Health communications tools to enhance signs and symptom campaigns are being developed to assist the states with this critical piece to reducing the proportion of heart attack and stroke deaths which occur before transport to emergency.

Diabetes

Program Description and Context

Over 17 million Americans suffer from diabetes, and the number of new cases is increasing steadily – by approximately 1million per year. Diabetes is now the sixth leading cause of death in the United States and the primary cause of new cases of blindness, non-traumatic amputations, and kidney failure in adults. CDC's National Diabetes Control Program conducts health promotion and disease prevention activities to improve the quality of care health systems provide to persons with diabetes. The program activities support and promote preventive health care services proven to be effective in reducing the onset and progression of diabetes-specific complications. The diabetes program is a multifaceted, science-driven public health program that monitors the extent of the diabetes problem in the U.S. through surveillance; translates research findings into clinical and public health practice; conducts state-based diabetes control programs; and, provides information to increase public awareness about how to control diabetes. CDC places a priority on reaching high-risk and disproportionally affected populations.

CDC funds diabetes prevention and control programs (DPCPs) in 16 states at a basic implementation level and 34 states at the Capacity building level. Basic implementation DPCPs are expected to expand the basic core activities to function throughout the state. Basic implementation DPCPs are demonstrating measurable success. For example, over a 2-year period, the New York DPCP, which collaborates with 14 regional community coalitions and 3 diabetes centers of excellence, reduced hospitalization rates by 35% and decreased lower-extremity amputations rates by 39%. In Michigan, a long-standing DPCP has produced a 45% lower rate of hospitalizations, a 31% lower rate of lower-extremity amputations, and a 27% lower death rate for participants.

Program Performance Analysis

CDC's current GPRA measures were initially established to assess the progress state DPCPs were making in meeting capacity building standards (that is establishing the ability to perform key elements essential to implementing population-based approaches to diabetes control). CDC also focused on the progress the state DPCPs were making in influencing quality care practices and how well states funded at the basic implementation level were doing in improving preventive care practices. As a result, 5 of the 7 CDC diabetes GPRA measures are directly related to state DPCP activities. These measures focused on process and enabled CDC to gauge DPCP's progress through significant developmental stages. The remaining measure was designed to capture the CDC's progress in conducting translational research and disseminating the findings. CDC has also added GPRA measures which relate to diabetes primary prevention activities.

CDC's GPRA reports demonstrate that state DPCPs have made significant progress over the years since the measures were established. Already, they have achieved the established targets for two measures. The third measure assessing increases in foot and eye exams, is one which states are making equally good progress. While the foot exam goal has been achieved, there is still work to be done to reach the eye exam goal. Only the 16 states funded at the basic implementation level are included in the analysis. Starting with the actual performance for FY 04, CDC will analyze data from both basic implementation and capacity building DPCPs. A brief summary of the accomplishments and progress follows:

Performance Measure 1 - Goal Achieved: By the end of FY 2002, 100% of the DPCPs had continued to adopt, promote, and implement guidelines for improving the quality of care for persons with diabetes. Applying the tools provided by diabetes research to influence positive changes in the preventive care practices undertaken in health systems is essential to the task of reducing diabetes. In reaching this critical goal, CDC will continue its work with states to sustain this effort.

Performance Measure 2 - Goal Achieved: CDC also conducted 8 prevention research studies to understand how to apply diabetes scientific findings in clinical and public health practice. For example, the Translating Research into Action for Diabetes (TRIAD) study is examining the influence of managed care structure on process and outcomes of diabetes care. TRIAD is important because it is the first multi-center study of diabetes quality of care, quality of life and factors affecting them. Ultimately, CDC will develop interventions to overcome the identified barriers.

Performance Measure 3: In FY 2002, Behavioral Risk Factor Surveillance System data from 13 of 16 basic implementation DPCPs showed that CDC had achieved the performance target for increasing the percentage of person with diabetes who receive annual foot exams. Diabetes is the leading cause of non-traumatic lower extremity amputations, yet over half of the over 80,000 amputations that occur annually could be prevented through appropriate preventive care and treatment. Although the data showed an increase in eye exams, CDC is still striving to achieve the target for eye exams in persons with diabetes. The estimates calculated for eye and foot exams are only among the 16 basic implementation states, and among these states, some of them are missing data each year. CDC usually has data on 10-13 of the 16 states each year. States conduct the BRFSS telephone survey annually, however not all of the states choose to include the Diabetes Module each year. It is possible that with all 16 states reporting, the target would be achieved. CDC will encourage all states to use the Diabetes Module regularly. CDC will also continue to work with the state DCPs to influence the preventive care practices of health systems and to inform providers and persons with diabetes about the importance of receiving annual eye exams to discover and treat diabetes-related eye disease in the earliest stages.

Performance Measure 4 - Goal Achieved: CDC's last performance measure monitoring the percentage of DPCPs that achieve core capacities presents a reporting challenge because the level of achievement for the several core capacities identified in the measure varies among the 58 DPCPs. Nevertheless, reports indicate an increase in FY 2001 and FY 2002 in this area. All states have established the necessary capacities in surveillance and partnership networks; however development of the capacity to establish and sustain communication networks, to assess quality of care, and to increase public awareness varies among the DPCPs.

CDC proposes to phase out measures where the goals were achieved. CDC's final report on Performance Measures 1, 2, and 4 will occur in 2002. CDC is introducing one new measure to capture funded states progress in increasing A1c testing rates to the recommended level. The A1c (A-one-C) test–-short for hemoglobin A1c–-measures blood glucose (sugar) control over the last 3 months. The suggested target for people with diabetes is 7%; however, many people with diabetes have levels of 9% or higher. Reducing blood glucose levels by just 1% among people with diabetes reduces their risk for microvascular complications (eye, kidney, and nerve disease) by 40%. These two measures reflect the evolution of CDC's National Diabetes Program focus from process outcomes to intermediate impact outcomes.

Effective FY 04, CDC is proposing to increase the number of DPCPs that promote health system approaches to identifying persons who are at high risk for developing diabetes (e.g. obese and/or impaired glucose metabolism). In addition, CDC seeks to establish the ability to track the number of people with pre-diabetes and their measures of nutrition, physical activity, and obesity. This will provide comprehensive data for program planning.

In 2001, exciting results were announced from two landmark clinical trials on the prevention of type 2 diabetes in high risk adults. Both studies, one conducted in Finland and a major clinical trial from the U.S., the Diabetes Prevention Program, demonstrated that sustained lifestyle change, including modest weight loss and physical activity, resulted in striking and substantial reduction in the incidence of diabetes among very high risk adults with impaired glucose tolerance or pre-diabetes, most of whom were obese. Estimates are that there are nearly 17 million adults with pre-diabetes. Because of the rapid increases observed in both obesity and diabetes, it is critical that CDC translate the new science of primary prevention into widespread public health action now.

CDC's FY 04 initiative focuses on pre-diabetes and obesity by supporting pilot programs to prevent obesity and the onset of diabetes and implementing interventions for physical activity and healthful diets in states and communities. These programs will target populations at highest risk for developing type 2 diabetes, especially racial and ethnic minority populations.

Arthritis

Program Description and Context

Congress established the CDC arthritis program in 1999 following the development of the National Arthritis Action Plan (NAA) - a landmark plan released by the Arthritis Foundation, CDC, and the Association of State and Territorial Health Officials.

Arthritis is a large and growing problem. It affects an estimated 70 million persons - including nearly one of every three adults in the United States – making it one of the most common diseases in the United States. The nation's leading cause of disability, arthritis limits daily activities for more than 7 million people. By 2020, an estimated 60 million persons will be affected and more than 11 million persons will have some limitation because of arthritis. The costs of arthritis treatment and lost productivity because of arthritis are enormous – totaling $65 billion.

The overall goal of CDC's arthritis program is to improve the quality of life of persons affected by arthritis by decreasing pain and disability and improving physical, psychosocial, and work functions. One of the ways the CDC Arthritis Program works toward this goal is by increasing self management attitudes and behaviors (including physical activity) among persons with arthritis. CDC's multifaceted approach for translating research findings into public health practice emphasizes: 1) support to states to develop/enhance public health programs that address arthritis, 2) activities to monitor the burden and impact of arthritis, 3) activities to increase public awareness and appropriate self management, and 4)efforts to improve the quality of care. CDC has been successful in helping states to monitor the burden of arthritis and its impact in their populations using the BRFSS.

Program Performance Analysis

In FY 2002, 36 state health departments will receive CDC funding for arthritis programs (28 states funded at $120,000 and 8 states at $320,000). Support of state arthritis programs is the CDC Arthritis Program's largest budget item. Since 1999 when states were first funded, CDC has been successful in helping states monitor the burden of arthritis and its impact in their populations using the BRFSS and in developing the public health foundation to address arthritis. CDC has strived to increase the number of states that use arthritis and quality of life measures on the BRFSS. Beginning in 2003 and continuing every other year, the arthritis questions will be included in the core questions of the BRFSS. CDC has achieved the second performance measure of increasing the number of states (8) that address arthritis at the capacity building level. Therefore, effective 2003, these two performance measures will be deleted. CDC will continue to have internal measures to monitor the performance of the arthritis program.

National Program of Cancer Registries
Program Description and Context

Cancer is the second leading cause of death among Americans. In 2002, an estimated 555,500 Americans will die of cancer, and approximately 1.3 million new cases of cancer will be diagnosed. The United States spends an estimated $156.7 billion annually on cancer care, including healthcare expenditures and lost productivity from illness and death. CDC's National Program of Cancer Registries (NPCR) is a fundamental component of CDC's state-based cancer control strategy. Passed by Congress in 1992, the Cancer Registries Amendment Act, Public Law 102-515, authorized CDC to implement a program to provide funds and guidance to supplement state health department efforts toward establishing or enhancing central cancer registries. Currently, CDC supports registries in 45 states, the District of Columbia, and 3 territories, representing 96% of the U.S. population. CDC also provides training in data collection, analysis, interpretation, and quality assurance for completeness, timeliness, and quality.

NPCR has made it possible for the vast majority of states to collect a standard set of data elements on all cancer cases for each year. Collection of complete data is critical to the program. Cancer registries help states report on cancer trends, assess program impact, identify cancer clusters, and respond to public inquiries and reports of suspected increased cancer occurrence. The proposed performance measure is therefore the most critical to the eventual success and usefulness of the program.

To maximize the benefits of state-based cancer registries, CDC implemented the NPCR-Cancer Surveillance System (NPCR-CSS) for receiving, assessing, enhancing, aggregating, and disseminating data from NPCR programs. This system of cancer statistics has provided valuable feedback to help state registries improve the quality and usefulness of their data. By summarizing regional- and national-level data, NPCR will facilitate the study of rare cancers, cancer in children and racial and ethnic minority populations, and occupation-related cancer.

Program Performance Analysis

CDC supports 45 state registry programs and the District of Columbia: 44 for basic implementation of established central registries and 2 for capacity building. According to January 2002 data (for cancer cases diagnosed in 1999), 65% (30 of 46) of NPCR states were at least 95% complete within 24 months of the close of the diagnosis year. The Fiscal Year 2001 target of 75% represents a 15% increase from 60% in Fiscal Year 2000. Although this ambitious target was not met, more than 76% of NPCR states were between 90% and 95% complete within 24 months of the close of the diagnosis year. NPCR staff are working closely with those states that have failed to meet program standards or achieve North American Association of Central Cancer Registries (NAACCR) certification, including an assessment of the individual standard the state may have failed to achieve. Project officers work with each

state to develop a plan of action to address compliance with the standard and monitor progress toward achieving both NPCR program standards and NAACCR certification. In an effort to eliminate process oriented measures, CDC will eliminate this measure effective 2003. CDC will continue to measure program performance internally.

HIV Prevention among School-Aged Youth
Program Description and Context

In the United States, HIV-related death has the greatest impact on young and middle-aged adults, particularly racial and ethnic minorities. It has been estimated that at least half of all new HIV infections in the United States are among people under 25 years of age, and the majority of young people are infected sexually. In 1998, HIV was the fifth leading cause of death for Americans between the ages of 25 and 44. Many of these young adults likely were infected in their teens and twenties.

Every school day, 53 million young people attend nearly 117,000 schools across our nation. Because of the size and accessibility of this population, school health programs are one of the most efficient means of preventing new HIV infections among young people. Scientific evaluations of school-based HIV prevention programs have shown that these programs are cost-effective and decrease sexual risk behaviors among high school students. These same studies show that the programs do not increase sexual activity among students.

CDC employs four strategies to reduce risk behavior among youth. First, CDC conducts surveillance activities to monitor six categories of priority health risk behaviors, including sexual behaviors and school health policies and programs among all 50 states. These activities are primarily conducted through CDC's Youth Risk Behavior Surveillance System (YRBSS) and School Health Policies and Programs Study (SHPPS). Second, through research synthesis, CDC identifies best practices and disseminates this information through guidelines development, research registries, and a system of identifying programs that have shown credible evidence of effectiveness. CDC's adolescent and school health programs synthesize and apply research to assist adolescent and school health researchers and to inform practitioners in the field responsible for implementing school health policies and programs. Third, CDC funds several programs to enable its constituents to implement adolescent and school health programs. These programs provide young people with the skills and knowledge needed to avoid infection with HIV, and other sexually transmitted diseases. And fourth, CDC provides technical assistance to state and local education agencies to help them evaluate the quality and effectiveness of their school health policies, teacher training, and curricula. CDC also conducts evaluation research to test effectiveness of school-based interventions designed to prevent HIV/STD infection and other serious health problems.

CDC funds 56 state and territorial education agencies, 18 local education agencies, and 41 national non-governmental organizations to implement HIV prevention education programs in schools. Performance measures for this aspect of CDC's HIV/AIDS prevention program monitor students' exposure to HIV/AIDS prevention education in schools and youth behaviors that affect their risk of becoming HIV infected.

HIV Prevention among School-Aged Youth
Program Performance Analysis

In FY 2000, CDC decided to replace two previous HIV performance measures (i.e., never having intercourse and using condoms if sexually active) with the a single measure, the leading health indicator on responsible sexual behavior from HP 2010: "Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if sexually active." This measure is also consistent with language in the draft CDC HIV Prevention Plan, which states "our nation's efforts should increase the proportion of adolescents who consistently engage in behaviors that reduce risk of HIV acquisition or transmission." The 1999 YRBSS data indicate that the proportion of adolescents (grades 9-12) who abstained from sexual intercourse or used condoms if currently sexually active was 85%. Because this measure was recently developed and adopted for use (May 2000), a FY 1999 target was never established.

To address the issue of health disparities among ethnic groups, two additional measures were added to address black/African-American and Hispanic/Latino populations. Surveillance summaries demonstrate that these two groups are disproportionately affected by HIV/AIDS and consequently warrant special attention. By including these two new measures, CDC acknowledges the importance of the HP 2010 goal to eliminate health disparities. In addition, the inclusion of the measures complements CDC's Racial and Ethnic Approaches to Community Health (Reach 2010) Demonstration Program.

For FY 2001, CDC continued to implement its national HIV prevention among school-aged youth program, reaching 53 million young people in 117,000 schools across our nation. CDC also implemented the 2001 National Youth Risk Behavior Survey (YRBS) and published data from this survey in the MMWR on June 28, 2002.

Data from the 2001 national YRBS demonstrate that 89% of high school students have been taught HIV/AIDS prevention in school (FY 01 target = 90% or higher). The 2001 data indicate that this measure has remained stable since 1997 (92%) and that the small fluctuations in 1999 (91%) and in 2001 (89%) are not significantly different from time to time when considering the confidence intervals associated these sample data. CDC will continue to analyze these data and evaluate the policies, programs, and strategies in place to continuously improve the effectiveness of school-based HIV/AIDS prevention education. This measure will remain because it is highly relevant and important to prevention efforts.

Data from the 2001 national YRBS also demonstrate that 86% of all adolescents (FY 01 target = 89%), 85% of Black or African-American adolescents (FY 01 target =87%), and 84% of Hispanic or Latino adolescents (FY 01 target = 88%) abstained from sexual intercourse or used condoms if sexually active. As described above, these data also reflect that these measures have remained stable since 1999, after demonstrating increases from 1991 to 1997. CDC will continue to review, analyze, and discuss the possible reasons for not reaching the FY 01 targets, in consultation with our funded states, cities, and national non-governmental organizations, and will make programmatic adjustments as needed to improve program effectiveness required to reach the stated targets.

Data to report on FY 2003 GPRA performance measures will be available in July 2004 when the 2003 national YRBS data will be released.

Monitoring Risk Behaviors (Behavioral Risk Factor Surveillance System)

Program Description and Context

The Behavioral Risk Factor Surveillance System (BRFSS) is a unique, state-based telephone survey through which states routinely collect information on behavioral risk factors and demographics. Active in all 50 states, 3 territories, and the District of Columbia, the BRFSS continues to be the primary source of information (for many states it is the only source) on risk behaviors that contribute to the leading causes of death among U.S. adults. For almost 20 years, the BRFSS has served as the backbone of surveillance for chronic disease prevention and health promotion. CDC provides funding, consults with state staff, edits and processes the data from each state's monthly interviews, and returns prevalence information and reports to states for their use. Nationwide, the BRFSS conducts about 200,000 interviews per year.

States use BRFSS data to make program decisions, target resources, monitor and evaluate program performance, educate the public, and alert public officials to health risks and disease prevalence. More than 60% of states use BRFSS data to set health objectives, prepare planning documents, and design disease prevention programs. Nearly two-thirds of states use BRFSS data to support legislative efforts (e.g., tobacco-related legislation). Although the BRFSS was designed to produce state-level estimates, data have been used in research studies and combined across states, for example, to estimate the extent of alcohol and tobacco use among pregnant women. Alabama used BRFSS data to support legislation restricting indoor smoking and mandating seatbelt use; Maryland determined priorities for Healthy Maryland 2010; and Michigan developed, implemented, and evaluated programs to reduce the risk of CVD. After the bomb explosion in Oklahoma City, health department staff analyzed questions on stress, nightmares, and feelings of hopelessness to better address the psychological impact of the disaster. In Arkansas, BRFSS data assessing the correlation between physical activity and hypertension among black women have been used to target special intervention and education programs.

Monitoring Risk Behaviors (Behavioral Risk Factor Surveillance System)
Program Performance Analysis

Meaningful estimates from BRFSS data depend on an adequate sample size of respondents. At present, sample sizes in states range from approximately 1,700 to approximately 7,500. A sample size of 4,000 completed interviews per state per year is adequate to measure progress towards state goals and Healthy People (HP) 2010 objectives and to monitor prevalence among certain population groups in terms of race, ethnicity, and age. A sample size of 4,000 permits better identification of geographic and demographic variations in health risk behaviors which programs can use to target interventions. In FY 2001, 18 states had a sample size of at least 4,000 completed interviews, thus achieving its target. FY 2002 data will be available April, 2003.

Whereas CDC will strive to increase the number of states that complete 4,000 telephone interviews per year, CDC will eliminate this measure effective FY 2003. BRFSS will remain a vital data and reference source for CDC, State and local health departments, public health professionals and others. Detailed information regarding the BRFSS will remain in Appendix D: Verification and Validation.

Nutrition, Physical Activity and Obesity
Program Description and Context

Physical inactivity and unhealthy eating contribute to obesity, cancer, cardiovascular disease, and diabetes. Together, they are responsible for at least 300,000 preventable deaths each year.

Following dramatic increases in overweight and obesity among U.S. adults between 1987 and 1999, obesity has reached epidemic proportions; more than 60% of adults are now overweight or obese. Moreover, the epidemic is not limited to adults: the percentage of young people who are overweight has more than doubled in the last 30 years. Between 10% and 15% of Americans aged 6-17 years are considered overweight. People who are overweight are at increased risk for heart disease, high blood pressure, diabetes, arthritis-related disabilities, and some cancers. The estimated annual cost of obesity in the United States is over $100 billion. Promoting regular physical activity and healthy eating and creating an environment that supports these behaviors are essential to reducing the epidemic of obesity.

Despite the proven benefits of physical activity, more than 60% of American adults do not engage in levels of physical activity necessary to provide health benefits. More than 25% are not active at all in their leisure time. Activity decreases with age and is less common among women than men and among those with lower income and less education. Insufficient physical activity is not limited to adults. More than a third of young people in grades 9-12 do not regularly engage in vigorous physical activity. Daily participation rates in high school physical education classes dropped 42% in 1991 and 29% in 1999.

We now know that good nutrition lowers the risk for many chronic diseases, including obesity, heart disease, stroke, some types of cancer, diabetes, and osteoporosis. A considerable gap remains between recommended dietary patterns and what Americans actually eat. Only about one-fourth of U.S. adults eat the recommended five or more servings of fruits and vegetables each day. Poor eating habits are often established during childhood. More than 60% of young people eat too much fat, and less than 20% eat the recommended five or more servings of fruits and vegetables each day.

Initial CDC program activities have focused on building state capacity to develop state nutrition and physical activity programs. The purpose of the national program is to prevent and reduce obesity and chronic diseases by supporting states in the development and implementation of nutrition and physical activity interventions, particularly through population-based strategies such as policy-level change, physical environmental approaches that promote physical activity and healthy eating, and the social marketing planning process. Since FY 2000, twelve states health departments have been funded to build capacity. These states are (a) developing plans for targeted populations; (b) developing appropriate internal and external partnerships to carry out the plans; and (c) developing, conducting, and evaluating nutrition and physical activity intervention projects in the populations. When states establish core capacity, they will develop and implement large-scale nutrition and physical activity programs. Implementation programs will: 1) expand effective pilot interventions to include a full range of interventions in communities, 2) expand partnerships with other Health Department units and external partners to maximize impacts of the statewide program, and 3) implement all aspects of the state plan and review and update the plan periodically. To date, no states receive implementation funding.

CDC has devised a logic model that describes the national program. This model is used as a tool to guide the evaluation of the program and the development of the program performance measures. Since this is a relatively new program, the performance measures currently are process and impact objectives rather than final health outcome objectives. The ultimate goal of this program is to result in positive health outcomes of improved dietary intake, improved physical activity levels, decreased obesity, and decreased chronic diseases. The program will achieve these long-term outcomes through effective community interventions developed using evidence-based, scientific resources, state and community policies and environmental supports, and increased and sustainable resources from states and other partners mobilized and targeted for nutrition and physical activity. The performance measures will assess the number of interventions for nutrition and physical activity that are implemented and evaluated in funded states.

Nutrition, Physical Activity and Obesity
Program Performance Analysis

During the first two years of the program, the 12 funded states are developing statewide action plans and initiating and evaluating interventions. State partners include public health organizations, food producers and marketers, medical and education providers, parks and recreation, transportation, urban planning, local media, and communities. All twelve states are implementing and evaluating nutrition and physical activity health promotion interventions to address overweight and chronic disease in specific populations. Results will include a number of refined programs, ready for adoption by other states and communities. States are also funded to improve their capacity to address the physical activity, nutrition and obesity prevention goals in part by working across programs such as diabetes, cardiovascular disease, asthma, school health, the Supplemental Food Program for Women, Infants and Children and other programs which benefit from overweight prevention and control.

Evidence based programs that work to promote healthy eating, activity, healthy weight and breastfeeding are identified and disseminated through CDC's efforts to train the public health work force. The Task Force on Community Preventive Services published six effective interventions to promote physical activity. An evidence based chapter on effective obesity prevention for the Guide on Community Preventive Services will be published in 2003. Other existing documents that elaborate strategic plans include: *Guidelines for Comprehensive Programs to Promote Healthy Eating and Physical Activity, National Blueprint for Increasing Physical Activity Among Adults age 50 and Older, Promoting Better Health for Young People Through Physical Activity and Sports,* and the *HHS Blueprint for Action on Breastfeeding.* These resources help CDC educate and train state and local officials to implement these guidelines in states and communities.

Information collected from high-quality surveillance systems and periodic surveys directs national efforts to solve the obesity epidemic. CDC is improving and expanding systems for monitoring vegetable and fruit consumption, physical activity levels, and the behavioral determinants of eating and physical activity, such as hours of television viewing.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 150,227	Estimate
FY 2003:	$ 152,417	President's Budget
FY 2002:	$ 153,397	Enacted

II-C. Environmental Health

Goal-by-Goal Performance Measurement
Biomonitoring

1. Performance Goal: Develop laboratory capacity to monitor human exposure to chemicals in the environment.

Performance Measure	Targets	Actual Performance	Reference
Develop laboratory methods to measure human exposure to previously undetected environmental chemicals.	**FY 04:** 14 new chemicals **FY 03:** 13 new chemicals **FY 02:** 13 new chemicals **FY 01:** 8 new chemicals **FY 00:** 8 new chemicals **FY 99:** 8 new chemicals	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Baseline: 200	**B** - 76 **HP** - 113

2. Performance Goal: Periodically determine the number of Americans exposed to environmental chemicals and the degree of their exposure.

Performance Measure	Targets	Actual Performance	Reference
Test a sample of Americans for exposure to an increasing number of priority environmental chemicals.	**FY 04:** 100 chemicals; report on the 100 chemicals from the previous year.	**FY 04:** 9/2004	**B** - 76 **HP** - 113
	FY 03: 100 chemicals; report on the 75 chemicals from the previous year.	**FY 03:** 9/2003	
	FY 02: 75 chemicals; report on the 50 chemicals from the previous year.	**FY 02:** Achieved	
	FY 01: 50 chemicals; report on the 27 chemicals from the previous year.	**FY 01:** Achieved: released *Report* on 27 chemicals. Completed testing of 50 chemicals for next *Report*	
	FY 00: 25 chemicals	**FY 00:** Exceeded/27	

Newborn Screening Quality Assurance

Performance Goal: Ensure the quality of laboratory technologies to quickly and accurately detect inherited disorders in newborns.

Performance Measure	Target	Actual Performance	Reference
Increase the number of disorders covered by the Newborn Screening Quality Assurance Program	**FY 02:** 32 disorders **FY 01:** 15 disorders	**FY 02:** 32 disorders **FY 01:** 15 disorders **FY 00:** 15 (baseline)	**B -** 76

Asthma

Performance Goal: Reduce the burden of asthma.

Performance Measure	Targets	Actual Performance	Reference
Reduce hospitalizations due to asthma for states that have implemented a comprehensive asthma control program.	**FY 04:** 10% reduction **FY 02:** Baseline* Age — Rate/10,000 < 5 yrs — 60.9 5-64 yrs — 13.8 ≥65 yrs — 19.3	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 3/2003	**B -** 76 **HP** - 24 **1**

*Data source: Healthy People 2010. Actual performance is determined the following year due to data collection and analysis lag.

Childhood Lead Poisoning

Performance Goal: Reduce the burden of lead poisoning in children.

Performance Measure	Targets	Actual Performance	Reference
Reduce the number of children with elevated blood lead levels.*****	**FY 03:** 35% reduction **FY 99:** 25% reduction	**FY 03:** Estimated 09/2006 **FY 99:** 300,000*	**B -** 76 **NHANES**

*Based on the NHANES data, it is estimated that in the United States approximately 300,000 children under six years old have blood lead levels (BLLs) equal to or greater than 10 micrograms per deciliter (mcg/dL). However, the number of children in the sample with elevated BLLs is relatively small and the statistical sampling error must be considered. Using the estimated sampling error, it is most likely (95 percent confidence) that the number of children with elevated BLLs is between 185,700 and 640,000. As more years of NHANES data become available, the estimated number can be reported with more precision.

Genomics and Disease Prevention

Performance Goal: Increase the availability of useful information on specific DNA-based tests to public health professionals and the public at large.

Performance Measure	Targets	Actual Performance	Reference
Use data which define the utility of DNA-based tests to educate public health professionals and the public at large on the usefulness of the tests in fighting disease. (Note: We rephrased this measure to make it more comprehensible.)	**FY 04:** 7 tests **FY 03:** 6 tests **FY 02:** 4 tests **FY 01:** 3 tests	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Baseline: 0	**B** - 76

Environmental Health Tracking and Infrastructure

Performance Goal: Increase the capacity of state and local health departments to deliver environmental health services in their communities.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of state and local health departments provided with consultation and/or technical assistance to address environmental health service issues.	**FY 04:** 27 sites **FY 03:** 25 sites **FY 02:** 17 sites **FY 01:** 5 sites	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Exceeded/25 **FY 01:** Exceeded/14 **FY 00:** Baseline: 0	**B** - 76

Program Descriptions, Context, and Analyses

Biomonitoring
Program Description and Context

To protect the public from death or disease resulting from exposure to environmental chemicals, CDC's Environmental Health Laboratory assesses human exposure using biomonitoring (i.e., the direct measurement of environmental chemicals in human samples, such as blood or urine). Biomonitoring measures the amount of a chemical that actually gets into people and is a more accurate determination of this dose than estimating it from levels of chemicals measured in air, water, soil, or food. CDC uses its biomonitoring expertise to assess the exposure of the U.S. population to chemicals, to assist state and local public health officials evaluating exposure of populations or individuals to chemicals, and to conduct studies that determine what levels of exposure are safe and what levels cause death or disease. CDC is also working with states to transfer biomonitoring technology to public health laboratories. Biomonitoring exposure information is critical to determine health risk resulting from an exposure situation – ranging from a high exposure of significant health risk warranting immediate attention to a background level exposure of minimal health significance needing no public health response. Specifically, biomonitoring —

- Markedly diminishes confusion about exposure and promotes appropriate management of health-related emergencies.
- Reduces misclassification of dangerous health situations as safe and vice versa.
- Substantially improves the allocation of financial and human resources to productive intervention and remediation efforts.
- Determines and tracks the efficacy of interventions aimed at reducing exposure and disease.
- Identifies at-risk population groups, such as children, that have high susceptibility to disease caused by exposure to environmental chemicals.
- Provides unique assessment of individual and population exposure in health studies that determine how much exposure causes disease or death.

Program Performance Analysis

CDC scientists have been measuring levels of chemicals in people for at least 25 years for national studies of population exposures and for studies to examine exposures of specific populations and have contributed significantly to the body of scientific knowledge about the levels and types of environmental chemicals that affect people's health. Key factors influencing the results of CDC's National Biomonitoring Program stem from innovations that have increased the sensitivity, specificity, accuracy, precision, and ruggedness of analytical methods as well as from the ability to measure many chemicals using one method and to increase the number of samples that can be analyzed per day.

- CDC can now measure at least 230 environmental chemicals in blood or urine.
- CDC uses state-of-the art analytical methods to measure the presence of these chemicals at very low levels, such as parts per trillion or parts per quadrillion, and typically measures these levels in less than a teaspoon of blood or urine.
- CDC issued the first *National Report on Human Exposure to Environmental Chemicals*, which provides data on the general U.S. population's exposure to environmental chemicals.
- The first *Report* provided information about levels of 27 chemicals; the second *Report* will contain information on at least 75 chemicals, including new data on the 27 chemicals in the first *Report*. Subsequent *Reports* will provide detailed assessments of exposure levels among different population groups defined by age, sex, race or ethnicity, urban or rural residence, education level, income, and other characteristics.
- CDC has extended is biomonitoring efforts to state public health laboratories by awarding 25 planning grants totaling $5 million to 22 individual states and three consortia comprising 11states to develop, implement, and expand state-based monitoring programs. Plans are currently under CDC review.
- CDC uses its biomonitoring expertise to investigate unusual exposures and to study the causes of disease and birth defects. For instance, CDC participated in an exposure investigation of New York City firefighters involved in rescue operations after terrorist attacks on the World Trade Center. CDC scientists also analyzed blood and urine samples for an investigation of a cluster of cases of childhood leukemia in Nevada.
- CDC is using biomonitoring as the foundation of its response to chemical terrorism by developing rapid analytical methods to identify potential chemical terrorism agents and is also transferring selected methods to designated state public health laboratories.

All analytical methods developed must be certified under the Clinical Laboratory Improvements Act of 1988 (CLIA). (Appendix D)

Newborn Screening Quality Assurance

Although the Newborn Quality Assurance (QA) Program will continue beyond the current fiscal year, the GPRA measure will be dropped as the program has continuously met the target of 32 disorders.

Asthma
Program Description and Context

In 1999, an estimated 26.7 million people in the United States reported that they had been diagnosed with asthma sometime in their lives. An estimated 10.5 million reported an attack in the previous 12 months. Although millions of Americans are currently experiencing symptoms from asthma, the good news is asthma can be controlled with proper medical and environmental management. People with asthma are encouraged to work with their doctors to develop a personalized asthma management plan, follow that plan, and then monitor the plan's effectiveness. The cornerstones of asthma management are taking asthma medication and avoiding contact with environmental "triggers" of asthma, including cockroaches, dust mites, furry pets, mold, tobacco smoke, and certain chemicals.

Recent statistics show that the death rate for asthma has plateaued and may be decreasing, and hospitalization rates have steadily decreased since the mid-1980s; however, severe asthma continues to affect a disproportionate number of poor, minority, and inner-city populations. Emergency department visit rates have continued to increase slowly for African-Americans and emergency room visit, hospitalization and death rates are three times higher for African Americans than for whites. Emergency department visits and hospitalizations are an indication that the individuals' asthma is not being adequately managed.

Asthma is also a significant cause of disability among children. Approximately 5 million children have asthma. From 1994 through 1996, an estimated 14 million missed school days were attributed to asthma each year, and 23.6% of 5- to 17-year-olds with asthma reported that their activities had been limited by asthma.

In 1999, CDC began developing its National Asthma Control Program with funding of $1.2 million. The program supports the goals and objectives of Healthy People 2010 for asthma and is based on the following three public health principles:

Tracking: collecting and analyzing data on an ongoing basis to understand when, where, and in whom asthma occurs;
Interventions: assuring that scientific information is translated into public health practices and programs to reduce the burden of asthma;
Partnerships: making sure that all stakeholders have the opportunity to be involved in developing, implementing, and evaluating local asthma control programs.

Building state-based asthma control programs is an important component of CDC's asthma control strategy. Ultimately, State Health Department activities will reduce the number of deaths, hospitalizations, emergency department visits, school or workdays missed, and limitations on activity due to asthma.

Asthma
Program Performance Analysis

CDC aims to reduce hospitalizations due to asthma through supporting states in building comprehensive asthma control programs that include building and using surveillance systems to track asthma and using that data to provide interventions to people most in need, thereby preventing hospitalizations and other adverse health effects of asthma. The only way that states will know where and how to target their intervention efforts and to assess whether they are reducing hospitalizations and other adverse effects due to asthma is through data provided by strong state-based surveillance systems. In fiscal year 2002, CDC funded 99 sites, including states, universities, hospitals, and non-profits, for asthma control activities. CDC funded 23 states and the District of Columbia to develop asthma control plans and 6 states to implement their final asthma control program plans. CDC also funded six urban school districts and six national non-governmental organizations to support and address asthma control. In fiscal year 2003, CDC will increase its support for state-based programs to: 1) improve the state's ability to track asthma, implement science-based asthma interventions, and build partnerships related to asthma control; and 2) improve the ability of schools to prevent asthma attacks, resulting in a decrease in hospitalizations. CDC remains committed to supporting state-based programs but will discontinue reporting on the number of states funded for core asthma programs.

Childhood Lead Poisoning
Program Description and Context

Lead poisoning is a major environmental health threat to children. The National Academy of Sciences has reported that even relatively low levels of lead exposure - 10 micrograms per deciliter (µg/dl) - are harmful and are associated with decreased intelligence, behavior problems, and other physical problems. During the past two decades, there has been a dramatic reduction of the prevalence of lead poisoning in young children in the U.S. This reduction was due to a number of different strategies, including the removal of lead from gasoline and new house paint and the implementation of prevention programs by CDC, Housing and Urban Development, and the Environmental Protection Agency.

Despite these successes, however, childhood lead poisoning remains a serious problem. CDC estimates that as many as 600,000 young children still have elevated blood lead levels. Children from low-income backgrounds, especially racial and ethnic minorities living in substandard, poorly maintained housing built before 1960, are at highest risk for lead poisoning. Nearly 22% of non-Hispanic black children living in homes built before 1946 have elevated blood lead levels, compared with <2% in non-Hispanic whites living in newer homes. Medicaid-enrolled children account for 60% of all children with elevated blood lead levels. Recent data show that only 19% of Medicaid-enrolled children have been screened for lead poisoning.

In response to recent findings, CDC has shifted the emphasis from universal screening of all U.S. children to targeted screening of high-risk children. Policy recommendations and funding guidelines have been revised accordingly. The CDC-supported federal Advisory Committee on Childhood Lead Poisoning Prevention developed recommendations for screening and improved case management. CDC also expanded its use of geographic information system (GIS) software using U.S. census data on income, race, and age of housing stock to identify high-risk geographic areas. CDC works closely with CMS to increase screening of Medicaid-enrolled children and is expanding technical assistance, consultation, and training to support state and local health officials and their prevention programs.

Childhood Lead Poisoning
Program Performance Analysis

CDC provides national leadership, technical assistance, and surveillance to prevent and reduce childhood lead poisoning. NHANES (1999) data indicate that approximately 300,000 children (aged 1-5 years) have blood lead levels of 10 micrograms/deciliter or greater. These data represent an almost 30% reduction in the number of children with lead poisoning in the United States as compared to 890,000 children in 1991-1994. This decrease is largely due to cooperative efforts between State and Local Childhood Lead Poisoning Prevention Programs and CDC, HUD and EPA. Activities include: (1) increased awareness of lead poisoning within high risk communities; (2) improved screening among the most at-risk populations; (3) implementation and enforcement of protective policies at the federal, state, and local levels; and (4) increased access to lead hazard reduction resources in some communities.

Genomics and Disease Prevention
Program Description And Context

CDC integrates discoveries in human genetics into disease prevention strategies as outlined in the 1997 CDC strategic plan, *Translating Advances in Human Genetics into Public Health Action*, as well as the update to the 1997 plan, *Genomics and Public Health at CDC: 2002-2006.* CDC promotes public health genomic knowledge and capacity through: 1) state- and community-level health assessment and planning, 2) public health research on gene-environment interactions along with the evaluation of genetic testing, 3)development of an interactive genomics and health information system to provide current updates on the latest knowledge, 4) a national program for implementing effective and ethical disease interventions through university-based Centers of Genomics and Public Health, and 5) communication and training strategies for providing relevant genetics information to various audiences. These programs are collaborative efforts among public, academic, and private organizations that strengthen crosscutting research, training, laboratory, and preventive health programs. By integrating genomics into existing public health programs, CDC and its partners are expanding opportunities to target interventions to persons with specific genetic variants that reduce their risk of disease and disability.

Genomics and Disease Prevention
Program Performance Analysis

CDC actively promotes the integration of human genetics into public health prevention activities. CDC's genetics activities in this pursuit can be broken down into two facets: integrating scientific advances in genetics into public health action and developing state public health capacity for such integration. CDC has started assessing DNA-based tests for clinical and public health utility, and the goal of four tests was achieved during FY 2002. CDC will continue to provide technical assistance to states to integrate genetics into public health, however, the measure of state programs funded will be discontinued.

Environmental Health Tracking and Infrastructure
Program Description and Context

There is no doubt that the environment plays a role in human development and health. Some links between environmental exposures and disease such as asbestos and lung cancer or lead and impaired cognitive development in children are well documented. Others, such as a possible link between disinfectant byproducts and bladder cancer are suspected, but still not proven. In 1988, The Institute of Medicine in its report *The Future of Public Health* noted that the removal of environmental health authority from public health agencies has led to fragmented responsibility, lack of coordination, and inadequate attention to the health dimensions of environmental problems. In January 2001, the Pew Environmental Health Commission, chaired by former Senator Lowell Weicker, Jr., issued a report entitled *America's Environmental Health Gap: Why the Country Needs a Nationwide Health Tracking Network*. In this report, the Commission documented that the existing environmental health system was inadequate and fragmented and recommended a "Nationwide Health Tracking Network for disease and exposures."

To achieve a national network, CDC will have to develop environmental health capacity and comprehensive tracking programs in all 50 states. An incremental approach will be necessary to develop a standards-based environmental public health tracking network that allows direct electronic data reporting and linkage within and across health effect, exposure, and hazard data and can interoperate with other public health systems. The key building blocks necessary for effective tracking programs at the national, state, and local level include: 1) collaboration and partnerships between traditional health and environmental focused entities (private and public); 2) local capacity and infrastructure in terms of personnel expertise and the latest technology; 3) appropriate, timely and complete data; and 4) mechanisms for timely dissemination of information to those responsible for prevention and control.

Environmental Health Tracking and Infrastructure
Program Performance Analysis

In FY 02, CDC took a series of steps toward development of a standards-based environmental public health network:

- Stakeholder input was solicited through a series of working group meetings. Four workgroups comprised of representatives from about 30 organizations including state and local public health and environment agencies, the EPA and other relevant federal agencies, academia, and other non-governmental organizations were convened to develop recommendations for shaping of an environmental public health tracking program. The workgroups addressed the following issues: (1) organization and management; (2) data technology and tracking methodology; (3) tracking system inventory and needs assessment; and (4) translation, policy, and public health action.

- A request for assistance (RFA - cooperative agreement) was developed to make funding available to up to 15 states and local health departments to move toward development of statewide/local systems that link hazard, exposure, and health effects data for those health conditions that are identified in the literature has having possible environmental links and that are priorities for a state. The RFA will be announced June 2002.

- The objectives of these projects are to: build environmental public health capacity; increase collaboration between environmental and health agencies; identify and evaluate existing data systems; build partnerships with non-governmental organizations and communities; develop model systems that link data and can be generalizable to other states/localities; and demonstrate the utility of these model systems in planning public health actions.

Regarding its goal of developing core capacity in environmental health services, CDC has begun the process of developing such capacity by providing relevant services to and expanding collaborations with its constituents. CDC achieved and exceeded its goal of assisting 5 sites in FY 2001 and has changed the targets for FY 2002 and FY 2003 from 7 states to 17 and 25 states, respectively. The FY 2001 goal of 5 sites was greatly exceeded due to unexpected funding from discretionary sources; FY 2002 appropriations included increased funding for tracking and capacity development. Internal, as well as external, requests increased dramatically following the 9-11-01 occurrences and anthrax outbreaks in New York City and Washington, D.C. By virtue of our interactions with State and Local Health departments in FY 2001 and FY 2002, the knowledge that expertise in Environmental Health Services exists at CDC and the numbers of requested consultations thus increased. The goals were exceeded largely due to the prolonged state of heightened awareness and preparedness on the part of CDC staff.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 76,158	Estimate
FY 2003:	$ 78,133	President's Budget
FY 2002:	$ 80,156	Enacted

II-D. Epidemic Services and Response
Goal-by-Goal Performance Measurement

1. Performance Goal: Maximize the distribution and use of scientific information and prevention messages through modern communication technology.

Performance Measure	Targets	Actual Performance	Reference
1. Based on established criteria continue to publish the Morbidity and Mortality Weekly Reports (MMWR) series of publications including Reports and Recommendations, Surveillance Summaries, and the Annual Summary to communicate major public health events to the media, public policy makers and health professionals through multiple media channels -- print, television, radio, interactive World Wide Web.	**MMWR Issues Published:** **FY 02:** 86 **FY 01:** 86 **FY 00:** 81 **FY 99:** 77	**MMWR Issues Published:** **FY 02:** 86 issues **FY 01:** 86 issues **FY 00:** 81 issues **FY 99:** 77 issues published and available on the CDC Internet site at: http://www2.cdc.gov/mmwr/.	**B -** 84 # 1
2. The MMWR will refine communication efforts through a Center-wide communications plan to provide a framework for current activities and maximize communicating public health messages through print and the World Wide Web.	**FY 02:** Prepare final report on the implementation and enhancements of the CDC communications plan. **FY 01:** Plan implemented and enhanced based on CDC communications assessment.	**FY 02:** Implemented the *MMWR* redesign in January 2002. **FY 01:** Plan is completed and implementation is under way. The MMWR is undergoing redesign and will reflect the changes in February 2002.	**B** - 84

2. **Performance Goal:** Encourage state health departments to develop efficient and comprehensive public health information and surveillance systems by promoting the use of Internet and by focusing on development of standards for communications and data elements.

Performance Measure	Targets	Actual Performance	Reference
1. The number of states with a plan for a comprehensive information network will be increased.	**FY 01:** 20 states **FY 99:** 18 states	**FY 01:** In FY 2001, CDC made the transition from the National Notifiable Disease Surveillance System (NNDSS) to the National Electronic Disease Surveillance System (NEDSS). Responsibility for NEDSS implementation lies within the Information Resource Management Office (IRMO) in the CDC Office of the Director. Program staff who formerly supported NDIS are currently supporting IMO's effort to implement NESS. **FY 99:** 33 states **FY 97:** 14 states.	**B -** 84  # 5
2. The number of states who have implemented a comprehensive information network will be increased.	**FY 01:** 9 states **FY 99:** 2 states	**FY 01:** In FY 2001, CDC made the transition from the National Notifiable Disease Surveillance System (NDIS) to the National Electronic Disease Surveillance System (NESS). Responsibility for NESS implementation lies within the Information Resource Management Office (IMO) in the CDC Office of the Director. Program staff who formerly supported NDIS are currently supporting IMO's effort to implement NESS. **FY 99:** 4 states **FY 98:** 0 states	**B** - 84  # 5

(*Note: Beginning in FY 1999, this initiative was expanded to address the need of major metropolitan areas for health-sector dedicated communications systems to support detection and response to terrorist events with support from the Public Health Response to Terrorism/Bioterrorism activity (see section II. -Q., Bioterrorism.)

3. **Performance Goal:** Efficiently respond to the needs of our public health partners through the provision of epidemiologic assistance.

Performance Measure	Targets	Actual Performance	Reference
Based upon established criterial for participation, Epidemic Intelligence Service (EIS) officers will respond to at least 95% of the requests for epidemic assistance from domestic and international partners	**EIS Response to Requests:** **FY 02:** At least 95% **FY 01:** At least 95% **FY 00:** At least 95% **FY 99:** At least 95%	**EIS Response to Requests:** **FY 02:** 99% **FY 01:** 99% **FY 00:** 99% **FY 99:** 99%	**B** - 84

4. **Performance Goal:** Build expertise within CIOs to conduct prevention effectiveness studies of public health interventions.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of professional prevention effectiveness staff and fellows.	**FY 02:** 43 **FY 01:** 43 **FY 00:** 40 **FY 99:** 32	**FY 02:** 43 **FY 01:** 43 **FY 00:** 32 **FY 99:** 24	**B -** 84
2. Increase the number of staff in CIOs who can use prevention effectiveness methods. (Measured by the number of staff completing the annual Prevention Effectiveness Course).	**Increase in Staff:** **FY 02:** By 110 persons **FY 01:** By 110 persons **FY 00:** By 80 persons **FY 99:** By 80 persons	**Increase in Staff:** **FY 02:** 136 persons **FY 01:** 110 persons **FY 00:** 80 persons **FY 99:** 80 persons **FY 98:** 60 persons	**B -** 84
3. Increase the number of prevention effectiveness studies conducted by CIOs.	**Increase in Studies:** **FY 02:** By 60 studies **FY 01:** By 60 studies **FY 00:** By 60 studies **FY 99:** By 60 studies	**Increase in Studies:** **FY 02:** 82 studies **FY 01:** 60 studies **FY 00:** 60 studies **FY 99:** 7 studies	**B** - 84

5. Performance Goal: As a long-term objective, CDC will implement accessible training programs to provide an effective work force for staffing state and local health departments, laboratories, and ministries of health in developing countries.

Performance Measure	Targets	Actual Performance	Reference
1. Provide for effective workforce for staffing state and local health departments and in other public health related organizations.	**FY 02:** 90% of the second and third classes of the Public Health Prevention Service (PHPS) will remain in public health with 50% working in state/local health departments. **FY 01:** 90% of the first and second classes of the PHPS will remain in public health with 50% working in state/local health departments. **FY 00:** 90% of the first class of the PHPS will remain in public health with 50% working in state/local health departments.	**FY 02:** Following graduation, 82% of the third PHPS class had remained in public health with 36% working in state/local health departments and 27% working at the federal level. **FY 01:** 80% of the first and second PHPS classes have remained in public health and 28% are working in state/local health departments **FY 00:** Following graduation, 76% of the first class remained in public health and 26% are working	**B** - 84
2. By FY 2002, implement the plan to address needed changes in EIS training methodologies identified in the evaluation study.	**FY 02:** Finalize the implementation of the second phase of the plan. Prepare final report on the implementation process. **FY 01:** Implement the second phase of the plan. **FY 00:** Develop the plan. **FY 99:** The second phase of EIS evaluation will be completed and the first phase findings will be implemented.	**FY 02:** At this time, the plan was not implemented. A more comprehensive, formal evaluation of the EIS Program is scheduled in FY 2003 and 2004. **FY 01:** Second phase of the plan was implemented **FY 00:** Plan Developed. **FY 99:** Second phase of the EIS evaluation has been completed. Results of the first phase are being implemented.	**B** - 84

Performance Measure	Targets	Actual Performance	Reference
3. Number of courses to train state and local public health professionals in epidemiology, surveillance, informatics, prevention effectiveness, and management through a program modeled after the EIS program.	**FY 03:** 0	**FY 03:** Available 6/2003	**B** - 84
4. Number of EIS officers assigned to state or municipal health departments.	**FY 04:** 78 **FY 03:** 64	**FY 04:** Available 6/2004 **FY 03:** Available 6/2003	**B** - 84  # 2 & 5

Program Description and Context

CDC's epidemic services and response program provides resources and scientific expertise for:

- Rapidly communicating critical information to public health officials about disease outbreaks and other acute health events and trends in health and health behaviors;
- Training public health professionals who are prepared to respond to public health emergencies, outbreaks, and other assistance requests;
- Developing and refining research methods and strategies to the benefit of public health practice; and
- Developing, operating, maintaining, and evaluating surveillance systems.

Communications

Epidemic services and response communicates critical information to public health officials by publishing the *Morbidity and Mortality Weekly Report*. *The Morbidity and Mortality Weekly Report (MMWR)* is CDC's main channel for communicating public health news about disease outbreaks and trends in health and health behavior. The weekly *MMWR* is one of a family of publications that include the MMWR Recommendations and Reports and the CDC surveillance Summaries, and the CDC Annual Summary of Notifiable Diseases. These Reports provide a diversity of information on health-related topics, including breaking news of emerging health threats, recommendations and guidelines for clinical, laboratory, and other care settings and strategies for effective public health interventions. This publication is available in print and on the Internet.

Training
CDC's will continue to provide the U.S. with a trained professional staff able to investigate health problems affecting the U.S. population. Changing needs in public health require that the public health workforce in states, counties, cities, and other countries all be trained to keep abreast of effective techniques for containing health threats. CDC conducts training programs in five critical areas: (1) epidemiology, (2) public health practice, (3) informatics, (4) preventive medicine, and (5) prevention effectiveness. These programs are targeted at building and maintaining the capacity of local, state, national, and global public health staff to carry out high-quality, science-based public health programs and interventions.

Applied Research
CDC carries out a variety of applied research and methods development activities. Some of the areas of research include: social determinants of health, aberration detection, burden of disease, injury and death, prevention effectiveness, and health care quality.

Surveillance
CDC monitors and tracks over 60 mandated notifiable infectious diseases in the United States, including food borne illness outbreaks, contaminated water sources (i.e., swimming pools), influenza, and others. This health information is reported by health care providers and laboratories to state health departments and is used to identify and control disease outbreaks. CDC staff provide technical assistance and consultation on surveillance principles and methods to international, state, and local health agencies, as well as to nontraditional partners such as medical examiners and coroners, health maintenance organizations, and private industry.

Program Performance Analysis

Maximize the distribution and use of scientific information and prevention messages through modern communication technology.

Based on established criteria continue to publish the Morbidity and Mortality Weekly Reports (MMWR) series of publications including Reports and Recommendations, Surveillance Summaries, and the Annual Summary to communicate major public health events to the media, public policy makers and health professionals through multiple media channels -- print, television, radio, interactive World Wide Web: In FY 2002, the *Morbidity and Mortality Weekly Report (MMWR)* provided a series of multiple channel publications including 158 *MMWR* weekly articles, 24 Recommendations and Reports, 4 CDC Surveillance Summaries and articles highlighting key health events. CDC met its target for the FY 1999, FY 2000, FY 2001, and FY 2002 goals to enhance the scientific quality and public health applicability of the *MMWR* to communicate public health news about disease outbreaks and trends in health and health behavior by publishing 86 issues of the *MMWR*. *JAMA* reprints weekly articles routinely, and the Massachusetts Medical Society publishes and distributes the *MMWR* to approximately 25,000 additional subscribers. Further dissemination through the development of communications partnerships began shortly after the attacks on September 11.

The MMWR will refine communication efforts through a Center-wide communications plan to provide a framework for current activities and maximize communicating public health messages through print and the World Wide Web: In FY 2002, the CDC-wide communications plan to enhance health communications as a vital component of public health strategies in promoting health and preventing disease and injury was implemented as redesigned in FY 2001.

Encourage state health departments to develop efficient and comprehensive public health information and surveillance systems by promoting the use of Internet and by focusing on development of standards for communications and data elements.

The number of states with a plan for a comprehensive information network will be increased: In FY 1999, CDC continued to recognize the need of state health departments to develop public health comprehensive information networks to support all essential public health services. CDC approached this challenge systematically by assisting state health departments in developing plans for comprehensive networks and in implementing those networks. In FY 1999, this initiative expanded to address the need of major metropolitan areas for health-sector dedicated communication systems to support detection and response to terrorist events. (See Section 2.12, "Public Health Response to Terrorism.") In FY 1999, 33 states have established a plan for a comprehensive network. In FY 2001, CDC made the transition from the National Notifiable Disease Surveillance System (NDIS) to the National Electronic Disease Surveillance System (NEDSS). Responsibility for NEDSS implementation lies within the Information Resource Management Office (IRMO) in the CDC Office of the Director. Program staff who formerly supported NDIS are currently supporting IRMO's effort to implement NEDSS.

The number of states who have implemented a comprehensive information network will be increased: In FY 1999, 4 of the 33 states mentioned above as having an established plan, have implemented the plan for a comprehensive information network. In FY 2001, CDC transitioned from the National Notifiable Disease Surveillance System (NDIS) to the National Electronic Disease Surveillance System (NEDSS). Responsibility for NEDSS implementation lies within the Information Resource Management Office (IRMO) in the CDC Office of the Director. Program staff who formerly supported NDIS are currently supporting IRMO's effort to implement NEDSS.

Efficiently respond to the needs of our public health partners through the provision of epidemiologic assistance.

Based upon established criteria for participation, Epidemic Intelligence Service (EIS) officers will respond to at least 95% of the requests for epidemic assistance from domestic and international partners: In FY 2002, the Epidemic Intelligence Service (EIS) Program coordinated 83 Epidemic Assistance Investigations (Epi-Aids), and over 300 state-based field investigations. Epidemics are prevented and controlled by mobilizing and deploying CDC staff, primarily Epidemic Intelligence Service (EIS) officers, to respond rapidly to disease outbreaks

and disaster situations. At the request of public health officials - at the state, national, or international level - CDC provides assistance by participating in epidemiologic field investigations. During these investigations, CDC staff act as consultants to a state or local health department or the health ministry of the host nation, investigating the patterns of disease or injury occurrence, the levels of risk behaviors, the identity of the causative agent, the transmission of the condition of concern, and the impact of preventive interventions. Each year, some requests for assistance are received which do not meet the established criteria or definition of a disease outbreak. All requests are reviewed; for those requests meeting the outbreak criteria, EIS Officers are deployed to aid in the investigation or disaster relief.

In FY 1999 through 2002, CDC exceeded its target of responding to "at least 95%" of the requests for epidemic assistance from domestic and international partners by responding to 99% of the requests. The requests for which CDC did not respond (1%) were international requests and could not be conducted due to the inability to get country clearance, the lack of funding from international organizations, or safety issues. During investigations, CDC staff provide training to public health staff on-site resulting in the ability of state and local staff to manage outbreak investigations without direct CDC assistance. In this event, technical assistance is provided by CDC in resolving outbreaks at the local level. In FY 2002 and beyond, CDC will continue to conduct activities involving rapid solutions to problems such as local identification of food poisoning to national and international investigations of deadly diseases, bioterrorism events, environmental hazards, or natural disasters. To accomplish this, CDC will maintain well trained professionals able to investigate health problems affecting the U.S. population and to achieve prevention goals.

Build expertise within CIOs to conduct prevention effectiveness studies of public health interventions.

Increase the number of professional prevention effectiveness staff and fellows: In FY 2001, CDC continually sought to improve health but to do so in economically responsible ways. When human and financial resources are limited, public health efforts must focus on prevention strategies that yield the most benefit for the investment. The Prevention Effectiveness program includes a fellowship and a training course. Together these demonstrate how spending money to prevent disease and injury and promote healthy lifestyles makes good economic sense. Prevention strategies are evaluated on: (1) the health impact of the related disease, injury, or disability on U.S. society; (2) the effectiveness of the prevention strategy; (3) the costs of the disease, injury, or disability; and (4) the cost-effectiveness of the strategy. For instance, some childhood vaccines, save up to $29 in direct medical costs for each dollar spent. Other strategies, such as yearly mammograms, carry a net cost but are considered cost-effective because they provide considerable value in return for the money invested. In FY 2002, the number of fellows exceeded the FY 2002 goal with 51 fellows.

Increase the number of staff in CIOs who can use prevention effectiveness methods: The number of staff that completed the annual Prevention Effectiveness Course exceeded the FY 2002 goal with 136 additional persons.

Increase the number of prevention effectiveness studies conducted by CIOs: CDC met its established target for FY 2000, FY 2001. CDC exceeded its established target for FY 2002 in building expertise to conduct prevention effectiveness studies of public health interventions and will continue to determine what prevention strategies are effective and what it costs to implement them.

As a long-term objective, CDC will implement accessible training programs to provide an effective work force for staffing state and local health departments, laboratories, and ministries of health in developing countries.

Provide for effective workforce for staffing state and local health departments and in other public health related organizations: An expanding mission, new programs, and new partners in public health underscore the need for a public health workforce able to apply a broad range of disciplines and strategies to develop effective prevention programs that improve and promote health. The Public Health Prevention Service (PHPS) program, established as a 3-year program of training and service, consists of two rotational assignments at CDC and one two-year field assignment in a state or local health department or agency. Masters-level Prevention Specialists from a variety of disciplines are trained to apply sound public health principles in the development, implementation, and evaluation of public health programs. Assignments include experiences in program development, management, and translating science into practice, including policy-making from these perspectives. The combination of federal, state, and local experiences, augmented by formal and informal instruction, provides a wide range of program activities to develop broad public health skills. Currently, there are 89 Prevention Specialists in the PHPS program. Fifty-four are assigned to state and local health departments and 35 are in assignments at CDC. One hundred sixty-nine Prevention Specialists have entered the program over the past 6 years; 67 have completed the program and are PHPS alumni.

On September 22, 2002, 22 Prevention Specialists in the 1999 PHPS Class completed the program and became alumni. Of these, 6 (27%) are employed by the federal government with 4 at CDC; 8 (36%) are employed at State or Local Health Departments; 2 (9%) are working with academic or research centers; and, 4 (18%) are undecided.

By FY 2002, implement the plan to address needed changes in EIS training methodologies identified in the evaluation study: At this time, the plan was not implemented. A more comprehensive, formal evaluation of the EIS Program is scheduled in FY 2003 and 2004.

Number of EIS officers assigned to state or municipal health departments: New measure; no performance analysis to date.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 124,621	Estimate
FY 2003:	$ 126,161	President's Budget
FY 2002:	$ 126,750	Enacted

II-E. Health Statistics

Goal-by-Goal Performance Measurement

Revised FY 2004 Performance Measurement Chart

Performance Goal: Monitor trends in the nation's health through high-quality data systems and deliver timely data to the nation's health decision-makers.

Performance Measure	Targets	Actual Performance	Reference
1. Monitor the nation's health through high-quality data systems by: conducting on-going surveys, increasing participant response rates, and working with partners.	**FY 04: a)** Conduct 4 ongoing surveys and data systems that produce detailed trend data for monitoring health.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Achieved	**B** - 93
	FY 04: b) Increase and maintain 78% participation for the National Health and Nutrition Examination Survey (NHANES) through improved outreach with communities, constituents, states and policy-makers.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** 78% response rate. **FY 01:** 81% response rate. **FY 00:** 80% response rate. **FY 99:** Baseline 72% response rate.	

Performance Measure	Targets	Actual Performance	Reference
(continued)	**FY 04: c)** Work with NAPHSIS and other partners on efforts to implement electronic death registration systems to improve the timeliness and accuracy of vital health data.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** Meetings with NAPHSIS and other partners held. **FY 00:** 0 states, non- profit groups such as NAPHSIS.	**B** - 93
2. Deliver timely data to the nation's health decision - makers by: reducing data release time lags, making statistics Internet accessible, and producing publications.	**FY 04: a)** Reduce time lags for release of core data systems by 5% **Vital Statistics (VS):** Release 2003 Preliminary data in **9 months from end of data** collection year.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** Met or exceeded all targets except release of Final 2000 Mortality data. Final Mortality data, released in 21 months, a 19% reduction from baseline. **FY 01:** Met or exceeded all except release of 2000 Final Mortality data. Data were released in 21 months, a 19% reduction from baseline. **FY 00:** Achieved **FY 99:** Achieved	**B** - 93

Performance Measure	Targets	Actual Performance	Reference
(continued)	**FY 04: b)** Make health statistics available via the Internet, including the development of one new product.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** NCHS website made accessible to the visually impaired. **FY 01:** Achieved. **FY 00:** Monthly vital statistics available for viewing, searching, downloading within 4 months. **FY 99:** Monthly vital statistics available for viewing, searching, downloading within 4 months.	**B** - 93
	FY 04: c) Produce reports and publications such as *Health, United States* that document trends, issues, and problems in health.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** *Health , United States 2002 — Trends in Health of the Nation* released in September 2002. **FY 01:** *Health , United States 2001* + Urban and Rural health Chart book. **FY 00:** *Health, United States 2000* + Adolescent Health Chart book.	

Previous Presentation of Goal-by-Goal Performance

This chart has been updated, and will continue to be updated accordingly until all measures are phased out in FY 04.

1. Performance Goal: Monitor trends in the nation's health through high-quality data systems addressing issues relevant to decision makers.

Performance Measure	Targets	Actual Performance	Reference
1. Conduct ongoing surveys and data systems that produce detailed trend data for monitoring health.	**FY 03:** 4 data systems **FY 02:** 4 data systems **FY 01:** 4 data systems **FY 00:** 4 data systems **FY 99:** 4 data systems	**FY 03:** 11/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Baseline: 3	**B** - 93
2. Develop, test, and support SLAITS.	**FY 03:** Provide management, oversight, technical support to prospective SLAITS users. **FY 02:** Provide management, oversight, technical support to prospective SLAITS users. **FY 01:** Provide management, oversight, technical assistance to prospective SLAITS users. **FY 00:** Provide management, oversight, technical coordination for a survey on children with special healthcare needs. **FY 99:** Develop SLAITS; pretest in 3 sites, including 1 Indian reservation.	**FY 03:** 11/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved	**B -** 93

Performance Measure	Targets	Actual Performance	Reference
3. Develop new monitoring tools to address emerging topics.	**FY 03:** Provide management oversight and technical support to prospective users of Community Health and Nutrition Examination Survey. (CHANES) **FY 02:** Refine plans to implement new tools to assess racial/ethnic data and other key health issues**.** **FY 01:** Move NHANES to an ongoing data system. **FY 00:** Complete Year 1 of NHANES data collection using automated survey, examination, and laboratory methods. **FY 99:** Finalize development of NHANES; conduct a pretest.	**FY 03:** 11/2003 **FY 02:** Transition to new race categories as indicated in OMB Classification System**.** **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Conducted pretest; fielded survey.	**B -** 93
4. Increase and maintain participation in the National Health and Nutrition Examination Survey (NHANES) through improved outreach with communities, constituents, States, and policy-makers.	**FY 03:** Maintain 78% response rate for NHANES. **FY 02:** Improve response rate of NHANES to 78% through enhanced approaches to media and outreach, including Congressional briefings, meetings with state health departments, or press releases.	**FY 03:** 11/2003 **FY 02:** 78% response rate achieved. **FY 01:** 81% response rate achieved. **FY 00:** 80% response rate. **FY 99:** Baseline 72% response rate.	**B -** 93

2. Performance Goal: Improve the nation's vital statistics system

Performance Measure	Targets	Actual Performance	Reference
1. Work with partners on efforts to implement electronic death registration systems to improve the timeliness and accuracy of vital health data.	**FY 03:** Work with NAPHSIS & other partners to assist states in implementation. **FY 02:** Work with NAPHSIS to define specific and standards for electronic registration system.	**FY 03:** 11/2003 **FY 02:** Meetings with NAPHSIS and other partners held. **FY 00:** Baseline: 0 States, non-profit groups such as NAPHSIS.	**B** - 93

3. Performance Goal: Deliver timely data to the nation's health decision makers.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce time lags for release of core data systems by 5%.	**FY 03:** Maintain time lag of data release at 2002 level. Vital Statistics (VS):Release Preliminary 2002 data in **9 months from end of data collection period**; Release final 2001 Natality data within 16 months, **16% reduction from baseline**; Release final 2000 mortality data within 18 months, **30% reduction from baseline.** Health Interview Survey: Release selected data within 6 months of collection and complete data set within 18 months, a **30% reduction from baseline**.	**FY 03:** 11/2003	**B** - 93

Performance Measure	Targets	Actual Performance	Reference
(continued)	**FY 02:** Reduce time lag of data release by 5% Vital Statistics (VS): Release of 2000 final mortality data in **18 months** or a **30% reduction** from baseline; release of 2000 final natality data in **16 months** or an **11% reduction** from baseline; preliminary VS 2001 data available **within 9 months** or a **10% reduction** from baseline. Health Care Surveys: Release of 2000 National Hospital Discharge Survey data in **18 months** or a **14% reduction** from baseline. Health Interview Surveys: Release of 2000 National Health Interview Survey data in **20 months** or a **23% reduction** from baseline. **FY 01:** Vital Statistics: Release 1999 mortality data in 18 months, 30% reduction and natality data in 16 months 11% reduction; make preliminary 2000 data available in 9 mos, 10% reduction. Health Care Surveys: Release 1999 NHDS data in 18 months, 14% reduction from baseline. Health Interview Surveys: Release 1999 NHIS data in 20 mos. (23% reduction).	**FY 02:** Met or exceeded all targets except release of 2001 Final Mortality data. Data were released within 21months – a 19% reduction from baseline. **FY 01:** Met or exceeded all except release of 2000 Final Mortality data. Data were released in 21 months, a 19% reduction from baseline.	**B** - 93

Performance Measure	Targets	Actual Performance	Reference
(continued)	**FY 00:** Reduce time lag in release of final VS by 2 months. Note: Data are currently released within 21 months after the end of data collection year. **FY 99:** Reduce time lag in release of core data systems by 5%.	**FY 00:** Achieved. **FY 99:** Vital Statistics: 1997 mortality data in 18 mos. (30% reduction) and natality data in 16 mos. (11% reduction); prelim. 1995 data in 10 mos. (11% reduction). Health Care Surveys: 1997 NHDS data in 20 mos. (5% reduction). Health Interview Surveys: 1997 NHIS data in 20 mos. (23% reduction). **FY 96**: Baseline: Vital Statistics: 1993 mortality data in 26 mos; 1994 natality data in 18 mos; prelim. 1995 data in 10 mos. Health Care Surveys: 1995 NHDS data in 21 mos. Health Interview Surveys: 1994 NHIS data in 26 mos. Health Examination Surveys: NHANES III 2nd half (1991-1994) in 31 months.	**B** - 93

4. Performance Goal: Disseminate health data in innovative ways.

Performance Measure	Targets	Actual Performance	Reference
1. Make health statistics available via the Internet.	**FY 03:** Maintain current products. **FY 02:** Develop at least one new product for the Internet. (Target was increased based on ability to do more.) **FY 01:** Develop at least one new product for the Internet. **FY 00:** Monthly vital statistics available for viewing, searching, downloading within 4 months. **FY 99:** Monthly vital statistics available for viewing, searching, downloading within 4 months.	**FY 03:** 11/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 96:** Within 6 months.	**B** - 93
2. Release statistics in new formats to speed the release of data on high-priority topics.	**FY 03:** Maintain release of statistics in current formats. **FY 02:** Release one data set in new format. (Target was increased based on ability to do more.) **FY 01:** 1 report in new format**.** **FY 00:** 1 report	**FY 03:** 11/2003 **FY 02:** NCHS website made accessible to the visually impaired. **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Multiple publications and products**.** **FY 98:** *Teenage Births in the United States: National and State Trends 1990-96*.	**B** - 93

Performance Measure	Targets	Actual Performance	Reference
3. Produce reports and publications that document trends, issues, and problems in health.	**FY 03:** Produce reports and publications. **FY 02:** Produce reports and publications. **FY 01:** Produce reports and publications. **FY 00:** Produce reports and publications.	**FY 03:** 11/2003 **FY 02:** *Health, United States 2002 -- Trends in Health of the Nation* was released September 2002. **FY 01:** *Health, United States 2001*+ Urban and Rural Health Chart book **FY 00:** *Health, United States, 2000* + Adolescent Health Chart book.	**B** - 93
4. Increase the number of persons who obtain health information from the NCHS website.	**FY 03:** Develop at least one product to facilitate use of statistical data on the web. **FY 02:** **a)** Increase the number of people who obtain statistical information from the website by 5%. **b)** Develop a product to educate the public on the use of statistical data.	**FY 03:** 11/2003 **FY 02:** 3.6 million visitor sessions where users obtained selected data or information. **FY 01:** 3.2 million visitor sessions where user obtained selected data or information.	**B** - 93

Program Description and Context

CDC's National Center for Health Statistics (NCHS) is the nation's principal health statistics organization. NCHS collects, analyzes, and disseminates information to help guide actions and policies that improve the health of Americans.

In and effort to consolidate measures, NCHS has only one performance goal for FY 2004:

Monitor trends in the nation's health through high-quality data systems addressing issues relevant to decision-makers, and deliver timely data to the nation's health decision-makers.

Below is a description of CDC's NCHS performance measurements and FY 2002 updates:

1.) Monitor the nation's health through high-quality data systems by: conducting on - going surveys, increasing participant response rates, and working with partners - NCHS data systems monitor a broad range of trends and issues key to understanding the health of Americans and the national health care system. Topics range from trends in mortality, teen childbearing, health insurance coverage, asthma rates, and nursing home usage. Monitoring these issues improves our understanding of health and the health care delivery system.

In FY 2002, all 4 data systems were operating. The National Health and Nutrition Examination Survey achieved a 78% response rate through improved outreach with communities, constituents, states and policy - makers. Lastly, meetings with NAPHSIS were conducted to discuss the details of re-engineering a vital statistics system based on national standards and definitions.

2) Deliver timely data to the nation's health decision - makers by: reducing data release time lags, making statistics Internet accessible, and producing publications - In order to have an accurate understanding of the health of the Nation, data must be processed and analyzed in a timely manner. It is also important to continually improve handicap accessibility, and to create new data dissemination techniques to meet the needs of our users.

In FY 2002, preliminary data for 2001 natality was released in June 2002, within just 6 months of data collection year. Final 2000 natality data was released in February 2002, within 13 months of end of data collection year, far exceeding the goal of 16 months. A new product to make CDC's NCHS website more accessible to the visually impaired was also implemented. Lastly, ***Health, United States*** is available on-line, has been mailed to data users, and post cards were sent out to announce its availability.

Previous measurements and goals have been appropriately updated and changed accordingly below. Goals that have been dropped will continue to be updated until they are phased out in FY 2004. The program description and context has also been updated accordingly in the text below.

Through NCHS, CDC collects and analyzes health data and disseminates health information through many venues such as:

National Health Interview Survey (NHIS) - This survey obtains information on the nation's health status through confidential household interviews. Interviewers annually collect information on topics such as: health status, health insurance coverage, utilization of health care, access to health care, causes of injury, immunization rates, and HIV testing practices. The data are used by health agencies and organizations to plan and monitor health policies and programs.

National Vital Statistics System - This system is the source of the nation's birth and death statistics. The collection and registration of these vital events are governed by the laws of states and registration areas. Vital records and reports originate with hospitals, physicians, and funeral directors. Records are compiled by the states and forwarded to CDC.

National Survey of Family Growth - This is a multipurpose survey and consists of personal interviews with a national sample of women and, for the first time, men 15-44 years of age in the civilian noninstitutionalized population. Its main function is to collect data on factors affecting pregnancy and reproductive health.

National Health Care Survey - This survey provides a picture of how hospitals, emergency and outpatient departments, ambulatory surgery centers, nursing homes, hospices, and office-based physicians deliver health care. It serves as a rich source of data on healthcare utilization and characteristics of patients and providers. CDC constitutes a significant resource for monitoring healthcare use, the impact of medical technology, and the quality of care provided to a changing U.S. population.

National Health Nutrition and Examination Survey (NHANES) - This survey is the only national source of objectively measured health data capable of providing accurate estimates of both diagnosed and undiagnosed medical conditions in the population. Through physical examinations, clinical and laboratory tests, and interviews, NHANES assesses the health status of a representative sample of U.S. adults and children. Mobile exam centers travel throughout the country to collect data on chronic conditions, nutritional status, behavioral risk factors, dental health, vision, and other factors that cannot be assessed by use of interviews alone. Findings from this survey are essential for determining rates of major diseases and health conditions and for developing public health policies and interventions.

CDC data are used for decision making and research. To support these uses, CDC makes its data available through a variety of mechanisms. These include CDC and DHHS publications, articles in peer-reviewed journals, de-identified electronic data sets, and electronic access to summary reports via the Internet. CDC also serves as a resource for other agencies and the public on statistical methods, analytic techniques, and data sources. CDC uses all reasonable methods, technologies, and legislative authority to protect the privacy and confidentiality of citizens who participate in its surveys.

Biomedical research also depends on CDC's data. High quality data are essential to researchers, assisting them in setting research priorities, in forming medical hypotheses, and evaluating clinical findings using nationally representative benchmarks. CDC surveys allow researchers to apply a finding from limited clinical setting to a broad population context. In order to understand the impact of a clinical discovery, CDC data describe the impact and burden within the national population. CDC surveys also help track the diffusion of technology, procedures, and medicines, as well as prevention techniques, through the health care system.

CDC data systems and related activities support DHHS programs and policies by providing health information for identifying and understanding health problems, tracking goals, and evaluating programs. For example, CDC data support the following DHHS priorities: 1) addressing racial and ethnic differentials in health, by providing data to identify problems and track progress; 2) implementing HP 2010 by providing the underlying data infrastructure for setting targets and tracking progress in meeting health objectives; and 3) supporting GPRA by providing data to identify action areas and by providing neutral, objective tracking data used across DHHS agencies.

Program Performance Analysis

CDC met or exceeded all health statistics performance measures for FY 2001. In FY 2002 we met or exceeded all health statistics performance measures. With the return of NHANES to field operations, all four of CDC's major data systems are in operation, adding a critical dimension to its ability to monitor trends in the nation's health. CDC established NHANES as an ongoing – instead of periodic – survey with its return to the field in 1999. A new, automated, state-of-the-art communications infrastructure collects and processes all NHANES data, nearly eliminating the need for paper forms and manual coding. In FY 2000, NHANES interviewed and examined approximately 5,000 individuals in 15 scientifically selected communities across the nation to generate national estimates. This same sample size was obtained in FY 2001 and is expected to be maintained in FY 2002.

The most recent topical focus of States and Local Area Integrated Telephone Survey (SLAITS) began field testing in 1999 and full implementation in Fall 2000. SLAITS will provide: data to 50 states and the District of Columbia on children under 18 with special healthcare needs, state-specific estimates of children's health insurance coverage, and national estimates for the reasons low-income uninsured children are not enrolled in Medicaid or the State Children's Health Insurance Program (SCHIP). In FY 2001, CDC continued to provide necessary technical assistance to the survey. Data collection will end in FY 2002 and a data file will be released to the public early 2003. In 2002, a survey of asthma prevalence and treatment will be conducted in 4 states. SLAITS modules are partnerships between CDC and sponsor organizations. In 2001, partners included Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB), National Center for Environmental Health (CDC/NCEH) and the Assistant Secretary for Planning and Evaluation (ASPE).

The Community Health and Nutrition Examination Survey is being developed as a new monitoring tool to answer questions and monitor the health of specific racial and ethnic populations groups. Using the flexible, efficient CHANES model, it would be possible to provide information on racial and ethnic population subgroups not adequately covered in ongoing national studies. CHANES uses smaller-scale, more flexible examination centers than the "parent national survey" (NHANES). CDC is offering this new monitoring tool to implement a series of focused research studies to interested collaborators.

In FY 2002, CDC has been working with the National Association for Public Health Statistics and Information Systems to develop a national standardized web-based vital statistics data collection system. This system will provide more timely and higher quality data that better describes the population by enabling a faster and more efficient transfer of data, and enhanced data integration among Federal, state and local entities.

CDC exceeded the 5% reduction in time lag for the release of data from the major data systems. This goal will be maintained to ensure continuous improvement in the timeliness of CDC data. In FY 2001, CDC met or exceeded the 5% reduction in time lag for the release of data from the major data systems. Preliminary 2000 vital statistics data were released in July 2001 – just 7 months after data collection – two months earlier than anticipated. Final Hospital Discharge data were released in just 14 months, a 33% reduction from baseline of 21 months and 4 months sooner than anticipated. In FY 2002, preliminary data for 2001 natality was released in June 2002, just 6 months of data collection year. Final 2000 natality data was released in February 2002, within 13 months of end of data collection year, far exceeding the goal of 16 months.

Early release of selected estimates for the 2000 and early 2001 National Health Interview Surveys happened within 9 months of data collection. Selected elements include data on insurance coverage, pneumococcal vaccination, obesity, and participation in leisure time physical activities. Final 1999 mortality data were released in 21 months instead of the planned 18 months – 3 months longer than anticipated but a 19% reduction from the baseline of 26 months. This delay was due in part to a major change in the coding system through the implementation of the 10th revision to the International Classification of Diseases, used to categorize cause of death. CDC is working with states and other partners on efforts to develop electronic birth and death registration systems to improve the timeliness and accuracy of vital statistics data. The delay in data release of final mortality data continued in FY 2002. Although, preliminary mortality data for 2001 was released in September 2002, the final 2000 mortality data were released in 21 months instead of the planned 18 months – 3 months longer than anticipated but a 19% reduction from the baseline of 26 months.

CDC has produced and released data in new formats to document trends, issues, and problems in health. CDC released ***Health, United States: Trends in the Health of Americans*** in September 2002. It documents and describes the health of residents all over the United States. New initiatives are being taken to disseminate the books faster by having them mailed out on the date of release in addition to post card announcements, and the actual book being available on the CDC's NCHS website.

In FY 2002, ***America's Children: Key National Indicators of Well - Being 2002*** was released. This was produced by the Interagency Forum on Child and Family Statistics in July 2002. For the fourth consecutive year, CDC led the efforts on the production of the report. The report contained data on key indicators of children's health monitored through Federal statistics covering areas related to health, economic security, behavior, education, and social and physical environment of children in the U.S. The report also included a new indicator on the number of children with parents born outside the U.S.

In FY 2002, CDC has taken advantage of technological advances, such as use of the Internet, to

make data more timely and accessible. Virtually all NCHS publications are available on the Internet concurrent with their release in published form. All CDC NCHS data is now available, from 1968 to present, on CD-ROM. Available data sets include: 2000 National Ambulatory Medical Care Survey, 2000 National Hospital Ambulatory Medical Care Survey, 2000 National Home and Hospice Survey, 1999 National Health Interview Survey, and 1999 - 2000 National Health and Nutrition Examination Survey. CDC also recently made its website accessible to visually impaired data users. Other efforts are being made to increase the accessibility and usability of its data systems and website for disabled people.

Verification/Validation of Performance Measures: CDC will verify performance via contractor reports, pretest reports, meeting proceedings, publications, and website records.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 1,281,176	Estimate
FY 2003:	$ 1,235,000	President's Budget
FY 2002:	$ 1,131,826	Enacted

II-F. HIV/AIDS Prevention

Goal-by-Goal Performance Measurement

Overarching Performance Goal: Reduce the number of new HIV infections.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce the number of HIV infection cases diagnosed each year among people <25 years of age.	**FY 04:** Overall: 1,900 reported cases.*	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 2,344 **FY 00:** Overall: 2,086 reported cases.*	**B** - 101 **1**
2. Decrease the number of perinatally acquired AIDS cases, from the 1998 base of 235 cases.	**FY 04:** <139 cases **FY 03:** <139 cases **FY 02:** 141 cases **FY 01:** 151 cases **FY 00:** 203 cases **FY 99:** 214 cases	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** Exceeded/100 **FY 00:** Exceeded/102 **FY 99:** Exceeded/171 **FY 98:** 235 **FY 97:** 310 **FY 96:** 509**	**B -** 101 **HP-** 13-17 **1**
3. Reduce the annual incidence of new HIV infections	**FY 03:** 35,600 new infections/yr **FY 02:** 35,600 new infections/yr **FY 01:** 37,900 new infections/yr **FY 00:** 40,000 new infections/yr **FY 99:** Measure rates of transmission of new HIV infections.	**FY 03:** 9/2005 **FY 02:** 9/2004 **FY 01:** 9/2003 **FY 00:** Estimated baseline: 40,000 **FY 99:** Estimated baseline: 40,000 ***	**B -** 101 **HP -** 13-5 **1**

* CDC will revise baseline and targets when data from more states with adequate HIV reporting systems are available. Current data are from 25 states with HIV reporting.

** Baseline changed from reported to diagnosed cases to increase accuracy

*** Declines in incidence related to funding increases in FY 2001 will not be realized until at least FY 2002 and will be reported in FY 2003.

Domestic HIV/AIDS
Goal-by-Goal Performance Measurement

1. Performance Goal: Decrease the number of persons at high risk for acquiring or transmitting HIV infection.

Performance Measure	Targets	Actual Performance	Reference
1. Among HIV-infected persons ≥ 18, increase the proportion who were abstinent during the past 12 months or used a condom the last time they had sex.	**FY 04:** 70%	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 60%	**B** - 101 **1**
2. Decrease the percent of HIV-infected IDUs who shared needles in past 12 months.	**FY 04:** 30%	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 35%	**B** - 101 **1**

2. Performance Goal: Increase the proportion of HIV-infected people who know they are infected.

Performance Measure	Targets	Actual Performance	Reference
1. Among persons with HIV infection, increase the proportion diagnosed before progression to AIDS.	**FY 04:** 80%	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 78% **FY 00:** 76% Data are from 25 states with HIV reporting.	**B** - 101 **HP** - 13-15 **1**
2. Among persons with HIV infection attributed to heterosexual behavior, increase the proportion diagnosed before progression to AIDS.	**FY 03:** 83% **FY 02:** 82% **FY 01:** 82%	**FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 82% **FY 00:** 80% **FY 99:** 81% Data are from 25 states with HIV reporting.	**B -** 101 **HP -** 13-15

Performance Measure	Targets	Actual Performance	Reference
3. Among persons with HIV infection attributed to injecting drug use, increase the proportion diagnosed before progression to AIDS.	**FY 03:** 76% **FY 02:** 76% **FY 01:** 76%	**FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 75% **FY 00:** 74% **FY 99:** 75% **FY 98:** 73% Data are from 25 states with HIV reporting.	**B** - 101 **HP** - 13-15 **1**
4. Among persons with HIV infection attributed to male-to-male sexual contact, increase the proportion diagnosed before progression to AIDS.	**FY 03:** 75% **FY 02:** 74% **FY 01:** 74%	**FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 76% **FY 00:** 74% **FY 99:** 73% **FY 98:** 74% Data are from 25 states with HIV reporting.	**B** - 101 **HP** - 13-15 **1**
5. Increase the percentage of HIV-positive tests with post-test counseling sessions reported from CDC funded test sites.	**FY 04:** 80% **FY 03:** 75% **FY 02:** 75% **FY 01:** 70% **FY 00:** 65% **FY 99:** 60%	**FY 04:** 10/2005 **FY 03:** 10/2004 **FY 02:** 10/2003 **FY 01:** Exceeded/71.3% **FY 00:** 69.3% **FY 99:** 70.0% **FY 98:** 73.1% **FY 97:** 67.4% **FY 96:** 74.4%	**B -** 101 **5**

3. **Performance Goal:** Increase the proportion of HIV-infected people who are linked to appropriate prevention, care and treatment services.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the proportion of HIV-infected people who received some form of medical care within 3 months of HIV diagnosis. Data are from interviews taken from a sample of persons in 16 areas.	**FY 04:** 80%	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 79.5% **FY 01:** 79%	**B -** 101 **HHS** - 3.4; 4.4

Performance Measure	Targets	Actual Performance	Reference
2. Expand the number of states that are able to measure:* 1. Adherence to treatment 2. Impact of antiretroviral therapy (ART) on long term survival. ***This study was initiated with three components: access to care, adherence to treatment and impact of ART. The access to care component ended in FY 2001.	**FY 03:** Initiate analyses of data. **FY 02:** Continue to support the same states funded in FY 01. **FY 01:** Continue to expand the numbers of states that collect data and can measure care and treatment outcomes.	**FY 03:** Initiated analyses **FY 02:** Adherence/19; impact 11 **FY 01:** Access/6; adherence/16; impact/11 **FY 00:** Access/5; adherence/15; impact/11 **FY 99:** Access/4; adherence/12; impact/11	**B** - 101
3. Refine methods for measuring long-term survival.	**FY 03:** Expand new methods to include understanding of factors associated with long-term survival. Publish final methods and instruments for collection of data on factors associated with long-term survival. **FY 02:** Develop new methods based on findings. **FY 01:** Publish final results; disseminate methodology. **FY 00:** Publish preliminary results of ASD survival analyses. **FY 99:** Measure trends in long-term survival and rates of transmission of new infections.	**FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** Achieved/ published final results; disseminated methodology & software. **FY 00:** Exceeded/ published final results. **FY 99:** Data analysis completed.	**B** - 101

4. **Performance Goal:** Strengthen the capacity nationwide to monitor the epidemic, develop and implement effective HIV prevention interventions and evaluate prevention programs.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of states and District of Columbia that conduct HIV case reporting in adults and adolescents.	**FY 04:** 51 states and D.C. **FY 03:** 50 States **FY 02:** 50 states **FY 01:** 45 states **FY 00:** 40 states	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 48 states, 33 report by name. **FY 01:** Met/ 45 states. 33 report by name. **FY 00:** Exceeded/ 43 states. 33 report by name. **FY 99:** Released *Guidelines*; 34 states (reports); 4 states, 1 territory (other method)	**B** - 101
2. Measure HIV incidence and prevalence in high-risk populations.	**FY 03:** 30 sites **FY 02:** 21 sites **FY 01:** 30 sites **FY 00:** 53 sites	**FY 03:** 9/2004 **FY 02:** 21 **FY 01:** 21 **FY 00:** 53 sites **FY 99:** 53 sites	**B** - 101
3. Percentage of states that adopt and maintain recommended security and confidentiality standards.	**FY 03:** 100% of states **FY 02:** 100% of states **FY 01:** 100% of states **FY 00:** 100% of states **FY 99:** Update *Guidelines* to include security and confidentiality standards.	**FY 03:** 12/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** 100%	**B** - 101
4. Fund community-based organizations to provide HIV prevention services to persons at high risk for HIV infection.	**FY 03:** 259 awards **FY 02:** 259 awards **FY 01:** 240 awards **FY 00:** 180 awards **FY 99:** 139 awards	**FY 03:** 10/2003 **FY 02:** Achieved/259 **FY 01:** Exceeded/259 **FY 00:** Exceeded/253 **FY 99:** Achieved **FY 97:** 94	**B** - 101

Performance Measure	Targets	Actual Performance	Reference
5. Fund community coalition planning and implementation projects to expand community demonstration projects.	**FY 03:** 11 **FY 02:** 11 **FY 01:** 10 **FY 00:** Fund 3 grants of 20 planning grants initially funded. **FY 99:** Fund 20 projects.	**FY 03:** 8/2003 **FY 02:** Achieved/11 **FY 01:** Exceeded/11 **FY 00:** Exceeded/10 **FY 99:** Achieved **FY 97:** 0	**B -** 101

International HIV/AIDS
Goal-by-Goal Performance Measurement

Performance Goal: Working with other countries, USAID, and international and U.S. government agencies, reduce the number of new HIV infections among 15- to 24-year-olds in sub-Saharan Africa from an estimated 2 million by 2005.

Performance Measure	Targets	Actual Performance	Reference
1. Initiate, expand, or strengthen HIV/AIDS prevention, care, treatment and support activities globally.	Surveillance **FY 04:** 25 countries/regions **FY 03:** 25 countries/regions **FY 02:** 25 countries/regions **FY 01:** 18 countries/regions **FY 00:** 15 countries/regions Voluntary counseling and testing **FY 04:** 25 countries/regions **FY 03:** 25 countries/regions **FY 02:** 25 countries/regions **FY 01:** 19 countries/regions **FY 00:** 12 countries/regions Locally appropriate technical assistance for treatment of STDs, TB, and other opportunistic infections. **FY 04:** 25 countries/regions **FY 03:** 25 countries **FY 02:** 25 countries **FY 01:** 15 countries **FY 00:** 5 countries	Surveillance **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** Exceeded/ 22 **FY 00:** 13 Voluntary counseling and testing **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 18 **FY 00:** Achieved Locally appropriate technical assistance for treatment of STDs, TB, and other opportunistic infections. **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** Exceeded/18 **FY 00:** Exceeded/11	**B -** 101

Performance Measure	Targets	Actual Performance	Reference
2. Initiate, expand, or strengthen perinatal HIV prevention programs in collaboration with national and international partners. ***This measure will be revised to:*** Increase the number of *Preventing Mother to Child Transmission Initiative* countries that have: • Coordinated needs assessments; • Planned programs; and • Begun implementation**.**	**FY 03:** 20 countries **FY 02:** 17 countries **FY 01:** 10 countries **FY 00:** 5 countries *Coordinated needs assessments* **FY 04:** 7 countries/regions *Planned programs* **FY 04:** 7 countries/regions *Begun implementation* **FY 04:** 7 countries/regions	**FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** Exceeded/13 **FY 00:** Exceeded/8 *Coordinated needs assessments* **FY 04:** 9/2005 **FY 02:** Baseline: 0 countries/regions *Planned programs* **FY 04:** 9/2005 **FY 02:** Baseline: 0 countries/regions *Begun implementation* **FY 04:** 9/2005 **FY 02:** Baseline: 0 countries/regions	**B -** 101

Overarching Program Description and Context

CDC has been involved in the fight against human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) from the earliest days of the epidemic and remains a domestic and global leader in HIV/AIDS prevention and control. Over the past several years, three new initiatives have significantly affected program activities. In 1999, Congress through the Minority AIDS Initiative program provided funding to CDC for the prevention of HIV in communities of color. In 2000, Congress provided first-time funding to CDC to address the HIV/AIDS epidemic in 15 countries in Africa and Asia. This program now reaches 25 countries on 3 continents. In 2001, CDC published a revised HIV Prevention Strategic Plan in concert with other federal agencies, partners and outside experts.

HIV remains a deadly infection for which there is no vaccine or cure and for which treatments are limited. Through December 2001, just over 816,000 Americans were reported with AIDS, and more than 467,000 (57%) had died. An estimated 850,000 to 950,000 persons are living with HIV infection in the United States. Although HIV incidence has decreased substantially from the high of 150,000 cases per year in the late 1980s, CDC estimates that 40,000 Americans become infected with HIV every year.

Over the past decade, the HIV/AIDS epidemic has expanded into new populations. More persons of color (especially women) and young persons are becoming infected with HIV. In 2000, AIDS prevalence was higher among African-Africans than among any other racial or ethnic group surveyed. In 2001, Hispanics accounted for 20% of new persons living with AIDS. An estimated 50% of those now infected with HIV in the United States became infected during their youth. Among men, the majority of new AIDS cases, 53 %, are among men who have sex with men (MSM). Recent evidence of resurgent unsafe behaviors and outbreaks of other STDs among MSM underscore the importance of sustaining and improving prevention efforts for this population.

In addition to the high costs in terms of morbidity and mortality, HIV has high economic costs. The estimated lifetime cost in the United States of treating just one person infected with HIV is $155,000. With approximately 40,000 persons infected each year, America faces additional annualized costs of more than $6 billion every year, dwarfing the amount CDC spends to prevent new infections.

The global toll of HIV is staggering. UNAIDS estimates that, at the end of 2002, 42 million adults and children were living with HIV/AIDS and nearly 22 million had died. In 2002 alone, an estimated 5 million persons, including more than 800,000 children, were newly infected with HIV, and 3 million had died of AIDS. The most severely affected countries are in sub-Saharan Africa; 70% of those living with HIV/AIDS reside in this region. HIV/AIDS has had a devastating toll on families in these countries, resulting in loss of income, ongoing costs for care of family members with AIDS and AIDS-related illnesses, and dissolution of basic family and community structures. By 2010, demographers project that life expectancy will fall from 66 to 33 years in Zambia and from 70 to 40 years in Zimbabwe. HIV surveillance and other data reveal emerging epidemics in India, China, the Ukraine, and other parts of the world.

Despite great declines in morbidity and mortality due to HIV/AIDS in the United States over the last 15 years, the number of new infections each year remains unacceptably high. In recognition of the need for a new national strategy, CDC worked with experts in public health, prevention science, and medicine and representatives from affected communities to devise a strategic plan to reduce by half the number of new HIV infections. The overarching goal is reduce the number of new HIV infections in the United States from an estimated 40,000 to 20,000 per year by 2005, focusing particularly on eliminating racial and ethnic disparities in new HIV infections. Through the plan, CDC aims to:

1. Decrease by 50% the number of persons in the United States at high risk for acquiring or transmitting HIV infection by delivering targeted, sustained and evidence-based HIV prevention interventions.
2. Through voluntary counseling and testing, increase from the current estimated 70% to 95% the proportion of HIV-infected people in the United States who know they are infected.
3. Increase from the current estimated 50% to 80% the proportion of HIV-infected people in the United States who are linked to appropriate prevention, care, and treatment services.

4. Strengthen the capacity nationwide to monitor the epidemic, develop and implement effective prevention interventions, and evaluate prevention programs.

CDC has also set a goal for international HIV/AIDS to assist in reducing HIV transmission and improving HIV/AIDS care and support in partnership with resource-constrained countries. In crafting the plan, CDC acknowledged that these goals could not be achieved without significantly increased funding levels. The performance targets for FY 2004 in this document reflect amounts currently budgeted for domestic HIV AIDS prevention.

The HIV Prevention Strategic Plan is being used to guide CDC's investment in HIV prevention and to monitor access, care and treatment. The goals in this performance plan are aligned with the goals of the strategic plan. In crafting the plan, CDC acknowledged that these goals could not be achieved without significantly increased funding levels. CDC's HIV Prevention Strategic Plan is available at: http:/www.cdc.gov/nchstp/od/news/prevention.pdf . Targets for most performance measures in this document reflect current funding levels.

Domestic Strategies, Activities, and Resources

CDC's approach to implementing the plan involves collaborations with a broad spectrum of partners and focuses on four areas: recognition, intervention, capacity building, and evaluation. Priority-setting for health protection activities is based on information gathered through CDC's HIV/AIDS recognition activities – surveillance and research. Surveillance is the tool by which CDC and state/local health departments track the epidemic and understand its dynamics. Surveillance provides demographic, laboratory, clinical, and behavioral data that are used to identify populations at greatest risk for HIV infection. Surveillance data also help CDC estimate the size and scope of the epidemic at the national level.

CDC provides funding and technical assistance to state and local health departments to conduct HIV/AIDS surveillance. Every state requires reporting of the number of persons diagnosed with AIDS each year. This information is used to identify those in need of services and care, allocate prevention and treatment resources, and track the course of the epidemic. However, because of the long latency of the disease, AIDS cases alone are not indicative of recent trends in the epidemic. Consequently, CDC has encouraged states to report HIV infections.

CDC also conducts specialized surveys of infected and high-risk persons to better understand the dynamics of the epidemic. For example, the Supplement to HIV/AIDS Surveillance (SHAS) is a survey of adults newly reported to have HIV infection or AIDS. Results help improve the understanding of sociodemographic characteristics of HIV-infected persons, sexual and drug-using behaviors, access to health care, HIV testing patterns, minority health issues, and use of and adherence to prescribed therapies. HIV/AIDS monitoring systems give CDC a clear, timely view of populations at risk and provide a scientific basis for developing prevention strategies and setting priorities.

While CDC has a strong tradition of supporting interventions that prevent HIV infection in persons at high risk, the changes in the epidemic have led CDC to broaden its focus to include the growing number of persons who are living with HIV and their partners. Medical science has made great progress in treating HIV infection and associated opportunistic infections. Research consistently shows the prevention benefit of early diagnosis and ongoing care and services for people living with HIV. At the same time, prevention research has revealed that persons who know they are HIV infected are more likely to make informed decisions to protect partners. For these reasons, it is vital for HIV-infected persons to know they are infected and to seek appropriate medical care as early as possible. CDC will build on activities to strengthen the HIV prevention, care, and treatment interface.

Early in the epidemic, CDC recognized that the involvement of affected communities was a critical success factor in HIV/AIDS prevention programs. Although HIV/AIDS in the United States is often referred to as a single epidemic, it is, in truth, composed of many smaller epidemics that often differ substantially. Once a disease that mainly affected white MSM and injection drug users, HIV/AIDS is increasingly affecting heterosexual persons, gay men of color, and young persons (ages 13-24). Communities of color are disproportionately affected. Overwhelming evidence, including historical experience and scores of careful scientific studies, demonstrates that well-designed prevention programs can help reduce the number of new infections. However, to produce lasting behavior change, prevention programs must consider the social and cultural realities of the persons at greatest risk.

Targeting Interventions to Marginalized Populations

U.S. prisons and jails hold 2 million persons and release approximately 12 million inmates into the community annually. These facilities house persons who are disproportionately affected by high rates of infectious diseases such as HIV/AIDS. The confirmed AIDS case rate among prisoners was five times the U.S. rate in 1999. Approximately 80% of prisoners have a history of substance abuse. Most facilities lack comprehensive discharge planning to link releasees with community-based providers for health care, substance abuse treatment, and other services.

CDC promotes a community approach to improve the health of inmates via collaborations with correctional institutions, public health agencies, and community-based healthcare and social service organizations. In FY 1999, CDC and HRSA funded 7 health departments to design and implement innovative demonstration projects for HIV prevention and care in jails, prisons, and/or juvenile detention centers. The Massachusetts Department of Public Health used this funding to implement an intensive case management program for inmates with HIV infection who are nearing release. Each of the state's five regions has a Transitional Intervention Project (TIP) team, consisting of a social worker and case manager, that meets with inmates before release to assess their needs, arrange for medical and social services, and monitor their transition.

CDC uses several tools to involve communities in HIV prevention. These include community planning, coordinated through health departments, and direct funding of community-based organizations. Through the HIV community planning process, communities tailor HIV prevention programs to local needs. Committees that include representatives from all affected communities, state and local health departments, and key non-governmental organizations providing HIV prevention and related services, and experts in

epidemiology, behavioral science, and program evaluation collaborate to determine the most appropriate HIV prevention interventions based on local epidemic data, community resources, and science.

Since 1989, CDC has provided funding directly to community-based organizations to conduct HIV prevention activities. Many of these organizations have a history of serving populations most-affected by the epidemic. Since 1999, CDC has received additional funding through the Minority AIDS Initiative to augment existing efforts to address racial and ethnic disparities in HIV/AIDS. These funds help communities build the basic services and infrastructure needed to implement HIV prevention programs and link HIV-infected and at-risk individuals to other health and social services.

Local HIV Prevention in California

Twenty-one California local health departments provide outreach, counseling, and testing in high-risk communities with the Neighborhood Interventions Geared to High Risk Testing (NIGHT). NIGHT outreach workers -- often former or current members of the communities in which they work – use mobile vans to provide education, referrals, and follow-up services directly to at-risk communities.

Underpinning its intervention programs are capacity building efforts. To build the capacity of its state and CBO partners to prevent HIV, CDC:

- Supports national meetings and satellite broadcasts as a forum for sharing new ideas and best practices;
- Funds non-governmental organizations to provide training, materials, and direct technical assistance to CBOs; and
- Synthesizes and disseminates information on science-based interventions.

Finally, CDC works to evaluate its programs to monitor progress and to refine efforts. CDC's evaluation efforts include an evaluation of CDC's Minority AIDS Initiative activities and development of state and local health department evaluation guidance. Currently, CDC is revising its grant application process to require more information on performance, especially as it relates to CDC's overall goals, and ways to manage the program based on performance information.

International Strategies, Activities, and Resources

CDC is working with HRSA, NIH, USAID, the Department of State, and other agencies and organizations to help ministries of health in Africa, Asia, and Latin America address the devastating impact of HIV/AIDS. These efforts compliment multilateral efforts, including the Global Fund to Combat HIV, TB, and Malaria. CDC (in collaboration with USAID) has established a field presence in 25 countries in Africa, Asia, and Latin America to help national HIV/AIDS control programs. CDC plans to establish a presence in at least one additional country in 2003. In FY 2004, CDC (in collaboration with USAID), will undertake an initiative to prevent mother-to-child transmission of HIV in 14 countries in Africa and the Caribbean.

Global AIDS Program Countries FY 2002	
Angola	Mozambique
Botswana	Namibia
Brazil	Nigeria
Cambodia	Rwanda
China	Senegal
Cote d'Ivoire	South Africa
Democratic Rep. of Congo	Tanzania
Ethiopia	Thailand
Guyana	Uganda
Haiti	Vietnam
India	Zambia
Kenya	Zimbabwe
Malawi	

CDC works with host countries and other key partners to assess the needs of each country and design a customized program of assistance that fits within the host nation's strategic plan. CDC will focus on two or three major program areas in each country. Priorities include:

- Primary prevention of HIV infection through activities such as expanding voluntary counseling and testing programs, building programs to reduce maternal-to-child transmission, strengthening programs to reduce blood transmission.

- Improving the care and treatment of HIV/AIDS, STDs and related opportunistic infections by improving STD management, enhancing care and treatment of opportunistic infections including tuberculosis, and initiating targeted antiretroviral treatment demonstration projects.

- Strengthening the capacity of countries to collect and use surveillance data and to manage national HIV/AIDS programs by expanding HIV/STD/TB surveillance programs and strengthening laboratory support for surveillance, diagnosis, disease monitoring and HIV screening for blood safety.

For example, prevention of mother-to-child-transmission (MTCT) of HIV infection has been identified as a priority in both Uganda and Kenya. In Uganda, CDC funds 10 counselors for the MTCT program at the prenatal clinic in Mulago Hospital, which serves more than 34,000 women annually. In Kenya, CDC is working with multiple partners to introduce MTCT prevention activities to the Pumwani Maternity Hospital in Nairobi. More than 23,000 babies are born at this facility each year. The estimated HIV prevalence in mothers there is approximately 16 percent.

Program Performance Analysis

Overarching Goal: Reduce the number of new HIV infections.

Historically, new AIDS cases (AIDS incidence) were the basis for assessing needs for prevention and treatment programs. However, potent new antiretroviral therapies are delaying or preventing the development of AIDS in many HIV-infected persons and AIDS data are no longer sufficient to describe the epidemic. Data on HIV are now needed to monitor the effect of the epidemic. CDC is working with states to implement and improve HIV reporting and is studying methods to estimate HIV incidence nationally. Until comparable HIV data are available nationwide, CDC will continue to use AIDS data to report most nationwide statistics. CDC currently reports HIV data from 25 state and will add additional states as data becomes available.

1. Reduce the number of HIV infection cases diagnosed each year among people <25 years of age.

The number of HIV infection cases among persons < 25 years of age diagnosed each year is the best data available for monitoring new HIV infections. HIV infections occurring in those < 25 years of age are likely to have been acquired recently and thus are a relatively good proxy measure of HIV incidence. Also, these data enable CDC to look at yearly trends in a meaningful way. Data or cases come from the HIV/AIDS Reporting System (HARS), a population-based national surveillance system that collects demographic, clinical and behavioral information on all AIDS cases diagnosed in the United States, as well as HIV cases diagnosed in states with HIV reporting requirements. CDC will report data on HIV infections among persons under 25 years of age for heterosexuals, men who have sex with men, and injecting drug users in the next GPRA report. This measure is still being discussed and might undergo slight revisions.

2. Decrease the number of perinatally acquired AIDS cases, from the 1998 base of 235 cases:

Surveillance data reported through June 2001 show sharply declining trends in perinatal AIDS cases; this decline was strongly associated with increasing zidovudine use in pregnant women who were aware of their HIV status. More recently, improved treatment also likely delayed onset of AIDS for HIV-infected children. With efforts to maximally reduce perinatal HIV transmission and increase treatment for those infected, declines are likely to continue. Declines may be affected by treatment failures and missed opportunities to prevent transmission. The data for this measure is not available at this time because the CDC HIV/AIDS Surveillance Report is delayed due to the transition from AIDS case reporting to HIV reporting. The data will be available for the next GPRA report.

3. Reduce the annual incidence of new HIV infections.

This measure is being phased out and replaced by performance measure number 1 above. CDC will estimate reductions in HIV incidence when the new methods for estimating incidence are applied in a sufficient number of states and the data are available for analysis. Preliminary data using the new methods should be available in 2004.

Goal # 1: Decrease the number of persons at high risk for acquiring or transmitting HIV infection.

1. Among HIV-infected persons >= 18, increase the proportion who were abstinent during the past 12 months or used a condom the last time they had sex.

Because every new HIV infection is the result of transmission from an infected person, encouraging infected persons to adopt safe behaviors in one of the highest priorities of HIV prevention. To reduce the risk of HIV transmission from infected persons, CDC-funded grantees have increased the number of prevention interventions aimed at supporting the adoption and maintenance of safer behaviors. Moreover, since 1998 CDC has funded five demonstration projects which provide comprehensive services with risk-reduction interventions at individual, group and community levels to HIV-infected persons. Abstinence and consistent use of condoms are effective methods for preventing HIV transmission.

2. Decrease the proportion of HIV-infected IDUs who shared needles in the past 12 month.

CDC has added this new performance measure to reflect progress in reducing HIV transmission from injecting drug use. An estimated 32 percent of people now living with AIDS are or were injecting drug users.

Goal # 2: Increase the proportion of HIV-infected people who know they are infected.

To achieve further declines in AIDS incidence and deaths, HIV-infected persons must seek testing earlier in the course of their disease and receive and adhere to complex treatment regimens. In addition, new HIV infections must be prevented.

1-4. Among persons with HIV infection, increase the proportion diagnosed before progression to AIDS.

As deaths due to AIDS have decreased and the rate of new infections has remained stable, the number of persons living with HIV/AIDS has increased. If incidence does not decrease, the number of persons living with HIV and AIDS is expected to continue to increase slightly each year. The increasing number of persons living with HIV and AIDS provides further evidence of the importance of continuing HIV prevention programs.

Measures 1 through 4 are indicators of the percent of persons who did not know they were HIV-infected until late in the spectrum of the disease. These individuals were not diagnosed with HIV until they had already developed an AIDS defining condition. The percent of persons diagnosed with HIV and AIDS simultaneously should decrease over time if a greater proportion of HIV-infected persons find out their HIV status earlier. Activities related to these measures include efforts to increase knowledge of HIV status through voluntary counseling and testing, and to link infected persons with prevention, care, and treatment services. Measure 1 is a new measure and is intended to replace measures 2 through 4 under Goal # 2 in the tables. Measures 2 through 4 address the same issue but are targeted to different risk groups and will be phased out when data for FY 2003 are reported.

5. Increase the percentage of HIV-positive tests from CDC-funded test sites with post-test counseling sessions reported.

The HIV Counseling and Testing System (CTS), initiated in 1990, is the principal source of information on the use of publicly funded HIV counseling, testing, and referral services in the United States. Client demographic, behavioral, and HIV test results are reported to CTS about each reported HIV counseling, testing, and referral episode in a CDC-funded site. Each year, approximately 2 million HIV tests are reported from over 11,000 sites, each with varying test return rates. CDC is working with all grantees to continue improving the return rates for HIV-positive test results and is evaluating grantees' reporting systems. Information obtained from the evaluation will be used to develop a comprehensive plan to ensure that all people receiving an HIV-positive test result from a CDC-funded site know their HIV status. Recent conditional approval by FDA of a rapid HIV-1 test will allow return of HIV test results "while you wait." This measure may be revised when rapid testing becomes more widespread. Additional strategies to improve client return for HIV-positive test results, such as provider peer training to replicate successful programs, will be instituted later this year.

Goal # 3: Increase the proportion of HIV-infected people who are linked to appropriate prevention, care and treatment services**.**

1. Increase the proportion of HIV-infected people who received some form of medical care within 3 months of HIV diagnosis.

This measure reflects linkage to care after initial diagnosis. Most HIV-infected persons should be evaluated by a physician soon after receiving their initial positive test results. However, many persons are not evaluated because of fear or lack of access to medical care. The data for this measure are collected through interviews with HIV-infected persons in 16 areas.

2. Expand the number of states that are able to measure: 1. Adherence to treatment; 2. Impact of antiretroviral therapy (ART) on long term survival:

CDC funds health departments to collect information on the care of all persons with HIV/AIDS. Health departments use these data for both care and prevention programs. This population-based surveillance captures data on persons who receive care through the private and public sectors, as well as persons who do not receive care at all. The care of most persons with HIV or AIDS is funded by Medicaid, Medicare, and the Ryan White CARE Act. Data on adherence identify persons at increased risk for morbidity and mortality. Because non-adherence can lead to the development of drug-resistant viral strains, these data also identify areas where surveillance for drug-resistant strains may be needed. Data on long-term survival identify populations underserved by prevention and care programs.

In FY 2002, the number of states monitoring adherence to treatment increased. The number of states monitoring the impact of antiretroviral therapy on long-term survival remained the same. This measure will be phased out when the data for FY 2003 are reported.

3. Refine methods for measuring long-term survival:
Midway through the 1990s, effective therapies became available for HIV-infected persons. The effect of these treatments on AIDS incidence and deaths were detected at the population level through surveillance as early as 1996. As the number of deaths have decreased and the rate of new infection remained stable, AIDS prevalence has steadily increased each year. CDC has two longitudinal studies to determine long-term survival of patients in medical care. This measure is being phased out.

Goal # 4: Strengthen the capacity nationwide to monitor the epidemic, develop and implement effective HIV prevention interventions and evaluate prevention programs.

1. Increase the number of states and District of Columbia that conduct HIV case reporting in adults and adolescents:

As of November 2002, 48 states, Puerto Rico, Guam, and the Virgin Islands conducted some type of surveillance for HIV infection. Thirty-three of these states use the same confidential, name-based method for reporting infections in adults and adolescents that is used in AIDS surveillance; 15 others used other systems. CDC anticipates that by 2003 all states will have implemented HIV surveillance as an extension of their AIDS surveillance activities. In the future, CDC will report the number of states which have confidential name-based reporting and those which use other reporting systems such as coded identifiers to report HIV cases. Currently, only data from name-based reporting systems can be used in CDC reports. The remaining methods need to be evaluated to determine if they meet reporting standards.

2. Measure HIV incidence and prevalence in high-risk populations:

Testing technology now can distinguish recent or "incident" HIV infections from "remote" infections among tests positive for HIV. In FY 2000 and 2001, CDC began funding prospective and retrospective studies in 21 sites to: 1) measure HIV incidence and prevalence in high risk populations, and in certain health care settings and geographical areas; and 2) to analyze and disseminate data from surveys to assist in evaluating the impact of HIV prevention efforts.

The incidence studies used the testing technology to measure HIV incidence; the data are used to guide local HIV prevention and care efforts. Funding for these studies will be discontinued in FY 2003. New HIV incidence studies were piloted in FY 2002 and will be implemented in FY 2003 in over 20 of the States with HIV reporting systems.

3. Percentage of states that adopt and maintain recommended security and confidentiality standards:

CDC is phasing out this process measure because the target was achieved from FY 1999 through FY 2002. Moreover, failure to maintain recommended standards is unexpected and unacceptable.

4. Fund community-based organizations to provide HIV prevention services to persons at high risk for HIV infection:

In 1988, CDC made funding available for the National and Regional Minority Organizations (NRMOs) program designed to provide technical assistance to community-based prevention efforts. In 1989, CDC began to provide direct funding to minority community-based organizations (CBOs). Since then, funding from the Minority AIDS Initiative has supported additional prevention efforts including capacity building assistance to CBOs, targeted efforts by health departments to address minority communities, focused CBO programs, demonstration projects to test new interventions, and communication efforts to increase knowledge of serostatus.

In 2001, CDC made 271 awards to CBOs. Most of these programs address the needs of persons considered to be at high-risk for acquiring or transmitting HIV infection, including men having sex with men, injecting drug users, youth, homeless persons, sex workers, and incarcerated persons. CDC anticipates continued funding of these CBOs in 2002 and 2003. This measure will be phased out after the results for FY 2003 are presented.

5. Fund community coalition planning and implementation projects to expand community demonstration projects:

In FY 1999, CDC awarded 20 planning grants for community coalition development to sustain, improve, and expand HIV prevention services for racial/ethnic minority populations. In FY 2002, CDC funded 11 of these grantees to implement community coalition development project. This measure will be phased out after the results for FY 2003 are presented.

Goal #5: Working with other countries, USAID, and international and U.S. government agencies, reduce the number of new HIV infections among 15- to 24-year-olds in sub-Saharan Africa from an estimated 2 million by 2005.

CDC continues to develop programs in 25 countries in sub-Saharan Africa, Asia, Latin America, and the Caribbean. In collaboration with USAID, CDC will begin to implement the International Mother and Child Prevention Initiative, an initiative to prevent the transmission of HIV from mother to infants and to improve health care delivery in Africa and the Caribbean. CDC has assigned staff in 25 countries as of December 2002 and has hired approximately locally employed staff in host countries. CDC has established 50 cooperative agreements to extend the scope and reach of its activities. An evaluation plan for all activities has been developed; the countries have submitted annual reports, tracking over 80 indicators; in-depth case studies of CDC's value-added in these countries have begun. CDC has worked closely with external partners including the United States Agency for International Development (USAID), the World Health Organization (WHO) and the World Bank, among others to develop a set of common, core indicators of progress.

1. Initiate, expand, or strengthen HIV/AIDS prevention, care, treatment and support activities globally.

Surveillance:
With funding received in 2001, CDC supported surveillance efforts in 22 countries. CDC expects to expand this to all global AIDS program countries with funding received in 2002. In addition, 870 country nationals have participated in surveillance trainings sponsored/co-sponsored by CDC and/or conducted by CDC staff in Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, Nigeria, South Africa, Zambia, Zimbabwe; 300 country nationals were trained in Vietnam.

Voluntary counseling and testing:
CDC continues to strengthen voluntary counseling and testing (VCT) programs in 18 countries by providing technical assistance to ensure the quality and accuracy of HIV testing, strengthening laboratory diagnostic capabilities, identifying methods to target groups at high risk, and enhancing linkages between VCT and health and social services. CDC staff in Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, South Africa and Uganda have supported co-sponsored and/or attended 95 meetings in Africa relating to the development of national, regional, district, and/or local strategic planning, policy and/or guidelines for

voluntary counseling and testing. In addition, 520 country nationals have participated in voluntary counseling and testing trainings sponsored/co-sponsored by CDC/GAP and/or conducted by CDC staff in Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, South Africa, Uganda; 370 country nationals were trained in Vietnam. 99,505 individuals have been tested and 17,407 individuals have tested HIV+ in voluntary counseling and testing sites supported with CDC/GAP funds in Botswana, Cote d'Ivoire, Kenya, and Uganda.

Technical assistance for treatment of STDs, TB, and other opportunistic infections:
In 2001, CDC has worked to initiate, expand or strengthen locally appropriate technical assistance for treatment of sexually transmitted infections (STIs), tuberculosis, and other AIDS-related diseases in 18 countries. For example, 150 country nationals have participated in STI training sponsored/co-sponsored by CDC and/or conducted by CDC staff in Botswana, Cote d'Ivoire, Ethiopia and Zambia; 2 country nationals were trained in Vietnam; 686 country national have participated in TB training sponsored/co-sponsored by CDC and/or conducted by CDC staff in Botswana, Cote d'Ivoire, South Africa, Uganda, Zambia.

2. Initiate, expand, or strengthen mother-to-child HIV prevention programs in collaboration with national and international partners:
CDC enhanced support for the implementation of programs that provide interventions to prevent perinatal transmission of HIV in 13 countries. Botswana, Cote d'Ivoire, Kenya, South Africa, Uganda and Zimbabwe have supported co-sponsored and/or attended 78 meetings in Africa relating to the development of national, regional, district, and/or local strategic planning, policy and/or guidelines for preventing mother to child HIV/AIDS transmission (PMTCT). Thirteen cooperative agreements, contracts or other funding mechanisms for preventing mother to child transmission have been awarded in Botswana (4), Kenya (4), Uganda (3), Zimbabwe (1) and Thailand (1). Three hundred and sixty-nine country national have participated in PMTCT trainings sponsored/co-sponsored by CDC/GAP and/or conducted by CDC/GAP staff in Botswana, Cote d'Ivoire, Kenya and Zimbabwe. CDC is supporting national coordinating committee(s) for PMTCT programs in Zimbabwe, Botswana, Cote d'Ivoire, Kenya, South Africa, and Uganda. CDC will continue to identify barriers to these services and evaluate the outcomes of interventions on both infants and mothers and to assess ways to expand prevention to infants' fathers as well.

In June 2002, the President announced a new $500 million dollar International Mother and Child Prevention Initiative. The Initiative will be jointly implemented by HHS and USAID. When fully funded, this effort is intended to reach one million women annually reduce mother to child transmission by 40 percent within 5 years or less in 12 African countries and the Caribbean. Implementation plans are currently being developed by a joint HHS-USAID workgroup. In recognition of CDC's involvement with the Initiative, the current performance measure will be revised in the 2004 performance plan to read "Increase the number of *Preventing Mother to Child Transmission Initiative* countries that have coordinated needs assessments, planned programs, and begun implementation."

Total Funding
Funding for FY 2002 - FY 2004 are included in the HIV/AIDS funding table.

II-G. Sexually Transmitted Diseases

Prevention of STD-Related Infertility and Syphilis Elimination Goal-by-Goal Performance Measurement

1. **Performance Goal:** Reduce STD rates by providing chlamydia and gonorrhea screening, treatment, and partner treatment to 50% of women in publicly funded family planning and STD clinics nationally.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce the prevalence of *Chlamydia trachomatis* among high-risk women under age 25, from 11.6%. Source: U.S. Department of Labor; U.S. Job Corps	**FY 03:** <10% **FY 02:** <10% **FY 01:** <8% **FY 00:** <8% **FY 99:** <8%	**FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 10.6% **FY 00:** 11.9% **FY 99:** 11.5% **FY 98:** 11.7% **FY 95:** 11.6%	**B** - 101 **1**
2. Reduce the prevalence of *Chlamydia trachomatis* among women under age 25 in publicly funded family planning clinics. Source: Regional Infertility Prevention Programs; CDC	**FY 04:** <5% median **FY 03:** <5**%** median **FY 02:** <5% median **FY 01:** <6% median **FY 00:** <6% median **FY 99:** <6% median	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** Achieved/5.6% **FY 00:** Achieved/5.2% **FY 99:** Achieved/5.5% **FY 98:** 5.4% **FY 96:** 9.0%	**B -** 101 **HP** - 25-1a **1**
3. Reduce the incidence of gonorrhea in women aged 15-44. Source: STD Morbidity Surveillance System; CDC	**FY 04:** <250/100,000 women **FY 03:** <250/100,000 women **FY 02:** <250/100,000 women **FY 01:** <250/100,000 women **FY 00:** <250/100,000 women **FY 99:** <250/100,000 women	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 286/100,000 **FY 00:** 278/100,000 **FY 99:** 286/100,000 **FY 98:** 286/ 100,000 **FY 97:** 264/ 100,000 **FY 96:** 258/ 100,000 **FY 95:** 303/ 100,000	**B** - 101 **HP** - 25-2 **1**

Performance Measure	Targets	Actual Performance	Reference
4. Reduce the incidence of PID, as measured by a reduction in hospitalizations for PID, in women aged 15-44. Source: National Hospital Discharge Survey, 2000 (latest data available)	**FY 03:** <125/100,000 women **FY 02:** <125/100,000 women **FY 01:** <125/100,000 women **FY 00:** <125/100,000 women **FY 99:** <125/100,000 women	**FY 03:** 12/2005 **FY 02:** 12/2004 **FY 01:** 12/2003 **FY 00:** Achieved: 120/100,000 women **FY 99:** 127/100,000 women **FY 98:** 155/100,000 women **FY 97:** 157/100,000 women **FY 96:** 164/100,000 women **FY 95:** 162/100,000 women	**B** - 101 **1**
5. Reduce the number of initial visits to physicians for PID in women aged 15-44. Source: National Disease and Therapeutic Index (NDTI), IMS America, Ltd.	**FY 04:** <225,000 visits **FY 03:** <225,000 visits **FY 02:** <225,000 visits **FY 01:** <225,000 visits **FY 00:** <225,000 visits **FY 99:** <225,000 visits	**FY 04:** 12/2005 **FY 03:** 12/2004 **FY 02:** 12/2003 **FY 01:** 244,000 visits **FY 00:** 254,000 visits **FY 99:** 250,000 visits **FY 98:** 233,000 visits **FY 97:** 260,000 visits **FY 96:** 286,000 visits **FY 95:** 262,000 visits	**B** - 101 **HP -** 25-6 **1**

2. Performance Goal: Reduce the incidence of primary and secondary syphilis.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the percentage of U.S. counties with an incidence of P&S syphilis in the general population of ≤4/100,000. Source: STD Morbidity Surveillance Systems, CDC	**FY 04:** >95% of counties **FY 03:** >95% of counties **FY 02:** >92% of counties **FY 01:** >90% of counties **FY 00:** >90% of counties **FY 99:** 85% of counties	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** Achieved/94% **FY 00:** Achieved/93% **FY 99:** Achieved/91% **FY 98:** 90% **FY 97:** 87% **FY 96:** 90% **FY 95:** 81%	**B** - 101 **1**

Performance Measure	Targets	Actual Performance	Reference
2. Increase the percent reduction in the racial disparity. Reported ratio is black:white	**FY 04:** 15%, to 13:1 **FY 03:** 15%, to 15:1 **FY 02:** 15%, to 18:1 **FY 01:** 15%, to 20:1^ **FY 00:** 15%, to 25:1^ **FY 99:** 15%, to 29:1^	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** Achieved: 30% reduction to 16:1 **FY 00:** Achieved: 20% reduction to 24:1 **FY 99:** 12% reduction to 30:1 **FY 98:** 21% reduction to 34:1	**B** - 101 **1**

^These targets were re-computed using the actual performance rate ratio for FY 1998 and FY 1999 rather than the target ratio for the previous fiscal year.

3. Performance Goal: Reduce the incidence of congenital syphilis.

Performance Measure	Targets	Actual Performance	Reference
Reduce the incidence of congenital syphilis per 100,000 births. Source: STD Morbidity Surveillance Systems, CDC	**FY 04:** <12 **FY 03:** <12* **FY 02:** <12 **FY 01:** <12 **FY 00:** <12 **FY 99:** <20	**FY 04:** 8/2005 **FY 03:** 8/2004* **FY 02:** 8/2003 **FY 01:** Achieved: 11.1 **FY 00:** 14.0 **FY 99:** Achieved: 14.5 **FY 98:** 21.3 **FY 97:** 27.8 **FY 96:** 32.9 **FY 95:** 47.7	**B** - 101 **HP -** 25-9 **1**

Program Description and Context

Programs to protect Americans from the immediate and long-term complications of sexually transmitted diseases (STDs) were first established in 1936 through collaborative efforts of federal, state, and local health authorities. Since then, rates of STDs have declined substantially. Nevertheless, STDs remain epidemic in the U.S. and disproportionately affect adolescents, women and infants, and communities of color.

The U.S. continues to record the highest STD rates in the industrialized world. STDs are the most commonly reported infections of all notifiable diseases reported to CDC. Because most STDs are asymptomatic and several of the most common STDs are not routinely reported, the true burden of STDs is many times greater than that reflected by national surveillance statistics. An estimated 15 million new cases of non-HIV STDs, such as syphilis, chlamydia, gonorrhea, genital herpes, and human papillomavirus (HPV), occur each year at an annual cost of at least $10 billion. STDs are even more costly when viewed in terms of human suffering. Severe, lifelong consequences that often follow these infections include involuntary infertility, potentially fatal tubal pregnancy, other adverse pregnancy outcomes such as stillbirths and newborn (congenital) infections, and increased risk of HIV transmission.

Investment in STD prevention now results in future savings in direct healthcare expenditures. For example, syphilis and its complications, such as congenital syphilis and increased HIV transmission, are estimated to cost the U.S. healthcare system more than $960 million annually. The health consequences from chlamydial infections in women are conservatively estimated to result in an additional $2.4 billion each year. In addition to causing irreversible and costly reproductive health consequences, chlamydia and syphilis infections increase the risk of HIV transmission among adults at least two to fivefold.

With the exception of hepatitis B, which is caused by a virus, there are no vaccines for STDs. Strategies to prevent STDs include promoting safe sexual behaviors, including abstinence and use of barrier protection; clinical services; counseling; and partner notification. *Safe sexual behavior*, including abstinence and use of barrier protection, can dramatically limit the magnitude of the STD epidemic in the U.S. Common bacterial STDs, such as chlamydia, gonorrhea, and syphilis, are curable and can be controlled and prevented with *clinical services* that include screening, diagnosis, and treatment. Common viral STDs, such as genital herpes and HPV, are treatable but not curable. *Counseling* has been proven effective in helping high-risk persons modify their sexual behaviors. *Partner notification* can interrupt chains of transmission in local sexual networks.

CDC works to prevent and control STDs in the U.S. Principal activities include: 1) monitoring disease trends using national and local data to focus and assess prevention activities; 2) conducting behavioral, clinical, and health services research and program evaluation to provide a scientific base for improving program efforts; and 3) providing financial, direct personnel, and technical assistance to state and local health departments to deliver clinical and prevention services.

Both providers and the public need credible information to fight STDs. CDC and its partners provide education and training through guideline development, regional STD/HIV Prevention Training Centers, and programs to ensure that providers are adequately prepared to provide optimal STD treatment, care, and prevention services.

Infertility Prevention Program:
CDC supports chlamydia screening and prevention services for uninsured and under-insured women attending family planning, STD , and other women's health clinics. These screening

programs are working to reduce the prevalence of chlamydia. Although all states and territories conduct some screening programs, large numbers of at-risk women are not reached. CDC conducts research to identify the biologic and behavioral determinants of chlamydia transmission and the feasibility, acceptability, and cost-effectiveness of chlamydia screening for males. Infections due to *Neisseria gonorrhea*, like those resulting from *Chlamydia trachomatis*, are a major cause of PID in the U.S. In addition, epidemiologic and biological studies provide strong evidence that chlamydial and gonococcal infections facilitate the transmission of HIV infection.

Regional Chlamydia Screening Programs

The effectiveness of large-scale screening programs in reducing chlamydia prevalence in women has been well documented in areas where this intervention has been in place for several years. After adjusting trends in chlamydia positivity to account for changes in laboratory test methods and associated increases in test sensitivity, chlamydia test positivity decreased in five of 10 HHS regions from 2000 to 2001, increased in four regions, and remained the same in one region. Although chlamydia positivity has declined in the past year in some regions due to the effectiveness of screening and treatment of women, continued expansion of screening programs to populations with higher prevalence of disease may have contributed to increases in positivity in

Syphilis Elimination:
CDC has undertaken an initiative to eliminate syphilis in the U.S. This effort builds on existing STD programs and takes advantage of the opportunity afforded by recent historic lows in syphilis rates. CDC has published a national plan for the elimination of syphilis in the U.S., which focuses on: community involvement in the development and implementation of syphilis elimination plans; enhanced surveillance; outbreak response preparedness; biomedical and behavioral interventions; enhanced health promotion; and assessment of quality and coverage of services. Resources are targeted to areas where syphilis persists at high levels and where there is a substantial potential for syphilis epidemics to reignite. (See Appendix C)

Syphilis Elimination Demonstration Sites
Of the project sites receiving funding for syphilis elimination, three counties received additional funds prior to the official launch of the *National Plan to Eliminate Syphilis from the United States.* These demonstration sites (Davidson County, TN; Wake County, NC; and Marion County, IN) had established community partnerships prior to the national campaign, which greatly improved their ability to rapidly implement the National Plan. In each of the sites, a coalition with broad community representation led to collaboration among health departments, providers, corrections institutions, hospitals, faith communities and social service agencies ultimately translating into increased screening and case-finding. These efforts resulted in an average decline of P&S syphilis rates among the demonstration sites at 69% from 1999 to 2001.

Program Performance Analysis

Goal 1- Prevention of STD-Related Infertility

Chlamydia
In 2001, CDC achieved the goal of reducing chlamydia prevalence among women attending family planning clinics. The median chlamydia test positivity among 15- to 24-year-old women who were screened during visits to selected family planning clinics in all states and outlying areas was 5.6% (range, 2.7% to 13.9%). However, in nearly all states chlamydia positivity was greater than the HP2010 objective of 3.0%.

Increases in reported chlamydial infections during the 1990s reflected the expansion of chlamydia screening activities, use of increasingly sensitive diagnostic tests, an increased emphasis on case reporting from providers and laboratories, and improvements in the information systems for reporting. In parts of the United States where large scale chlamydia screening programs have been instituted, prevalence of the disease has declined substantially. However, many women who are at risk for this infection are still not being tested, reflecting the lack of awareness among some health care providers and the limited resources available to support screening. Chlamydia screening and reporting are likely to expand in response to the Health Plan Employer Data and Information Set (HEDIS) measure for chlamydia screening of sexually active women 15 through 25 years of age. HEDIS measures are used to report on the performance of medical care provided through managed care organizations.

Gonorrhea
Reduce the incidence of gonorrhea among women aged 15-44: The U.S. experienced a 73.9% decline in the reported rate of gonorrhea in the U.S. from 1975 to 1997. The rate increased in 1998 and has remained essentially unchanged since. Among women aged 15-44, the 2001 rate was 286 per 100,000 exceeding the target rate of 250. Although increased screening (usually associated with simultaneous testing for chlamydial infection), use of more sensitive diagnostic tests, and improved reporting may account for a portion of the recent increase, true increases in disease in some populations and geographic areas also appear to have occurred.

Pelvic Inflammatory Disease
The reported number of initial visits to physicians' offices for PID through the National Disease and Therapeutic Index has generally declined from 1993 through 1998 but has remained, for the most part, unchanged since 1998.

Goal 2 - Syphilis Elimination

The rate of primary and secondary (P&S) syphilis in the United States declined by 89.2% from 1990 through 2000. Despite national progress toward syphilis elimination, syphilis remains an important problem in the South and in some urban areas in other regions of the country.

Recently, outbreaks of syphilis among men who have sex with men (MSM) have been reported, possibly reflecting an increase in risky behavior in this population. The rate of P&S syphilis increased slightly in 2001from 2.1 to 2.2 per 100,0000 (the first annual rate increase since 1990); this increase was observed only in men. The number of P&S syphilis cases reported to CDC increased to 6,103 from 5,979 in 2000, an increase of 2.1%.

However, substantial progress has been made in syphilis elimination efforts:

	1997	1998	1999	2000	2001
Reported primary and secondary syphilis rate (per 100,000 pop.)	3.2	2.6	2.4	2.1	2.2
Syphilis-free counties	75%	78%	79%	80.3%	80.2%
Number of counties responsible for 50% of new cases	31	28	25	22	21
Black:white reported rate ratio	43:1	34:1	29:1	24:1	16:1

Goal 3- Reduce the Incidence of Congenital Syphilis

The lack of syphilis serologic testing and treatment during pregnancy remains the major reason that congenital syphilis persists in the U.S. Each positive test in a child is considered a medical emergency with immediate health services follow-up. The absence of testing is often related to complete lack of, or late initiation of, prenatal care. Between 2000 and 2001, the overall rate of congenital syphilis decreased by 20.7% in the U.S., from 14.0 to 11.1 cases per 100,000 live births.

The continuing decrease in the rate of congenital syphilis likely reflects the substantial reduction in the rate of P&S syphilis among women that has occurred in the last decade. During the period from 1991 through 2001, the average yearly percentage decrease in the congenital syphilis rate was 19.8%. The average yearly percentage decrease in the rate of P&S syphilis reported among women for the years 1991 through 2001 was 20.8%.

All data are reported by calendar year. See Appendix D for additional data verification and validation information for each disease area.

Total Funding
Funding for FY 2002 - FY 2004 are included in the HIV/AIDS funding table.

II-H. Tuberculosis

Goal-by-Goal Performance Measurement

Performance Goal: Eliminate Tuberculosis in the United States.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the percentage of TB patients who complete a course of curative TB treatment within 12 months of initiation of treatment (some patients require more than 12 months).	**FY 04:** 88% **FY 03:** 88%* **FY 02:** 88% **FY 01:** 88% **FY 00:** 85% **FY 99:** 85%	**FY 04:** Mid-2007 **FY 03:** Mid-2006* **FY 02:** Mid-2005 **FY 01:** Mid-2004 **FY 00:** Mid-2003 **FY 99:** 79.9% **FY 98:** 79.1% **FY 97:** 77.2% **FY 96:** 75.1% **FY 95**: 72.4% **FY 94:** 67.6%	**B** - 101 **HP** - 14-12 **4**
2. Increase the percentage of TB patients with initial positive cultures who also have drug susceptibility results.	**FY 04:** 95% **FY 03:** 95**%*** **FY 02:** 95% **FY 01:** 95% **FY 00:** 93% **FY 99:** 92%	**FY 04:** Mid-2005 **FY 03:** Mid-2004* **FY 02:** Mid-2003 **FY 01:** 92.2% **FY 00:** 92.7% **FY 99:** 91.9% **FY 98:** 90.9% **FY 97:** 88.5% **FY 94:** 74.7%	**B -** 101 **4**
3. Increase the percentage of contacts of infectious (AFB smear-positive) cases who are placed on treatment for latent TB infection and complete a treatment regimen.	**FY 04:** 63% **FY 03:** 63%* **FY 02:** 63% **FY 01:** 63%^ **FY 00:** 75% **FY 99:** 75%	**FY 04:** Mid-2006 **FY 03:** Mid-2005* **FY 02:** Mid-2004 **FY 01:** Mid-2003 **FY 00:** 56.7% **FY 99:** 59.3% **FY 98:** 74.0% **FY 97:** 71.6% **FY 93:** 68.4%	**B** - 101 **HP** - 14-13 **4**

*Data for this measure are reported by calendar year.
^Targets changed to reflect revisions in data collection methods.

Performance Measure	Targets	Actual Performance	Reference
4. Increase the percentage of other high-risk infected persons who are placed on treatment for latent TB infection and complete a treatment regimen.	**FY 02:** 72% **FY 01:** 72% **FY 00:** 70% **FY 99:** 70%	**FY 02:** Unable to analyze data** **FY 01:** Unable to analyze data** **FY 00:** Unable to analyze data** **FY 99:** Unable to analyze data** **FY 98:** 62.9% **FY 97:** 60.6% **FY 93:** 64.8%	**B** - 101 **HP** - 14-13
5. For TB case reports sent to CDC from states, increase the percentage in which at least 90% of core data items are complete.	**FY 03:** 95% **FY 02:** 95% **FY 01:** 95% **FY 00:** States will report to CDC for identified variables: Date of birth Country of origin Sex Race Mo/yr arrived US Status at TB diagnosis Disease site Sputum smear Sputum culture TB skin test Initial drug regimen Initial drug susceptibility results Previous TB Year of previous diagnosis (continued)	**FY 03:** Mid-2004 **FY 02:** Mid-2003 **FY 01:** 16 out of 22 core variables greater than or equal to 95% complete. Remaining variables: Mo/yr arrived US 85.6% TB skin test 92.6% Initial drug susceptibility results 92.2% Year of previous dx 89.6% HIV status 46.0% HIV status (25-44) 57.8% **FY 00:** 16 out of 22 core variables greater than or equal to 95% complete. Remaining variables: Mo/yr arrived US 84.7% TB skin test 92.9% Initial drug susceptibility results 92.7% Year of previous dx 92.4% HIV status 45.8% HIV status (25-44) 58.1%	**B** - 101

^Targets changed to reflect revisions in data collection methods.
*Data for this measure are reported by calendar year.

Performance Measure	Targets	Actual Performance	Reference
5. Continued	**FY 00:** HIV status HIV status (25-44) Resident of correctional facility Resident of long-term care facility Sputum conversion Reason therapy stopped DOT use Date therapy stopped (Note: the percentages reported are the percentage with complete reporting results for each variable.)	**FY 99:** 16 out of 22 core variables greater than or equal to 95% complete. Remaining variables: Mo/yr arrived US 84.2% TB skin test 92.2% Initial drug susceptibility results 91.9% Year of previous dx 92.6% HIV status 44.3% HIV status (25-44) 57.2% **FY 93:** 7 out of 18 applicable core variables greater than or equal to 95% complete. Other core variables apply to FY 95 data set for 1993 cases. Remaining variables: Mo/yr arrived US 63.4% Sputum smear 94.3% Sputum culture 92.5% TB skin test 81.6% Initial drug regimen 88.9% Initial drug susceptibility results 68.4% Year of previous dx 92.4% HIV status 22.1% HIV status (25-44) 33.0% Resident of correctional facility 83.6% Resident of long-term care facility 67.9%	**B -** 101

Program Description and Context

CDC administers and promotes a national program for the prevention, control, and elimination of tuberculosis (TB) in the United States. These activities are authorized in the Public Health Service Act, Section 317E.

Many people think that tuberculosis is a disease of the past. One reason for this belief is that the U.S. is currently seeing a decline in TB and new TB cases are at an all-time low. However, this very success may lead to declining attention to TB control, making the nation vulnerable to the complacency and neglect.

There is reason for concern, as the nation has felt the ill effects of complacency and neglect of TB before. In the 1970s and early 1980s, TB control efforts were scaled back and many states and cities redirected TB prevention and control funds to other programs. Consequently, the trend toward elimination was reversed, and the nation experienced a resurgence of TB, with a 20% increase in cases reported between 1985 and 1992. Many of these cases were difficult-to-treat, drug-resistant TB. The nation mobilized additional resources to combat the resurgence in the 1990s. This effort has paid off; in 2001 the nation achieved the ninth consecutive year of decline. Regaining control of TB has clearly been one of the major public health success stories of the last decade and has put the nation back on track toward TB elimination.

Still, TB continues to pose considerable challenges. All 50 states and District of Columbia continue to report TB cases each year and nearly 16,000 cases of TB disease occurred in the U.S. during 2001. Every new TB case has the potential to spread if not promptly recognized and treated.

Further, an increasing proportion of cases in the U.S. are among persons born outside the country. Foreign-born persons now account for half of all U.S. TB cases, reflecting the potential impact of the global epidemic of TB on the health of people in the U.S. and elsewhere.

Drug-resistant TB also poses a continuing threat. If persons with TB disease do not complete their full course of treatment, they can develop and spread strains of TB that are resistant to available drugs. One case of multidrug-resistant (MDR) TB can cost up to $1 million to treat. Some U.S. areas are also having increasing difficulty in ensuring proficiency among healthcare providers in diagnosing and treating TB disease and latent TB infection. Diagnosis of infectious cases may be delayed because of their lack of experience, resulting in unnecessary disease transmission to others.

In 1989, CDC set a goal to eliminate TB in the United States, with elimination defined as less than 1 case per 1,000,000 persons. This goal was reaffirmed by the Advisory Council for the Elimination of Tuberculosis (ACET) in 1999 and by the Institute of Medicine (IOM) in 2000. In its report, *Ending Neglect: The Elimination of Tuberculosis in the United States*, the IOM called for a renewed commitment to TB elimination. CDC and the Federal TB Task Force are outlining a

plan to accomplish this goal. Central to this plan are strategies to:

- Strengthen domestic TB control programs to ensure the prompt identification of persons with TB and offer appropriate treatment;
- Provide examination and treatment to persons who have latent TB infection and who are at high risk for developing infectious disease;
- Support the development of improved tools for TB prevention and control, such as a better vaccine, new diagnostic tests and improved drugs; and
- Work in partnership with the countries that contribute most to TB morbidity in the U.S.

Program Performance Analysis

Success in achieving TB elimination ultimately depends on treating infectious patients quickly and completely, treating them with drugs that work, treating their close contacts, treating persons with latent infection who are at high risk of developing the disease, and maintaining timely, complete local, state, and national TB information systems to monitor elimination efforts. Key performance measures include the following:

Percentage of infectious TB patients who complete treatment within 12 months: Because completion of TB treatment is the most effective way to reduce the spread of TB and prevent its complications, this objective is the highest priority for CDC's TB program. Its achievement is vital to the reduction of TB cases and the eventual elimination of this disease. By FY 2004, CDC anticipates that 88% of TB patients will complete therapy within 12 months. In 1999, 79.9% of patients were reported to complete therapy within 12 months, an increase from the 67.6% reported in 1994. Patients who do not complete therapy within 12 months are often difficult to treat and require numerous interventions. Significant new efforts must be made to achieve this objective. CDC supports outreach workers, hired from language, cultural, and ethnic groups with high TB incidence to help meet this objective. Outreach workers help patients complete treatment through directly observed therapy (DOT), incentives, and other adherence strategies. CDC and the CDC-funded Model TB Centers also design and implement training and educational aids for health department and healthcare provider staff to improve the skills needed to help achieve this objective.

Percentage of TB patients with initial positive cultures who also have drug susceptibility tests done: Healthcare providers must know if a newly diagnosed infectious patient is infected with drug-sensitive or drug-resistant organisms so that appropriate drug therapy can be initiated. If this information is not known, patients may receive inadequate treatment leading to spread of drug-resistant organisms, additional morbidity, and mortality. The performance for this measure in 2001 was 92.2%, up from 74.7% in 1994. With continued progress, CDC expects that programs will achieve the 95% target in FY 2004. Much of this progress is attributable to increased efforts of state and local health departments and hospital infection-control practitioners to address the resurgence of TB and to increased funding for health department laboratories to purchase state-of-the-art equipment needed to perform more accurate and rapid laboratory testing and confirmation for TB and multidrug resistant TB (MDR TB).

Percentage of contacts of smear-positive cases who are placed on treatment for latent TB infection and complete a treatment regimen: Completion of treatment for latent TB infection among contacts of infectious TB cases is a cornerstone of U.S. efforts to reduce TB and eliminate the disease. Contacts of smear-positive TB patients are at high risk of developing TB and therefore must be screened for infection and, if infected, offered and complete treatment. The 1998 rate for this measure was 74%, up from 68.4% in 1993. Because the methods and definitions of reporting were substantially revised, the results from 1999 and later years cannot be compared to those from 1998 and prior years. Interpretation of data from 1999 and later years needs to be interpreted with caution because of incomplete reporting from program areas.

Through cooperative agreements with state and local health departments, CDC supports a commitment to the identification and examination of contacts and the completion of treatment for contacts who have latent TB infection. CDC is designing training for health department TB staff to improve their skills in this area. CDC is also working with HRSA and other federally funded programs serving groups at high risk for TB to facilitate testing and completion of treatment in high-risk persons.

Recently, CDC and its partners have pursued the use of short-course regimens to improve adherence during treatment for latent TB infection. CDC is assessing implementation of these guidelines paying particular attention to the incidence of adverse events, and has recently issued additional guidance to help providers more safely treat persons who are latently infected. Further research in this area is critical.

Percentage of other high-risk persons who are placed on treatment for latent TB infection and complete a treatment regimen: Because the methods and definitions for this measure were substantially revised in 1999, data are not available to assess progress in this area. This measure is being phased out. The 1998 rate for this objective was 62.9%, up from 60.6% in 1997.

Percentage of TB case reports in which core data items are complete: To design and carry out community TB prevention and elimination efforts, public health officials and community leaders need to identify the unique and ever-changing characteristics of TB in their communities. Significant progress is being made on this front. Since 1993, when the national TB the case report was revised and expanded to include information on TB risk factors (such as HIV status), drug resistance, and treatment, the percentage of core variables that were at least 95% complete increased from 7 of 18 to 19 of 22 in 2001. Progress can be attributed to CDC funding for TB surveillance activities and frequent telephone, electronic, and on-site communication between CDC and health department surveillance staff. Two of the under-reported variables for this measure relate to information about the HIV status of TB patients. CDC is working with health department TB staff, state epidemiologists, HIV program staff, and others to resolve issues surrounding these items, many of which are related to HIV confidentiality issues.

Note: Because this measure is a process measurement for conducting national TB surveillance and not an outcome of the impact of surveillance and associated programmatic interventions, this measure will be phased out in 2004.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 510,506*	[$620,506]	Estimate
FY 2003:	$ 627,601*	[$627,601]	President's Budget
FY 2002:	$ 627,239*	[$627,239]	Enacted

**This funding level reflects a proposed law change in FY 2004 that will increase access points for underinsured children by transferring funds from the 317 program to the Vaccines for Children program. The proposed law also includes funding to lift the price cap on Tetanus/Diptheria vaccine purchase. Figures within the brackets represent funding under the current law.*

II-I. Immunization

Goal-by-Goal Performance Measurement

1. Performance Goal: Reduce the number of indigenous cases of vaccine-preventable diseases.

Performance Measure	Target	Actual Performance	References
1. The number of indigenous cases of paralytic polio, rubella, measles, *Haemophilus influenzae* invasive disease (type b and unknown) in children under 5 years, diphtheria, congenital rubella syndrome, and tetanus will remain at or be reduced to 0 by 2010. * To be in line with Healthy People 2010, beginning in 2001, the diphtheria and tetanus cases will be measured in persons < 35 years of age (previously < 25 years of age). † Provisional data	**Paralytic Polio** **FY 04:** 0 **FY 03:** 0 **FY 02:** 0 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Rubella** **FY 04:** 15 **FY 03:** 15 **FY 02:** 20 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Measles** **FY 04:** 50 **FY 03:** 50 **FY 02:** 60 **FY 01:** 60 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0	**Paralytic Polio** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Rubella** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 2 **FY 00:** 176 **FY 99:** 271 **FY 98:** 364 **FY 97:** 181 **Measles** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 26 **FY 00:** 63 **FY 99:** 66 **FY 98:** 74 **FY 97:** 81	**B** - 116 **1**

Performance Measure	Target	Actual Performance	References
(continued)	***Haemophilus influenzae*** **FY 04:** 150 **FY 03:** 175 **FY 02:** 175 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Diphtheria*** **FY 04:** 5 **FY 03:** 5 **FY 02:** 5 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Congenital rubella syndrome** **FY 04:** 5 **FY 03:** 5 **FY 02:** 5 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0 **Tetanus*** **FY 04:** 25 **FY 03:** 25 **FY 02:** 25 **FY 01:** 0 **FY 00:** 0 **FY 99:** 0 **FY 98:** 0 **FY 97:** 0	***Haemophilus influenzae*** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** b + unknown 181 **FY 00:** b + unknown 197 **FY 99:** 120 **FY 98:** 163 **FY 97:** 152 **Diphtheria** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 0 **FY 00:** 1 **FY 99:** 0 **FY 98:** 1 **FY 97:** 3 **Congenital rubella syndrome** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 3 **FY 00:** 9 **FY 99:** 6 **FY 98:** 7 **FY 97:** 5 **Tetanus** **FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 1 **FY 00:** 35 **FY 99:** 40 **FY 98:** 41 **FY 97:** 50	**B** - 116

Performance Measure	Target	Actual Performance	References
2. The number of indigenous cases of mumps in persons of all ages will be reduced from 666 (1998 baseline) to 0 by 2010.	**FY 04:** 200 **FY 03:** 250 **FY 02:** 250 **FY 01:** 500 **FY 00:** 500 **FY 99:** 500	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 266 **FY 00:** Exceeded – 338 **FY 99:** Exceeded – 387 **FY 98:** 666 **FY 97:** 683 † Provisional data	**B** - 116 **1**
3. The number of cases of pertussis among children under 7 years of age will be reduced.	**FY 04:** 2,300 **FY 03:** 2,500 **FY 02:** 2,500 **FY 01:** 2,000 **FY 00:** 2,000 **FY 99:** 2,000	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 3,161 **FY 00:** 2,708 **FY 99:** 3,247 **FY 98:** 3,417 **FY 97:** 3,043	**B** - 116 **1**

Verification/Validation of Performance Measures: Data is obtained from a variety of sources, including the National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; the National Congenital Rubella Syndrome Registry (NCRSR), CDC, NIP; the Active Bacterial Core Surveillance (ABCs), Emerging Infections Programs, CDC, NCID; and the National Health Interview Survey (NHIS), CDC, NCHS.

2. Performance Goal: Ensure that 2-year-olds are appropriately vaccinated.

Performance Measure	Target	Actual Performance	References
Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 3 doses DTaP vaccine 3 doses Hib vaccine 1 dose MMR vaccine* 3 doses hepatitis B vaccine 3 doses polio vaccine 1 dose varicella vaccine** 4 doses pneumococcal conjugate vaccine** * Includes any measles-containing vaccine. **Performance targets for newly recommended vaccines will begin 5 years after ACIP recommendation. Measures for varicella will begin in 2001and for pneumococcal conjugate measure in 2006, even though coverage will be reported earlier.	**FY 04:** 90% coverage **FY 03:** 90% coverage **FY 02:** 90% coverage **FY 01:** 90% coverage **FY 00:** 90% coverage **FY 99:** 90% coverage **FY 98:** 90% coverage	**FY 04:** 8/2005 **FY 03:** 8/2004 **FY 02:** 8/2003 **FY 01:** 8/2002 **FY 00:** DTaP 94% Hib 93% MMR 91% Hepatitis B 89% Polio 89% Varicella 76% **FY 99:** DTaP 96% Hib 94% MMR 92% Hepatitis B 88% Polio 90% Varicella 58% **FY 98:** DTaP 96% Hib 93% MMR 92% Hepatitis B 87% Polio 91% Varicella 43%	**B** - 116 **1**

Verification/Validation of Performance Measures: Data are collected through the National Immunization Survey (see Appendix B).

3. Performance Goal: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Performance Measure	Target	Actual Performance	References
1. Increase the rate of influenza and pneumococcal pneumonia vaccination in persons ≥65 years.	**FY 04:** Influenza 76% Pneumococcal 69% **FY 03:** Influenza 76% Pneumococcal 69% **FY 02:** Influenza 74% Pneumococcal 66% **FY 01:** Influenza* 72% Pneumcoccal 63% **FY 00:** Influenza 70% Pneumococcal 60% **FY 99:** Influenza 60% Pneumococcal 54%	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** Influenza 63% Pneumococcal 54% **FY 00:** Influenza 68% Pneumococcal 53% **FY 99:** Influenza 66% Pneumococcal 50%	**B** - 116 **1**
2. Achieve a vaccination rate of 60% among non-institutionalized high-risk adults aged 18 to 64 years for influenza and pneumococcal pneumonia by 2010.	**FY 04:** Influenza 32% Pneumococcal 22% **FY 03:** Influenza 32% Pneumococcal 22%	**FY 04:** 6/2005 **FY 03:** 6/2004 **FY 02:** 6/2003 **FY 01:** Influenza: 6/2003 Pneumococcal 6/2003 **FY 00:** Influenza 33% Pneumococcal 18% **FY 99:** Influenza 43%†† Pneumococcal 25%†† **FY 98:** Influenza 31% Pneumococcal 15% †† Preliminary estimate based on vaccination rates among persons aged 18-64 with diabetes	**B** - 116 **1**

*Beginning in FY 01, performance will be reported as in HP 2010 (age adjusted to the 2000 standard population).

Verification/Validation of Performance Measures: Data is collected through the National Health Interview Survey (NHIS), CDC, NCHS for non-institutionalized populations and National Nursing Home Survey (NNHS), CDC, NCHS for institutionalized populations.

4. Performance Goal: Assist domestic and international partners to help achieve WHO's goal of

global polio eradication.

Performance Measure	Target	Actual Performance	References
1. Purchase doses of oral polio vaccine for mass immunization campaigns in Asia, Africa, and Europe.	**FY 03:** 600 million doses **FY 02:** 558 million doses **FY 01:** 625 million doses **FY 00:** 750 million doses **FY 99:** 445 million doses	**FY 03:** 6/2004 **FY 02:** 694 million doses **FY 01:** 590 million doses **FY 00:** 700 million doses **FY 99:** 427 million doses **FY 98:** 390 million doses	**B** - 116 **1**
2. Achieve and sustain zero cases of polio by 2005.	**FY 04:** 0 **FY 03:** 200 **FY 02:** 500 **FY 01:** 1,500	**FY 04:** 6/2005 **FY 03:** 6/2004 **FY 02:** 6/2003 **FY 01:** 483 † **FY 00:** 2,979 † Provisional data	**B** - 116 **1**

Verification/Validation of Performance Measures: UNICEF provides the number of doses of polio purchased with CDC funding via an annual report that is part of the CDC/WHO cooperative agreement. WHO provides the polio case data based on reports submitted by countries.

5. Performance Goal: Work with global partners to reduce the cumulative global measles related mortality rate.

Performance Measure	Target	Actual Performance	References
1. By 2005, reduce by 50% the cumulative global measles-related mortality compared with 1999 estimates (Baseline: 875,000 deaths)	**FY 04:** 500,000 **FY 03:** 621,600	**FY 04:** 6/2006 **FY 03:** 6/2005 **FY 02:** 6/2004 **FY 01:** 6/2003 **FY 00:** 777,000	**B** - 116 **1**
2. Eliminate indigenous measles transmission in all 47 countries of the Americas.	**FY 04:** Less than 500 cases;* Elimination in 47/47 countries. **FY 03:** Less than 500 cases;* Elimination in 47/47 countries. ***Related to Importations	**FY 04:** 6/2005 **FY 03:** 6/2004 **FY 02:** 6/2003 **FY 01:** 537 cases Elimination in 46/47countries **FY 00:** Baseline: 1,754 cases	**B** - 116 **1**

Verification/Validation of Performance Measures: The global measles data source is WHO/Geneva and PAHO for the Americas. Data is obtained from each country through an established, systematic surveillance data/reporting mechanism similar to how CDC gets data from the States.

6. Performance Goal: Improve vaccine safety surveillance.

Performance Measure	Target	Actual Performance	References
Improve capacity to conduct vaccine safety studies by increasing the number of persons in the large linked databases to 13 million people by 2010.	**FY 04:** 10 million **FY 03:** 10 million	**FY 04:** 6/2005 **FY 03:** 6/2004 **FY 02:** Baseline: 7.5 million	**B** - 116

Verification/Validation of Performance Measures: Data collected from the National Notifiable Disease Surveillance System (NNDSS), CDC, EPO, as well as the Vaccine Adverse Event Reporting System (VAERS) and the Vaccine Safety Datalink (VSD), CDC, NIP.

Measures Being Eliminated From the Plan

The following performance measure was submitted as a new measure for 2003 but is now being deleted from the Plan because there is no national surveillance system to count varicella cases. Without such a surveillance system, data cannot be collected to provide performance results.

Performance Measure	Target	Actual Performance	Reference
The number of indigenous cases of varicella in persons under 18 years will be reduced to 400,000 by 2010. (1996 Baseline: 4 million..)	**FY 03:** 2.8M	**FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01†:** 13,413 † Provisional data	**B -** 116

The following performance measure was originally introduced with the intent that acellular pertussis vaccine could be used to reduce febrile seizures. However, since this vaccine is no longer available for use, it is not appropriate to continue measuring this goal.

Performance Measure	Target	Actual Performance	Reference
By 2010, reduce febrile seizures following pertussis vaccines by 50% of 1998 baseline (152 seizures).	**FY 03:** 122	**FY 03:** 6/2004 **FY 02:** 6/2003 **FY 01:** DtaP 53 DTP 0 **FY 00:** DtaP 192 DTP 4 **FY 99:** DtaP 183 DTP 21	**B -** 116

The following performance measures were replaced or omitted in favor of more outcome oriented measures. CDC will continue to report on these measures until 2002, as they were previously included in the FY 2002 Performance Plan.

Performance Measure	Target	Actual Performance	Reference
Expand the network of CDC and CDC-funded staff, virologists, epidemiologists, technical and scientific officers on long-term assignments in WHO country and regional offices.	**FY 02:** 100 **FY 01:** 90 **FY 00:** 82 **FY 99:** 67	**FY 02:** 250 **FY 01:** 150 **FY 00:** 120 **FY 99:** 75 **FY 98:** 60	**B -** 116
Expand a special program to prepare a cadre of trained public health professionals throughout CDC to complete short-term assignments with WHO.	**FY 02:** 124 **FY 01:** 100 **FY 00:** 60 **FY 99:** 50	**FY 02:** 99 **FY 01:** 199 **FY 00:** 128 **FY 99:** 100 **FY 98:** 23	**B -** 116
Use new data mining techniques to increase the number of detected true and false signals of adverse events associated with vaccination.	**FY 02:** 5	**FY 02:** 4 **FY 01:** 2 **FY 00:** 1	**B -** 116
Expand the Vaccine Safety Datalink (VSD) sites to increase the number of persons under active surveillance for vaccine safety.	**FY 02:** 12 million vaccine recipients.	**FY 02:** 7.5 million members **FY 01:** 8 million members **FY 00:** 6.5 million members enrolled in participating HMOs	**B -** 116
Improve the ability of health care providers to report vaccine adverse events, including those associated with influenza vaccine, by pilot testing electronic reporting to VAERS in managed care organizations.	**FY 02:** 3	**FY 02:** 72 **FY 01:** 1 **FY 00:** 0	**B -** 116

Program Description and Context

CDC protects the health of American children and adults from disability and death associated with vaccine-preventable diseases by developing and implementing immunization programs and monitoring vaccine use.

Immunizations are among the greatest public health achievements of the 20th century. Vaccines are responsible for the control of many infectious diseases, including diphtheria, measles, mumps, and pertussis, that were once common in this country. Vaccines are now available to protect children and adults against life-threatening or debilitating diseases. These interventions have reduced cases of all vaccine-preventable diseases by more than 97% from peak levels before vaccines were available, saving lives and treatment and hospitalization costs. Appropriate administration of safe and effective vaccines remains one of the most successful and cost-effective public health tools for preventing disease, disability, and death and reducing economic costs resulting from vaccine-preventable diseases.

Vaccines are Highly Cost-Effective
For every $1 spent:
DTaP saves $27.00
MMR saves $23.00
Varicella saves $5.40

Despite great success in lowering disease levels and raising immunization coverage rates, however, much remains to be done to protect children and adults worldwide. Approximately 1 million two-year-olds in the United States have not received one or more of the recommended vaccines. New vaccines, although greatly beneficial to public health, complicate an already complex immunization schedule and make it increasingly difficult to ensure complete vaccination. Immunizations are also subject to a higher standard of safety than other medical interventions because they are given to healthy people. Like all medical interventions, no vaccine is 100% safe or effective. Vaccine safety activities are needed to maintain public confidence in immunizations, preserve high coverage levels, prevent a resurgence of vaccine-preventable diseases, and detect adverse events quickly.

One of the greatest challenges is extending the success in childhood immunization to adults. The burden of vaccine-preventable diseases in adults in the United States is staggering. Over 20,000 U.S. adults die annually of influenza, pneumococcal infections, and hepatitis B; the cost to society exceeds $10 billion each year. Pneumonia and influenza were the 5th leading cause of death in all persons aged 65 and older based on 1999 national mortality data.

Barriers also remain in achieving global polio eradication, and support is needed to expand global measles control efforts. Polio virus causes acute paralysis that can lead to permanent physical disability and even death. Before polio vaccine was available, 13,000 to 20,000 cases of paralytic polio were reported each year in the United States. These annual epidemics of polio often left thousands of victims – mostly children – in braces, crutches, wheelchairs, and iron lungs. Development of polio vaccines and implementation of polio immunization programs have eliminated paralytic polio caused by wild polio viruses in the U.S. and the entire Western Hemisphere. Before measles immunization was available, nearly everyone in the U.S. got

measles, resulting in approximately 3 - 4 million measles cases each year. An average of 450 measles-associated deaths were reported each year between 1953 and 1963. In industrialized countries, up to 20% of persons with measles are hospitalized, and 7% to 9% suffer from complications such as pneumonia, diarrhea, or ear infections. Although less common, some persons with measles develop encephalitis, resulting in brain damage. In the United States for the past ten years, roughly one of every 1,000 persons with reported measles died. However, in some developing countries, 250 people die for every 1,000 persons with measles.

Measles is one of the most infectious diseases in the world and is frequently imported into the U.S. In 2000, most cases were associated with international visitors or U.S. residents who were exposed to the measles virus while traveling abroad more than 90% of people who are not immune will get measles if they are exposed to the virus. According to the World Health Organization (WHO), nearly 770,000 deaths occurred among persons in developing countries in 2000. In populations that are not immune to measles, measles spreads rapidly. If vaccinations were stopped, 2.7 million measles deaths worldwide could be expected. Although the United States has greatly reduced its burden of disease through immunizations, our children are at risk due to the occurrence of these diseases in other countries.

Strategies, Activities, and Resources

CDC provides national leadership in the ongoing effort to protect America's children and adults from vaccine-preventable diseases and to ensure the safety of vaccines. Beginning in 1962, when the first national effort to improve the immunization status of children was proposed, CDC has counted immunization among its most vital programs, recognizing it as a core public health activity and perhaps the best example of effective primary prevention. CDC's National Immunization Program (NIP) focuses on several major programmatic areas, including childhood immunization, adult immunization, global polio eradication, and global measles control.

Although CDC is assisted by many partners, state and local health agencies play a primary role in helping NIP carry out its mission in the United States. CDC ensures quality immunization services by: 1) awarding grants to states and large local health departments; 2) providing technical, epidemiologic, and scientific assistance to states and localities; 3) monitoring immunization coverage; 4) ensuring an adequate supply of vaccine by overseeing purchases made through CDC contracts and managing the Vaccines for Children (VFC) program; 5) helping states develop immunization registries; and 6) conducting research to develop new and improved delivery strategies. CDC increases community participation, education, and partnerships through public information campaigns, education and training for providers, assistance to communities on building coalitions, and partnerships with community-based organizations, minority organizations, volunteer groups, vaccine companies, professional organizations, and federal agencies.

Global disease eradication and elimination programs are also collaborative efforts. CDC works with WHO, Rotary International, USAID, the Task Force for Child Survival and Development, UNICEF, other CDC components, and international agencies to bolster polio eradication efforts by providing scientific assistance and financial support. This collaboration is unique among public health initiatives for the unprecedented level of partnerships.

The United States remains at risk of importation of measles from countries that have not yet eliminated the disease. Therefore, CDC contributed more than $4 million in FY 2002 to support the Pan American Health Organization (PAHO) initiative to eliminate measles from the Western Hemisphere. CDC provides epidemiologic and laboratory assistance for disease tracking, vaccine for outbreak control, and other supplementary immunization activities, and short- and long-term assignments of CDC scientific staff to priority countries.

CDC also plays a critical role in developing immunization policy by providing technical and scientific support to policy-making advisory groups. These groups include the Advisory Committee on Immunization Practices (ACIP), the Committee on Infectious Diseases of the American Academy of Pediatrics and the American Academy of Family Physicians, the National Vaccine Advisory Committee (NVAC) of the National Vaccine Program Office, and the Advisory Commission on Childhood Vaccines of the National Vaccine Injury Compensation Program, among others.

Although coverage for preschool immunization is high in almost all states, pockets of need – areas with substantial numbers of under-immunized children – continue to exist. These areas are of great concern because of the potential for outbreaks of vaccine-preventable diseases. CDC uses several strategies to improve immunization coverage in pockets of need. AFIX (Assessment, Feedback, Incentives, and Exchange) is a tool for assessing immunization coverage and providing feedback to providers – methods that have resulted in higher coverage rates. Linkages with the U.S. Department of Agriculture's Women, Infants, and Children (WIC) program have increased coverage among low-income preschool children. Reminder and recall systems (manually generated mail or telephone appointment reminders) consistently improve patient compliance for scheduled health visits.

As a result of all of these activities, cases of vaccine-preventable diseases are at or near all-time lows, and childhood immunization rates are at an all-time high. Infrastructure funds are essential to sustain the systems that have resulted in the highest immunization levels ever recorded. These funds are used to implement proven strategies to raise immunization coverage, conduct disease surveillance, implement outbreak control measures, ensure access to and appropriate administration of vaccines, perform outreach activities, develop immunization registry systems, educate providers and parents about the need for timely immunization, and assess immunization coverage levels and pockets of under-immunized children, among many other activities. Infrastructure investments must be maintained to ensure that proven systems and high immunization levels are not jeopardized.

Program Performance Analysis

CDC uses two main sources to measure the attainment of U.S. performance goals: 1) the National Notifiable Diseases Surveillance System, and (2) the National Immunization Survey. The National Notifiable Diseases Surveillance System (NNDSS) is the data source for tracking cases of vaccine-preventable disease. Provisional data from this system are routinely published in the *MMWR;* final data are published in the Annual Summary of Notifiable Diseases. CDC collects vaccination coverage data at the national, state, and local levels through the National

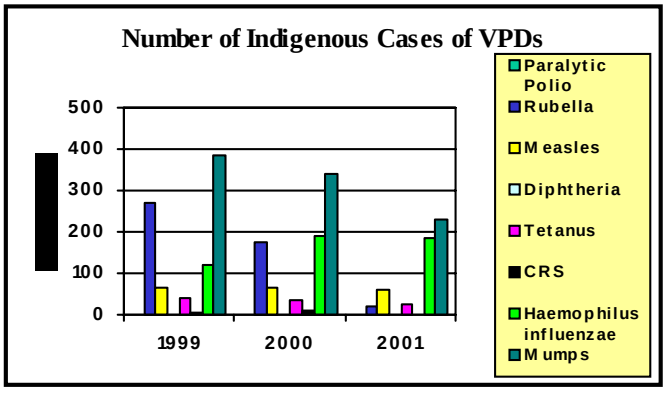
Immunization Survey (NIS). With these data, CDC can evaluate the impact of national, state, and local policies and programs and use the results to monitor progress toward the goals of the performance plan. The surveys measure vaccine-specific and series-complete coverage and include detailed analyses for race/ethnicity and poverty groups. Such surveys are necessary to monitor the maintenance or improvement of immunization coverage levels in the target populations of 78 state and major urban areas.

Cases of Vaccine-Preventable Diseases

By all counts, efforts to protect children in the U.S. from vaccine-preventable disease have been a success. Cases of most vaccine-preventable diseases of childhood are down more than 96% from the pre-vaccine era. No cases of paralytic polio due to indigenous transmission of wild polio virus have been reported in the U.S. since 1979. Coverage levels for preschool children are at an all-time high for all racial and ethnic groups. As in prior decades, these goals for zero cases of disease are very ambitious. Therefore, we have modified the goals to more specifically reflect the anticipated progress of the Program.

Only 26 reported cases of indigenous measles occurred in 2001. In March 2000, a panel of experts reviewed extensive information on measles epidemiology, imported cases, population immunity, and the quality of measles surveillance, and concluded that measles is no longer an endemic in the United States. The elimination of endemic measles from the United States is a historic public health achievement and the fulfillment of a goal expressed by public health experts even before the first vaccine was licensed in 1963. Keeping endemic measles out of the United States will require sustained efforts to maintain high vaccine coverage levels.

Conjugate vaccines for the prevention of *Haemophilus influenzae* type b (Hib) are highly effective and have led to near elimination of invasive Hib disease, the main cause of bacterial meningitis. However, the number of possible cases reported did increase from 120 cases in 1999 to 167 cases in 2000 to 181 cases in 2001. In accordance with the Healthy People 2010 goal, this measure was clarified to include both cases with type b and unknown serotype. As a portion of these cases were not serotyped, the number of unknown serotypes that are actually type b cannot be confirmed. Therefore, it is possible that, although the total number of cases increased in 2001, the number of type b cases (both serotyped and not) – for which the vaccine is effective – may have remained the same or decreased.



The reduction in the number of indigenous cases of mumps has exceeded our goal of 500 cases. In 2000, there were only 338 cases of mumps; in 2001, the incidence was further reduced to 266 cases. This reduction is linked to the effectiveness of the Measles-Mumps-Rubella vaccine and its coverage rate.

Although substantial progress has been made to reduce and/or eliminate the incidence of these vaccine-preventable diseases, total eradication, i.e., the number

of cases be reduced to zero, of some of these diseases is unlikely to occur except under exceptional circumstances. For example, smallpox has been eradicated and polio is virtually eradicated because 1) humans are the only reservoir, 2) there is no carrier state or vaccination eliminates carriage, and 3) efforts to eradicate the disease are global. Where an organism is found in the environment, such as tetanus, the only way to reduce cases to 0 is to assure complete protection – which implies both vaccination and immunological response to vaccine. Where vaccination does not significantly impact the transmission of an organism or where transmission occurs in a population that cannot be vaccinated, such as pertussis, significant numbers of cases will continue to occur. Additionally, where protection from vaccination occurs in the U.S. but not globally, such as rubella, cases will continue to be introduced by travelers or immigrants.

Vaccine Coverage

Childhood Immunization Coverage

The prior goal of four doses of Diptheria-Tetanus-acellular Pertussis (DTaP) vaccine has been changed to three doses of DTaP. This is primarily because of vaccine shortages which have resulted in many children not being able to get the fourth dose of DTaP. The ACIP has recommended that, if vaccine is in short supply or not available, the fourth dose of DTaP should be dropped. As a result, it is not appropriate to measure this dose. Also, the first three doses are considered the most critical to prevent disease.

The varicella vaccine was newly introduced to the Recommended Childhood Immunization Schedule in 1996. Coverage levels for varicella vaccine have reached almost 68% in 2000. Coverage for this vaccine has more than doubled from 26% in 1997 to 58% in 1999 with no racial or ethnic gaps in coverage. In 1999, attenuation of seasonality and declines in varicella cases and hospitalizations were documented in active surveillance systems. Between 1995 and 1999, varicella cases and hospitalizations declined 80% in the communities with active surveillance. The greatest decline in cases occurred among children 1 - 4 years, however, cases declined in all age groups, including infants and adults, indicating reduced disease transmission in these areas.

Following prevention of *Haemophilis influenzae* type B infections with an infant vaccine licensed in 1988, pneumococci took over as the leading cause of meningitis. Now pneumococcal meningitis is preventable. Pneumococci also are the leading cause of bacterial pneumonia, bloodstream infections, otitis media (ear infections), and sinusitis among children. Studies of PCV, pre-licensure, showed this vaccine to be more than 97% effective against invasive pneumococcal infections. Overall, this vaccine is projected to prevent over one million episodes of childhood illness and approximately 120 deaths among children annually. Preventing pneumococcal infections with PCV is becoming more important because of problems with treatment as a result of increasing antibiotic resistance. The Advisory Committee on Immunization Practices (ACIP) added pneumococcal conjugate vaccine (PCV) to the 2001 Recommended Childhood Immunization Schedule. As this is a newly recommended vaccine, accountability for performance targets will begin in 2006; however, NIP will begin tracking coverage rates this year to establish a baseline.

Adult Immunization Coverage

The growth rate of the elderly population has far exceeded the population of the country as a whole. In this century, the total population has tripled. The number of persons aged 65 and older has increased by a factor of eleven, from 3.1 million in 1900 to 35 million in 2000, and accounts for 12.4% of the population in the United States. According to the Census Bureau's middle series projection, the number of persons aged 65 years and older will more than double by the middle of the next century to 80 million. While the growth of the elderly will be steady from 1990 to 2010, there will be a substantial increase in the number of elderly persons during the 2010 to 2030 period when the "Baby Boom" generation reaches age 65.[2]

During the past decade, vaccination rates among older adults increased steadily as CDC implemented national strategies and promoted adult and adolescent immunization among health care providers and state and local governments. Influenza vaccine coverage rates have continually increased, from 30 percent in 1989 to 63 percent in 2001. An increasing proportion of older adults also reported receipt of pneumococcal vaccination, from 15 percent in 1989 to 54 percent in 2001. However, data suggests that influenza vaccination levels may have reached a plateau. Delays in distribution of influenza vaccine supplies during the 2000-01 season and to a lesser degree in the 2001-02 season pose additional challenges to increasing coverage levels. Therefore, in August, 2001, members of CDC and CMS met to discuss the feasibility of reducing performance targets for 2002 and 2003. Because no credible information is currently available which confirm that coverage rates are dropping or stabilizing, CDC decided to maintain a target of 74 percent for 2003 for influenza vaccination. In addition, since States use the performance targets to justify funding levels in support of immunization infrastructure, it was also felt that a reduction of the target levels at this point could harm their programs.

Global Disease Eradication

The global polio eradication initiative, in partnership with the World Health Organization, is on target for achieving polio eradication by 2005. Global polio incidence has declined by more than 99% from about 350,000 cases in 1988 to less than 1000 cases in 2001. About 250,000 lives have been saved and 4 million cases of childhood paralysis have been avoided, and the number of polio-endemic countries have dropped from 125 in 1988 to only 10 at the end of 2001. In 2001, the American Region of WHO completed its tenth year without a reported case of polio due to the wild virus. The Western Pacific Region (includes China, Vietnam, and Cambodia among its 35 countries) has achieved regional eradication of polio. More than 90 countries conducted mass immunization campaigns in 2001, vaccinating 575 million children.

As long as polio transmission occurs anywhere in the world, it remains a threat to American children. CDC will continue to fight against polio by collaborating with partners to increase the number and quality of National Immunization Days, as well as intensify implementation of the other components the strategy to interrupt transmission in the remaining 10 endemic countries.

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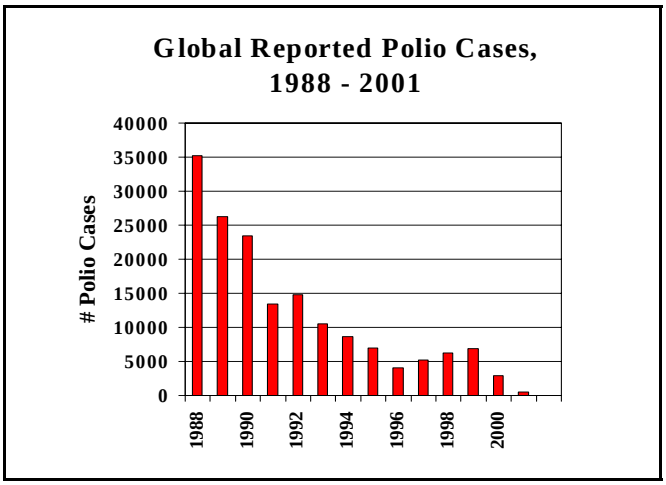
2 Source: U.S. Bureau of the Census, *65+ in the United States*, Special Studies, Series P23-190, U.S. Government Printing Office, Washington, DC, 1996

It is necessary for CDC to provide scientific assistance to improve tracking to certify that polio eradication has occurred. In 2002, CDC purchased 694 million doses of polio vaccine for use in mass global immunization campaigns. In FY 2001, a 25% price hike by polio vaccine manufacturers of oral polio vaccine (OPV) from 7.2 cents per dose to 9.0 cents per dose decreased CDC's purchasing capacity (through UNICEF) from a projected 625 million doses in FY 2001 to an actual 590 million doses. For FY 2002, CDC has received increased funding for polio eradication which should allow us to meet the FY 2002 target. Additionally, CDC supported 150 experts in polio eradication programs throughout the world. Nearly 100 public health professionals throughout CDC and from other public health institutions were trained in 2001 to complete additional short-term assignments. CDC has provided epidemiologic, laboratory, and programmatic expertise to assist polio-endemic countries and the WHO with polio eradication activities. UNICEF has received grants from CDC to procure nearly 600 million doses of oral polio vaccine for mass immunization campaigns in 90 countries to help interrupt polio transmission or to protect from imported poliovirus. Additionally, a number of CDC staff are assigned to WHO and other international organizations to provide leadership and technical expertise.

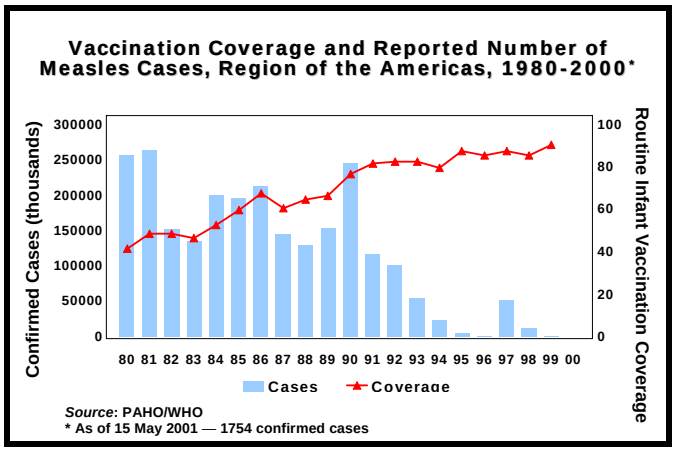
To reflect CDC's participation in the global immunization arena, beyond that of polio immunization, CDC has included the global measles reduction goal in the FY 2004 Performance Plan. The subsequent performance measures reflect the goals and commitment of the WHO and Pan American Health Organization (PAHO) as well as CDC's participation in these efforts.

According to available surveillance information, measles transmission has been interrupted in all countries of the Western Hemisphere except Venezuela. An aggressive plan to eliminate measles has reduced cases in the Western Hemisphere by more than 99% from about 250,000 in 1990 to less than 600 cases in 2001 – the lowest annual total ever reported. Deaths from measles complications have virtually disappeared.

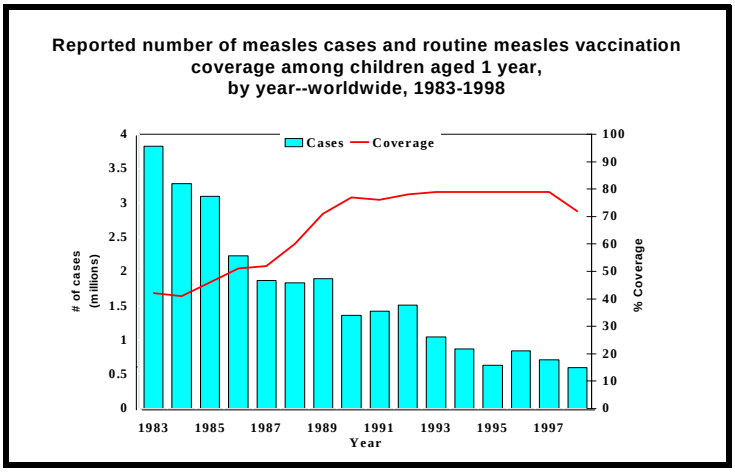
Globally, measles caused an estimated 770,000 deaths in 2000 and was the leading cause of death among children under five years of age from a vaccine-preventable disease. Based on surveillance data for 2001, 46 of 47 countries and territories in the American region appear to have interrupted measles transmission. Nationwide measles immunization campaigns in seven southern African countries conducted in 1996-1998 have resulted in approximately a 95% reduction in reported cases. Zero deaths from measles were reported in these countries in 2000-2001.



During 2001, CDC reviewed immunization programs in Guatemala and Venezuela and provided technical support for measles surveillance or for measles campaigns in Brazil, Columbia, Costa Rica, Benin, Burkina Faso, Cameroon, Ghana, Mali, Tanzania, and Uganda. In addition, CDC bought measles vaccine for outbreak response in Haiti. These efforts resulted in a curtailment of outbreaks in Haiti and the Dominican Republic.



The WHO, UNICEF, and CDC have prepared a 5-year strategic plan for global measles control, mortality reduction, and regional elimination. The plan calls for a one-half reduction in measles mortality by 2005 compared with 1999 levels through introduction of a second opportunity for measles vaccination for all children. In addition, the plan recommends that prevention of rubella and congenital rubella syndrome be integrated with measles vaccination and surveillance activities where appropriate. CDC is a major partner with the PAHO and WHO in eliminating measles and reducing measles mortality. CDC has developed new partnerships with the American Red Cross, the International Federation of Red Cross and Red Crescent Societies, and the UN Foundation to advocate for measles control. A global public-private sector coalition has been formed to implement the 5-year Global Measles Strategic Plan to reduce measles mortality.



Vaccine Safety

Although infectious diseases continue to decline, concerns remain about the risks associated with vaccines. Immunizations are subject to a higher standard of safety than other medical interventions because they are given to healthy people. But, like all medical interventions, no vaccine is 100% safe or effective. Since vaccination is such a common and memorable event, any illness following immunization may be attributed to the vaccine. While some of these reactions may be caused by the vaccine, many of them are unrelated events that occur after vaccination by coincidence. Therefore, the scientific research that attempts to distinguish true

vaccine side effects from unrelated, chance occurrences is crucial. Vaccine safety activities are needed to maintain public confidence in immunizations, preserve high coverage levels, and prevent a resurgence of vaccine-preventable diseases. As science continues to advance, we are constantly striving to develop safer vaccines and improve delivery in order to better protect ourselves against disease.

CDC has a unique and vital role in striving for vaccine safety by monitoring harmful effects, conducting scientific research to evaluate the safety of vaccines, communicating to the public the benefits and risks of vaccines, and supporting development of new vaccine administration devices, combination vaccines, and potential candidate vaccines to prevent additional infectious diseases. Assessments of the risks and benefits of vaccines can also influence vaccine policy and recommendations.

As there was no incidence of paralytic polio in the United States in 2001, it follows that there were also no cases of vaccine-associated paralytic polio to report for the year.

Education and Information Sharing
CDC offers health care provider training through satellite, remote audio, Internet and land-based immunization courses, speaker presentations, and grand rounds. In addition, immunization modules are presented in medical residency programs as well as medical and nursing school curricula. In 2001, over 100,000 professionals participated in live-satellite, land-based, or self-study courses, and over one third of the participants (physicians and nurses) were awarded Continuing Medical Education (CME) or Continuing Nursing Education(CNE) credits.

Both the general public and health care professionals frequently request immunization information and referral services from the National Immunization Information Hotline (NIIH). This information is provided through a toll-free service and website in both English and Spanish. NIIH responded to 111,515 calls in 2001. To accommodate the deaf and hard of hearing, NIIH implemented both Tele-Typewriter (TTY) and American Sign Language (ASL) services.

Performance measures have not yet been developed to assess the effectiveness of these programs, however, CDC plans to do so in the future.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 331,640	Estimate
FY 2003:	$ 334,733	President's Budget
FY 2002:	$ 348,181	Enacted

II-J. Infectious Diseases Control

Goal-by-Goal Performance Measurement

Epidemiology and Laboratory Capacity

1. Performance Goal: Protect Americans from infectious diseases.

Hepatitis C, Chronic Liver Disease, and Viral Hepatitis

Performance Measure	Targets	Actual Performance	Reference
Provide support to up to 65 health departments for coordinators to initiate hepatitis prevention and control activities.	**FY 04:** 55 health departments **FY 03:** 49 health departments **FY 02:** 47 health departments **FY 01:** 25 health departments **FY 00:** 9 health departments	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Exceeded/48 **FY 01:** Exceeded/48 **FY 00:** Exceeded/15 **FY 99:** 0	**B** - 126 **HP** - 14-9

Influenza

Performance Measure	Targets	Actual Performance	Reference
Monitor influenza viruses in states (1 site/250,000 population domestically) and provide support to build capacity for influenza surveillance sites and networks internationally to enhance early detection of viruses with pandemic potential and improve vaccine decision-making.	**FY 04:** 800 sites/5 net **FY 03:** 700 sites/1 net **FY 02:** 600 sites/1 net **FY 01:** 514 sites/1 net **FY 00:** 510 sites	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** 9/2002 - 1 net **FY 01:** 550/1 net **FY 00:** Exceeded/706 - 1 net **FY 99:** 410 **FY 96:** 0	**B** - 126 **HP** - 14-1 **1**

Foodborne Illnesses

Performance Measure	Targets	Actual Performance	Reference
1. Increase the proportion of outbreak investigations in which the causative organism/toxin is identified.	**FY 02:** 57% **FY 01:** 55% **FY 00:** 50% **FY 99:** 45%	**FY 02:** Achieved/57% **FY 01:** Achieved/55% **FY 00:** Achieved/50% **FY 99:** Exceeded/48% **FY 98:** Baseline: 40%	**B** - 126 **HP**- 10-2 **5**
2. Expand the number of public health laboratories using PulseNet to build subtyping capacity and exchange foodborne illness data for early identification of and response to outbreaks (number of agents may increase as new pathogens are identified).	*E. coli* 0157:H7: **FY 04:** 50 labs **FY 03:** 45 labs **FY 02:** 45 labs **FY 01:** 45 labs **FY 00:** 40 labs **FY 99:** 29 labs *Salmonella* Typhimurium: **FY 04:** 50 labs **FY 03:** 45 labs **FY 02:** 45 labs **FY 01:** 45 labs **FY 00:** 40 labs **FY 99:** 7 labs *Listeria monocytogenes:* **FY 04:** 35 labs **FY 03:** 30 labs **FY 02:** 30 labs **FY 01:** 30 labs **FY 00:** 20 labs **FY 99:** 7 labs *Shigella sonnei:* **FY 04:** 20 labs **FY 03:** 15 labs **FY 02:** 15 labs	*E. coli* 0157:H7: **FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Baseline: 0 *Salmonella* Typhimurium: **FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Baseline: 0 *Listeria monocytogenes*: **FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** Achieved **FY 97:** Baseline: 0 *Shigella sonnei*: **FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** 7 **FY 97:** 0	**B** - 126 **HP** - 10-2

Performance Measure	Targets	Actual Performance	Reference
2. (continued)	*Clostridium-perfringens* **FY 04:** 5 **FY 03:** 0 *Campylobacter jejuni/C. coli* **FY 04:** 5 **FY 03:** 0 *Vibrio parahaemolyticus* **FY 04:** 5 **FY 03:** 0 *Vibrio Cholerae* **FY 04:** 5 **FY 03:** 0	*Clostridium-perfringens* **FY 04:** 9/2004 **FY 03:** Baseline: 0 *Campylobacter jejuni/C. coli* **FY 04:** 9/2004 **FY 03:** Baseline: 0 *Vibrio parahaemolyticus* **FY 04:** 9/2004 **FY 03:** Baseline: 0 *Vibrio Cholerae* **FY 04:** 9/2004 **FY 03:** Baseline: 0	**B** - 126
3. Enhance FoodNet by increasing the number of pathogens and syndromes under active surveillance.	**FY 04:** 13 **FY 03:** 11 **FY 02:** 11 **FY 01:** 11 **FY 00:** 10 **FY 99:** 8	**FY 04:** 9/2004 **FY 03:** 9/2003 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** 8 **FY 97:** 7	**B** - 126 **HP -** 10-2

Group B Streptococcal Infections

Performance Measure	Targets	Actual Performance	Reference
Reduce the incidence of perinatal group B streptococcal infections to 0.3 per 1,000 live births.	**FY 03:** 0.3 **FY 02:** 0.3 **FY 01:** 0.3 **FY 00:** 0.4 **FY 99:** 0.9	**FY 03:** 3/2004 **FY 02:** 3/2003 **FY 01:** 0.5 (final) **FY 00:** 0.5 (final) **FY 99:** Exceeded/0.4 **FY 95:** 1.3	**B** - 126

HIV Variants

Performance Measure	Targets	Actual Performance	Reference
Expand surveillance for unusual HIV variants.	**FY 03:** 7 countries **FY 02:** 8 countries **FY 01:** 6 countries **FY 00:** 6 countries	**FY 04:** 6/2005 **FY 02:** 6 **FY 01:** 6 **FY 00:** 6 **FY 99:** 2 **FY 98:** 0	**B** - 126

Antimicrobial Resistance

2. Performance Goal: Reduce the spread of antimicrobial resistance.

Performance Measure	Targets	Actual Performance	Reference
1. Diminish the rapid rise in the proportion of enterococci resistant to vancomycin (VRE rate) among pathogens associated with nosocomial infections in ICU patients.	Increase in resistant strains: **FY 04:** 26.0% **FY 03:** 26.0% **FY 02:** 26.0% **FY 01:** 27.2% **FY 00:** 25.2% **FY 99:** 40.0%	**FY 04:** 3/2005 **FY 03:** 3/2004 **FY 02:** 3/2003 **FY 01:** 26.9% (corrected) **FY 00:** 25.0% **FY 99:** 40.9%; 5-year historical mean, 47%.	**B** - 126 **HP** - 14-21 **5**
2. Reduce the number of courses of antibiotics for ear infections for children < 5 years to 57 courses per 100 children.	**FY 03:** 54 courses **FY 02:** 54 courses **FY 01:** 54 courses **FY 00:** 106 courses	**FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 59 **FY 00:** 54 **FY 97:** 69 (corrected)	**B** - 126 **5**
3. Increase the proportion of U. S. laboratories that use acceptable methods to test for Staphylococcus aureus with reduced susceptibility to vancomycin.	**FY 04:** 95% **FY 03:** 90% **FY 02:** 85% **FY 00:** 76%	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 00:** 76% **FY 98:** Baseline: 56%	**B** - 126 **HP -** 14-18
4. Reduce the number of courses of antibiotics prescribed for a sole diagnosis of the common cold to 1,268 courses per 100,000 population.	**FY 04:** 1,917 courses **FY 03:** 2,017 courses **FY 02:** 2,144 courses **FY 01:** 2,281 courses **FY 00:** 2,408 courses	**FY 04:** 9/2005 **FY 03:** 9/2004 **FY 02:** 9/2003 **FY 01:** 2,000 **FY 00:** 1,999 (corrected) **FY 97:** Baseline: 2,535	**B** - 126 **HP** - 14-19 **5**

Medical Errors and Healthcare-associated Infections

3. **Performance Goal:** Protect Americans from death and serious harm caused by medical errors and preventable complications of healthcare.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce the rate of central line-associated bloodstream infections in adult ICU patients to 3.80.	**FY 04:** 3.80 **FY 03:** 3.80 **FY 02:** 3.80 **FY 01:** 3.86 **FY 00:** 4.4 **FY 99:** 5.2	**FY 04:** 4/2005 **FY 03:** 4/2004 **FY 02:** 4/2003 **FY 01:** 4.6 **FY 00:** 4.5* **FY 99:** Exceeded/4.4 **FY 98:** 5.3	**B** - 126 **5**

*Revised with later data.

Program Description and Context

CDC is charged with planning, directing, and coordinating a national program to improve the identification, investigation, diagnosis, prevention, and control of infectious diseases in the United States and throughout the world.

Infectious diseases can lurk anywhere – in undercooked hamburgers, on unwashed hands, or carried by blood, water, ticks, or mosquitoes. Some, like the pathogens that cause influenza or syphilis, are familiar foes that have preyed on humans for centuries. Others, like West Nile virus, are relatively new or emerging threats. Some old threats, like tuberculosis, have adapted to the drugs deployed against them, making them dangerous in new ways. These attributes make infectious diseases a constant threat. The emergence of a new strain of influenza somewhere in the world could have a severe effect on the United States, causing an estimated 89,000 to 207,000 deaths, 314,000 to 734,000 hospitalizations, and direct and indirect costs of $71 billion to as much as $167 billion. Antimicrobial resistance in six bacteria commonly found in hospitals adds approximately $661 million per year in hospital charges. Hospital-acquired infections kill an estimated 88,000 Americans annually and cost more than $4.5 billion. The estimated burden of illness from foodborne infections is up to 5,000 deaths and 76 million illnesses annually, with associated costs reaching several billion dollars annually. Chronic liver disease is the tenth leading cause of death among adults in the United States and approximately 40% of chronic liver disease is caused by hepatitis C virus (HCV). HCV is the most common blood borne viral infection in the United States.

In 1994, recognizing the serious and growing threat of infectious diseases, CDC and partners launched the first phase of a nationwide program to revitalize U.S. capacity to protect the public from infectious disease threats. The second phase of this effort began in 1998 and continues to build domestic and global capacity for recognizing and responding to infectious diseases through partnerships with federal, state, and local agencies, universities, private industry, foreign governments, WHO, and non-governmental agencies. CDC's efforts focus on four strategies:

- Surveillance and response – to detect, investigate, and monitor emerging pathogens, the diseases they cause, and the factors influencing their emergence;
- Applied research – to integrate laboratory science and epidemiology to optimize public health practice;
- Infrastructure and training – to strengthen public health infrastructure to support surveillance and research and to implement prevention and control programs; and
- Prevention and control – to ensure prompt implementation of prevention strategies and enhance communication of public health information about emerging infectious diseases.

Within this framework key priorities have emerged; addressing infectious diseases that contribute to high mortality, morbidity, and healthcare costs, such as hepatitis C, influenza, foodborne illnesses, Group B Streptococcal infections, and HIV; finding solutions to the problems posed by antimicrobial resistance; and reducing the burden of illness from infectious diseases among hospitalized patients and healthcare workers.

Infectious Diseases - Periodically, the results of public health surveillance and applied research call for new actions to protect Americans from infectious diseases. Consequently, CDC has undertaken efforts to develop national strategies to address these areas.

Hepatitis C, chronic liver disease, and viral hepatitis - A program target is to lower the incidence of chronic hepatitis C in the United States and to reduce the burden of liver disease from chronic HCV infection. To this end, CDC is: 1) educating healthcare and public health professionals to improve identification of persons at risk for HCV infection and ensure appropriate counseling, diagnosis, management, and treatment; 2) educating the public and persons at risk about risk factors and the need for testing and evaluation; 3) promoting clinical and public health activities aimed at identifying, counseling, and testing persons at risk and evaluating or referring persons found to be infected; 4) developing outreach and community-based programs to address practices that put people at risk and identify persons who need testing; 5) strengthening surveillance to monitor disease trends and evaluate the effectiveness of prevention activities; and 6) conducting epidemiologic research to guide prevention efforts.

Influenza - CDC plays a key role in the prevention and control of influenza. Improved preparedness is essential to minimize the impact on Americans of a long-overdue influenza pandemic. To fulfill this role, CDC: 1) conducts world wide monitoring of influenza viruses to collect data to contribute to annual Northern and Southern hemisphere vaccine decisions; 2) builds capacity domestically and internationally to improve the early detection systems for new influenza viruses; 3) works closely with States to improve the infrastructure for delivery of influenza vaccines; 4) conducts research studies on influenza viruses to form the building blocks for better vaccines; and 5) participates on an interagency workgroup to develop an influenza pandemic preparedness plan for the United States.

Foodborne Illnesses - CDC has a prominent role in maintaining the safety of the nation's food supply. CDC is challenged to: 1) build a strong nationwide public health network for foodborne disease surveillance and response; 2) design and implement prevention strategies; 3) support, educate, and train the public health workforce; and 4) provide scientifically sound health information to the public. These efforts are essential for regulatory agencies that need and rely on CDC's epidemiologic data, laboratory science, environmental health capability, public health expertise, and links to state and local health and education departments.

Group B Streptococcal Infections - Perinatal group B streptococcal disease is the most common cause of severe infections in newborns. CDC worked with the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) to develop guidelines and information for practitioners on the best methods for preventing group B streptococcal disease. Surveys have shown that the prevention recommendations have been widely adopted.

HIV Variants - During the 1990s, two unusual HIV-1 strains (group O and group N) were identified among isolates obtained in Africa and in Brazil. These strains are important because they may not be consistently detected by the currently licensed tests used for routine HIV-1 diagnostic testing and blood screening in the United States. CDC is expanding surveillance for these viruses and for other immunosuppressive retroviruses that may be missed by current screening protocols. CDC shares the data obtained from these surveillance activities with appropriate federal agencies to allow for informed discussions on U.S. blood-screening practices so that appropriate recommendations for modifications or re-configurations of screening assays can be made if necessary.

Antimicrobial Resistance - In the United States and around the world, many infections are becoming resistant to the antimicrobial drugs used to treat them. In some areas of the United States, more than 30% of infections with pneumococci, the most common cause of bacterial pneumonia and meningitis, are no longer susceptible to penicillin. Nearly 30% of the bacteria that most frequently cause infections acquired in hospital intensive-care units are resistant to the preferred antibiotic. Drug-resistant *Staphylococcus aureus*, formerly seen almost exclusively in hospitals, is now being reported in the community.

An interagency task force, co-chaired by CDC, FDA, and NIH, released *A Public Health Action Plan to Combat Antimicrobial Resistance*, which calls for 1) a national antimicrobial resistance surveillance plan; 2) promotion of appropriate use of antimicrobial drugs and prevention of transmission of infections; (3) research into antimicrobial resistance and mechanisms of transmission; and (4) new product development to prevent, diagnose, and treat infections.

Medical Errors and Healthcare-associated Infections - Assuring the safety of patients receiving health care is a public health priority. The Institute of Medicine (IOM) has estimated that medical errors and preventable adverse events contribute to the deaths of 44,000 to 98,000 patients and add $29 billion to the cost of direct healthcare expenditures in the U.S. annually.

The IOM has called for a 50% reduction in medical errors and adverse events within 5 years and that a national system for monitoring and reporting these events will be critical to achieving this goal. In addition, the IOM proposes that the wider adoption of new information technology can more effectively help healthcare facilities improve systems of care and ensure adherence to best practices for promoting patient safety. CDC's strategy for responding to the IOM recommendations will build on its core capacities in measuring and monitoring infections and other adverse health events. Significant enhancements in the measurement and intervention capacity to prevent medical errors and other adverse health events are needed both at the individual facility level and within local, state and national public health agencies. Our strategy is to build this capacity by updating and expanding existing patient safety capacities that are embedded in infection control programs. The core of this strategy is the National Healthcare Safety Network (NHSN), a national program which will not only measure, but can provide interactive capacity to intervene through health communications campaigns and targeted intervention programs.

Program Performance Analysis

Infectious Diseases -
Hepatitis C, Chronic Liver Disease, and Viral Hepatitis - CDC was able to exceed the expected number of HCV coordinators funded. The additional coordinator was funded through prudent management of hepatitis program funds to address the growing need for hepatitis C coordinators in state and local health departments. HCV coordinators serve as the "linking pin," coordinating hepatitis C activities among health department programs (e.g., STD, Immunization, and Epidemiology/Surveillance), and state agencies (e.g., Mental Health, Substance Abuse, and Corrections). They are also closely involved with media campaigns, provider education, and the development of educational materials.

Influenza - CDC has improved preparedness for both epidemics and a possible pandemic of influenza by expanding influenza surveillance. In 2002, we exceeded the number of targeted domestic sites through diligent recruitment for U.S. Sentinel Physicians and consistent follow-up by CDC staff. These domestic and international sites provide surveillance data that are critical to influenza vaccine decisions. In 9 of the last 10 years, influenza vaccines were well matched to the circulating influenza viruses. CDC will increase support to build capacity for influenza surveillance sites and networks internationally. These international sites/networks strengthen global surveillance capabilities to increase the likelihood of early detection of an influenza pandemic and effective tracking of its spread. In addition, the international surveillance sites will provide critical information needed to improve vaccine decision-making. Maintaining and improving the U.S. sentinel physician surveillance system is a priority because it is the primary U.S. system for measuring influenza morbidity and is a source of specimens necessary for monitoring circulating viruses in the U.S.. Data collected about circulating influenza viruses are used to form the basis for annual vaccine decisions. The U.S. Sentinel Physician surveillance system will be the primary system for measuring the impact of an influenza pandemic on morbidity in the U.S.

Foodborne illnesses - CDC has improved food safety through collaborations with federal, state, and local governments and other public- and private-sector partners. CDC led the development and implementation of FoodNet, a network of 10 sentinel sites. This network provides accurate trend information for important foodborne infections and improved methods for early detection of foodborne disease problems within and between states. These programs and other CDC efforts have: 1) strengthened and expanded the early warning system for foodborne illness; 2) improved and expanded pathogen-detection methods; 3) improved techniques to avoid, reduce, and eliminate pathogens; and 4) improved outbreak containment. In collaboration with FDA and USDA, CDC: 1) designed training and educational materials for public health and healthcare professionals; 2) collaborated with government, industry, and consumer partners to conduct a broad-based food safety education campaign (Fight BAC!™); and 3) launched a national partnership for school-focused foodborne illness prevention. In FY 2001 and FY 2002, we met our target with eight common bacterial pathogens, two parasites, and one syndrome (Hemolytic Uremic Syndrome) under active surveillance.

CDC and its state partners also designed and implemented the PulseNet DNA fingerprinting network in public health laboratories. This network provides early detection and investigation of foodborne disease outbreaks within and between states. CDC has prioritized the expansion of PulseNet because of the increased demand from participating sites. As of FY 2002, the targets for each of the pathogens have been achieved as expected. Four additional pathogens (*Clostridium perfringens, Campylobacter jejuni/C. coli, Vibrio parahaemolyticus, and Vibrio cholerae*) have been added to the performance measure.

The FY 01 and FY 02 targets to increase the proportion of foodborne outbreaks in which the causative agent was identified were met at 55 and 57%, respectively. CDC has continually met or exceeded targets for this measure and, subsequently, will remove this measure from future Performance Plans.

In FY 2000, using FoodNet and other sources, CDC updated estimates of the burden of foodborne disease in the United States. New estimates indicate that 76 million cases of foodborne illnesses result in 325,000 hospitalizations and 5,000 deaths annually. A recent summary of FoodNet data from 1996-2001 showed significant declines in rates of infection with *Yersinia enterocolitica* (49% decline between 1996 and 2001), *Listeria* (35%), *Campylobacter* (27%), and *Salmonella* (15%), suggesting the current efforts to reduce these diseases are on tract towards the 2010 Health People Objectives. Recent declines in *E.coli* O157 and *Shigella* infections were also documented over this time period, but may reflect year to year variation, rather than sustained trends. New interagency efforts in research and surveillance to improve and document the effectiveness of food safety measures are under way.

Group B Streptococcal Infections - Final data for FY2001 show that the plateau in disease incidence has continued, with 0.5 cases per 1000 births in 2001, similar to 0.5 cases per 1000 births in 2000. To improve prevention efforts, CDC and staff from the Active Bacterial Core Surveillance (ABC) project completed a study comparing the two prevention strategies recommended in 1996. The study found that the strategy based on prenatal screening was significantly more effective at preventing perinatal group B streptococcal disease. CDC worked with partners to develop new prevention guidelines recommending universal prenatal screening; the new guidelines were released by CDC in August 2002 (MMWR RR series, aug 15).

HIV Variants - CDC targeted and expanded participation to 6 countries for surveillance of unusual HIV variants in both FY 00 and FY 01. For FY 02, efforts to expand participation to 2 additional countries were not successful. However, efforts to recruit 1 additional African country into this surveillance program in FY 03 will continue with a planned expansion in FY 04 into 2 countries in Asia.

Antimicrobial Resistance - The number of courses of antibiotics given for ear infections to children less than 5 years of age rose from 54 in 2000 to 59 in 2001. The difference is largely due to the survey design used to collect the data and is not statistically significant. Reductions in antibiotic prescriptions for otitis media may reflect an increased awareness of the public health problem of antimicrobial resistance, the effectiveness of a national efforts including the CDC's education campaigns targeted to physicians and the public on judicious use of antibiotics, or a decrease in the incidence of otitis media.

The common cold is caused by a virus and antibiotic therapy is ineffective in treating these infections. Reducing the use of antibiotics in the treatment of the common cold remains one of the prime targets of our antimicrobial resistance campaign. CDC has met this goal again in FY 01 and will continue to monitor future progress. Success in exceeding this measure may reflect efforts by CDC and partners to promote appropriate antibiotic use in the community.

Medical Errors and Healthcare-associated Infections - The FY 2001 goal for reduction of central line-associated bloodstream infections was not met. This failure to see reductions in the rate of bloodstream infections is consistent with the growing magnitude of the patient safety problem in the United States, especially with regard to healthcare-associated infections. There are several possible reasons for this reported increase:

1. Increasing severity of illness of patients in hospital intensive care units.
2. The national nursing shortage making it more difficult to hire and retain well-trained staff and maintain favorable nurse to patient ratios.
3. Continuing rise in the number of antimicrobial-resistant infections which are harder to treat.

These data reinforce the importance of implementing the National Healthcare Safety Network as part of the DHHS patient safety data system. It also underscores the need for aggressive programs to control and reduce antimicrobial resistance in hospitals and attack the broader problem of hospital-acquired infections in the context of the DHHS patient safety initiatives that are now under way.

CDC is actively engaged in a number of collaborative projects with both public and private sector partners to help bring about the changes that will lead to a redesigned, safer and more effective healthcare system.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 144,796	Estimate
FY 2003:	$ 145,026	President's Budget
FY 2002:	$ 149,502	Enacted

II-K. Injury Prevention and Control

Goal-by-Goal Performance Measurement

1. Performance Goal: Increase the capacity of injury prevention and control programs to address the prevention of injuries and violence**.**

Performance Measure	Targets	Actual Performance	Reference
Among the states receiving funding from CDC, reduce deaths from residential fire.	**FY 04:** 3.0 per 100,000 **FY 03:** 3.0 per 100,000 **FY 02:** 3.0 per 100,000 **FY 01:** 3.0 per 100,000 **FY 00:** 3.0 per 100,000	**FY 04:** 10/2006 **FY 03:** 10/2005 **FY 02:** 10/2004 **FY 01:** 10/2003 **FY 00:** 1.52 per 100,000	**B -** 134 **HP** - 15-25 **1**

2. Performance Goal: Monitor and detect fatal and non-fatal injuries.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of states receiving CDC funding for surveillance and to identify and track injuries.	**TBI Surveillance** **FY 04:** Disseminate TBI data at the State level. **FY 03:** Revise CNS surveillance guidelines to include protocols for collection of data on mild TBI. **FY 02:** Disseminate revised protocol for CNS TBI surveillance; conduct an expert conference to develop protocols for mild TBI.	 **FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Achieved	**B** - 134 **HP** - 15-1

Performance Measure	Targets	Actual Performance	Reference
(continued)	**NEISS All Injury Surveillance** **FY 04:** Publish national statistics on nonfatal injuries treated in emergency departments by leading causes of injury.	**FY 04:** 12/2004	**B** - 134 **HP** - 15-14
	FY 03: Implement a National Electronic Injury Surveillance system - All Injury Program (NEISS AIP) special study on traumatic brain injury.	**FY 03:** Achieved	
	FY 02: Implement a National Electronic Injury Surveillance system - All Injury Program (NEISS AIP) special study on adverse reaction to therapeutic drugs.	**FY 02:** Achieved	
	National Violent Death Reporting System Surveillance **FY 04:** Maintain FY 03 state funding levels to continue with the implementation of National Violent Death Reporting System (NVDRS).	**FY 04:** 12/2004	
	FY 03: Increase the number of states implementing NVDRS from five to eight.	**FY 03:** 12/2003	
	FY 02: Fund states to begin implementing NVDRS.	**FY 02:** Baseline: Five states funded.	

3. Performance Goal: Conduct a targeted program of research to reduce injury-related death and disability.

Performance Measure	Targets	Actual Performance	Reference
Develop new or improved approaches for preventing and controlling death and disability due to injuries.	**FY 04:** Maintain FY 03 funding level for research agenda targeted areas. Increase peer-review by 5%.	**FY 04:** 7/2004	**B** - 134
	FY 03: Fund 1 research project for injury research in targeted areas. Increase peer-review by 5%.	**FY 03:** 7/2003	
	FY 02: Complete a CDC injury Research Agenda for defining the scope and priorities for injury research at CDC. All research projects will be peer-reviewed.	**FY 02:** Achieved Baseline: 66% of research awards peer-reviewed; 134 projects funded.	

Measures to be Eliminated

The following performances have been achieved.

Performance Measure	Targets	Actual Performance	Reference
1. In a CDC-funded youth violence project, reduce the number of students reporting incidents of fighting.	**FY 00:** Reduce by 30%	**FY 00:** Achieved **FY 96:** Reduced by 30% **FY 94:** 50% (baseline)	**B -** 134
2. Develop best practice protocols for implementation and evaluation of youth violence prevention programs.	**FY 03:** Increase materials and technical assistance provided via the Resource Center by 15 percent. **FY 02:** Develop capacity for technical assistance through the National Youth Violence Prevention Resource Center. **FY 01:** Provide technical assistance to at least 5 communities. **FY 00:** Disseminate to at least 1 target audience. **FY 99:** Develop protocols.	**FY 03:** Achieved **FY 02:** Bilingual/Technical staff such as writers, graphic artists, etc. have been hired. **FY 01:** Technical assistance provided via Academic Centers of Excellence. **FY 00:** Completed protocol development. **FY 99:** Compiled into *Best Practices* source book.	**B** - 134
3. Increase the number of regional best practices workshops, and disseminate workshop results.	**FY 01:** 8 workshops **FY 00:** Develop/test dissemination mechanisms (e.g., website).	**FY 01:** Achieved Best Practices training via other mechanisms. **FY 00:** Launched website **FY 97:** 0 workshops	**B** - 134
4. Reduce the number of bicycle-related emergency department visits by 5% per year from 123,475 in 1995.	**FY 01:** NA **FY 00:** 5% reduction **FY 99:** 5% reduction	**FY 01:** Funding for this program shifted to other injury program priorities. **FY 00:** 127,500 **FY 99:** Data collection began in FY 2000. **FY 95:** 123,475	**B** - 134 **1**

Performance Measure	Targets	Actual Performance	Reference
5. Increase the use of bicycle helmets by child and teen bicyclists in CDC-funded project areas.	**FY 01:** Funding ended in FY 00 **FY 00:** Increase use by 25%. **FY 99:** Increase use by 30%.	**FY 01:** Partially Achieved--funding ended in FY 00 **FY 00:** Percent above baseline. CA + 15% CO + 6% FL + 40% OK + 616% RI 0% **FY 99:** Percent above baseline. CA. + 7% CO + 3% FL - 8% OK 250% RI 0% **FY 98:** Percent above baseline. CA + 4% CO + 16% FL + 5% OK 333% RI + 325% **FY 97:** Baseline: Proportion of children wearing helmets. CA .54 CO .30 FL .62 OK .06 RI .08	**B -** 134

Performance Measure	Targets	Actual Performance	Reference
6. Implement CDC guidelines for design and use of TBI registries in 2 states by 2004; report outcomes associated with TBI.	**FY 03:** Disseminate findings of feasibility study. **FY 02:** Determine the feasibility of linking registry data to service provision for persons with TBI. **FY 01:** Develop a questionnaire for TBI follow-up; collect, analyze and disseminate information on disability and other TBI-related outcomes. **FY 00:** Disseminate report on TBI and public health, with recommendations on use of registries; disseminate TBI brochure. **FY 99:** Develop guidelines for registries for collecting follow-up data by 2002.	**FY 03:** 12/2003 **FY 02:** Linkage feasibility projects in 2 states has been completed; one final report has been prepared and one linkage implementation project is in progress. **FY 01:** Questionnaire developed, data collected and presented at more than 10 conferences, a data book summary of TBI outcomes prepared and disseminated. **FY 00:** Achieved; Guidelines for registries for collecting follow-up data completed (See FY 99 target). **FY 99:** Guidelines under development; reviewed surveillance activities in 33 states; 12 states reported use of systems to identify TBI survivors and provide information on services. **FY 98:** Guidelines under development.	**B** - 134
7. In CDC-funded projects within 14 states (our previous round of state projects), increase the proportion of homes with at least one smoke detector on each habitable floor. *This data sources has changed from the 1-time CPSC Smoke Detector Survey to the annual National Health Interview Survey	**FY 01:** 65% **FY 00:** 60% **FY 99:** The proportion of homes with at least one smoke detector will be increased from 80% in 1993 to 88% in 1999.*	**FY 01:** 72% - Achieved **FY 00:** 69.4% **FY 99:** 87%*	**B** - 134

Performance Measure	Targets	Actual Performance	Reference
8. In CDC-funded projects within the 13 states, increase the number of homes with at least one smoke alarm on each habitable floor.	**FY 03:** 41,600 **FY 02:** 20,800	**FY 03:** 12/2003 **FY 02:** 12/2002 **FY 01:** Began installation of smoke alarms	**B** - 134
9. Publish recommendations for conducting and evaluating smoke alarm promotion programs.	**FY 03:** Publish and disseminate recommendations. **FY 02:** Complete analysis and draft recommendations. **FY 01:** Receive data. **FY 00:** Publish recommendations. **FY 99:** Develop recommendations for review.	**FY 03:** 12/2003 **FY 02:** Achieved/Began implementation. **FY 01:** Achieved **FY 00:** Data analysis in progress. **FY 99:** Achieved	**B** - 134
10. Establish demonstration projects to address prevention of violence against women.	**FY 03:** Modify curricula and research instruments as appropriate and continue interventions. **FY 02:** Develop a progress report based on pilot testing of research instruments. **FY 01:** Finalize curricula and research instruments for CDC IRB review. **FY 00:** Implement/begin evaluation of 2 innovative community-based programs.	**FY 03:** 12/2003 **FY 02:** First year progress reports being analyzed. **FY 01:** Five (5) of 10 projects received CDC IRB protocol approval**.** **FY 00:** 10 projects funded **FY 99:** 0 evaluations	**B** - 134

Performance Measure	Targets	Actual Performance	Reference
11. Increase efficiency and effectiveness of research investments by employing competitive peer-review processes.	**FY 03:** Fund 1 research project for top-level injury research priority. **FY 02:** Complete a CDC injury research agenda for defining the scope and priorities for injury research at CDC. All research projects will be peer-reviewed. **FY 01:** Initiate an injury research agenda development process.	**FY 03:** 12/2003 **FY 02:** RFA published to begin FY03 awards. **FY 01:** Injury research agenda drafted. **FY 00:** Baseline: only investigator initiated extramural grants and Injury Control Research Center applications are peer-reviewed.	**B** - 134
12. Develop case definitions for sexual assault.	**FY 02:** Publish and disseminate case definitions.	**FY 02:** Definitions currently being revised	**B** - 134
13. Conduct state training programs.	**FY 03:** Conduct at least 1 training session based on a needs assessment. **FY 02:** Assess training needs of sexual assault prevention program staff.	**FY 03:** 12/2003 **FY 02:** Conducted needs assessment.	**B** - 134
14. Establish a research program to address understudied aspects of violence against women (e.g., assess factors of perpetration of IPV that would inform development of interventions and treatment).	**FY 03:** Begin translating findings to communities. **FY 02:** Define the conceptual basis for the study and operationalize study concepts. . **FY 01:** Address at least 2 understudied topics from the research plan, with a long-term goal of translating findings to communities. **FY 00:** Develop a research plan; identify potential research institutions.	**FY 03:** 12/2003 **FY 02:** Injury research plan is being reviewed. **FY 01:** Funds were awarded to support the VAW Prevention Research Center to conduct research. **FY 00:** Identified priorities; developed RFP; reviewed applications; made funding decisions. **FY 99:** No research plan	**B** - 134

Performance Measure	Targets	Actual Performance	Reference
15. Evaluate the effectiveness of communities with coordinated community responses.	**FY 03:** Provide technical assistance. **FY 02:** Fund additional community based projects. **FY 01:** Provide technical assistance. **FY 00:** Increase at least 1 measure.	**FY 03:** 12/2003 **FY 02:** Received data from contractor which is now being analyzed. **FY 01:** Achieved **FY 00:** Analyzed first set of preliminary data. **FY 99:** Received data	**B** - 134
16. Establish the capability of state health departments to receive secure transmission of non-identifiable patient data from participating emergency departments.	**FY 02:** Expand beyond 2 states. **FY 01:** Fund at least one State to strengthen the capability of emergency departments to electronically report data to state health departments.	**FY 02:** Not met/E-government priority shifted. **FY 01:** Achieved. 2 states have been funded on a trial basis. **FY 00:** Health departments can not receive secure data transmissions from hospital EDs (baseline).	**B** - 134

Program Description and Context

CDC's injury research and prevention programs protect Americans from harm. Injuries are the leading cause of years of potential life loss before the age of 65. Each year, nearly 150,000 Americans die from injuries and hundreds of thousands are non-fatally injured; many suffer permanent disabilities. Although the greatest cost of injury is in human suffering and loss, the financial costs are staggering; more than $224 billion a year for medical care and rehabilitation and in lost income.

Despite great progress in injury prevention and control during the past several years, injuries remain an enormous problem in the United States:

- Home fires and falls among older persons cause thousands of deaths and injuries each year and result in high medical costs and substantial property loss.
- An estimated 1.5 million Americans sustain a traumatic brain injury each year. Of these, about 230,000 are hospitalized annually and 50,000 die. An estimated 80,000 to 90,000 people survive a TBI and are disabled.
- Violence among intimate partners continues to result in large numbers of lives lost; each year over 30% of women murdered in the United States are killed by a spouse or ex-spouse.
- Over 1 million children each year are victims of abuse and neglect.

Preventing injuries cost far less than treating them. CDC's science-based approach encompasses: 1) surveillance to find out the extent of the problem, 2) research to determine risk factors, 3) development and implementation of prevention programs, 4) evaluation to find out which interventions work best, 5) support to states and local public health agencies, and 6) partnerships with public and private organizations.

CDC's injury prevention and control program includes three new performance goals which highlight the priority of injury prevention and our ongoing efforts to provide sound scientific information upon which the public and healthcare providers make informed decisions. The performance measures for injury prevention and control reflect CDC's mission to provide leadership in preventing and controlling injuries through surveillance, research, implementation of programs, and communication of prevention messages.

Program Performance Analysis

I. Building Strong Injury Prevention and Control Programs to increase the capacity of injury prevention and control programs to address the prevention of injuries and violence.

Core Injury Prevention Programs - Partnerships with state and local agencies are essential to CDC's injury prevention efforts. These agencies provide critical data about injuries, offer an important perspective on how injuries affect communities nationwide and help reach local communities. State injury prevention programs lead and coordinate injury prevention efforts or provide critical support for specific injury prevention activities. Injury prevention programs focus on five core areas: data collection and analysis; program design, implementation and analysis; coordination and collaboration; technical support and training, and public policy. CDC began building core injury programs in states in 1999 by funding health departments in 4 states. Since then, CDC has provided limited funding to 27 states for injury prevention activities, including basic surveillance functions. Monitoring and tracking injuries is one of the first and most basic elements of injury prevention and control. It assists program managers in determining the magnitude of injury problem and identifies the population groups and behaviors at greatest risk of injury.

Fire Prevention – The United States has the third highest death rate from fires of any industrialized country. Fires and burns are the sixth leading cause of unintentional injury death in this country. About 40% of home fires reported to U.S. fire departments and 52% of home fire deaths occurred in homes with no smoke alarms. House-fire death rates are highest for children under age 5 and for adults older than 65. Death rates for Blacks and Native Americans are more than twice the rate for whites. Working smoke alarms on every level give residents enough warning to escape nearly all types of fires. If a fire occurs in a home, a working smoke alarm can reduce the risk of death by about 50%.

Although alarms provide an early warning, they do not prevent fires. More education is needed about escape plans and fire prevention. Since 1996, CDC has collaborated with the National Fire Protection Association, the U.S. Consumer Product Safety Commission, United States Fire Administration and others to develop and test an educational program to reduce the incidence of fire- and fall-related injuries among older adults.

CDC funds 13 states to conduct smoke alarm installation programs coupled with fire safety education for home-fire deaths. The goal of this program is to increase the proportion of households, in state-funded projects, with functional smoke alarms, particularly those at highest risk for fire deaths and injuries. Project staff identify high-risk homes and target populations under age 5 and over 65. Health departments work with fire departments and community-based organizations. In 3 years, CDC's installation/education program has installed over 116,000 smoke alarms in program homes and over almost 350 lives have been saved by early warning from a smoke alarm.

Rape Prevention and Education - CDC estimates that more than 450,000 rapes occur each year. CDC addresses this problem by supporting every state and territory through the rape prevention and education grant program. CDC provides resources and assistance to states for rape prevention and education programs conducted by rape crisis centers, state sexual assault coalitions, and other public and private nonprofit entities. Resources are used for: 1) educational seminars, 2) operation of hotlines, 3) staff training, 4) informational materials, 5) education and training of students and campus personnel at colleges and universities, 6) education and training to increase awareness about drugs that facilitate rapes or sexual assaults, and 7) other efforts to increase awareness about or prevent sexual assault. CDC assists state and coalition staff through training opportunities, support for the National Sexual Violence Resource Center, and research to learn what works in preventing rape.

Violence Against Women Prevention - Each year, 2 million American women experience domestic or sexual violence; 75% of these women are assaulted by their intimate partners. Female victims of violence often have physical and mental health problems and use healthcare facilities more than non-victimized women. CDC's long-term goal of reducing the incidence of violence against women may take many years to achieve. In the interim, an ongoing system is needed to monitor the problem, improve the level and scope of prevention and intervention services, evaluate what works and communicate what we know to service providers, and gain a greater understanding of the social norms that allow violence against women. The short-term goal is to develop surveillance, communications, and evaluation/feedback systems that will speed reductions in the incidence of violence against women.

CDC has 10 projects that work in communities to improve coordination among social, legal, justice, public health, and other agencies to respond to violence against women. Because special interventions are needed to reach specific under served populations, CDC supports 10 innovative demonstration projects to implement and evaluate culturally appropriate approaches to prevent violence against women. CDC is also extending efforts to hard-to-reach groups. CDC funded California health workers to implement an award-winning training program to teach migrant women to address domestic violence. CDC is evaluating and replicating this program in Wisconsin and Texas.

II. Monitoring and Tracking Fatal and Non-Fatal Injuries

Traumatic Brain Injury - CDC data indicate that approximately 1 million Americans are treated for traumatic brain injury (TBI) in hospital emergency departments (ED) annually, with a rate of 390 TBI-related ED visits per 100,000 per year. An estimated 230,000 people are hospitalized with TBI and 50,000 die. Among children under 14 years of age, 3,000 die with TBI, 29,000 are hospitalized and another 400,000 receive treatment in the ED. Teens, young adults and people over age 75 are far more likely than others to die of TBI. Many of these deaths are preventable.

Since 1994, CDC has funded more than 15 state health departments to report the number of people who die or are hospitalized with a TBI. Surveillance data from 14 of these states documented hospitalization rates for TBI of about 90 per 100,000 population and death rates of about 18 per 100,000. Males represent two thirds of hospitalized cases. Roughly half of TBI hospitalized cases resulted from motor vehicle crashes, another 25% resulted from falls, and about 6% from non-firearm assaults.

CDC also funds a follow-up registry in one state to describe TBI-related disability and the need for and barriers to receiving services among older adolescents and adults. CDC is currently funding research to determine the best measures for a follow-up registry of children.

CDC and States will continue to use data from the surveillance system to guide the development of Traumatic Brain Injury (TBI) programs. CDC will continue TBI follow-up registries to understand better the longer term impact of TBI on and to explore ways to link people with TBI to services. CDC will improve public awareness of TBI by providing information on the treatment, outcomes, and resources available for persons with less severe TBI. The TBI surveillance system (12 states are being funded in FY 2003 at approximately $118,000/state) will continue to have a substantial local impact -- State TBI data have been used to target prevention programs for falls, All Terrain Vehicles, snowmobiles, and suicide. In addition, data from state TBI surveillance systems have been used to increase resources available for persons with a TBI.

National Electronic Injury Surveillance System - The National Electronic Injury Surveillance System (NEISS), funded by CDC in collaboration with the U.S. Consumer Product Safety Commission (CPSC), provides injury data from inner city, urban, suburban, rural and children's hospitals. NEISS collects data on nonfatal injuries related to consumer products and recreational activities, and was expanded to include data about all nonfatal injuries treated in hospital emergency departments. CDC uses NEISS data to generate national estimates of nonfatal injuries in the U.S. and to guide decisions and policies about injury prevention and control.

National Violence Death Reporting System - CDC implemented the National Violent Death Reporting System (NVDRS) in FY 2002 with a funding level of $2.25 million. Current surveillance systems tell us nothing about the circumstances leading up to suicides, nor do they give us a full picture of homicides: where they occurred, what specific weapon type was involved, and what multiple factors led to the killing. The NVDRS data will provide answers to questions such as:

- What proportion of women killed in domestic violence attacks had restraining orders against the offenders;
- How often do child-abuse fatalities occur;
- Where do youths obtain the weapons they use in acts of violence;
- How often do murder-suicides occur;
- What are the tree most common circumstances leading to accidental gun deaths among children and to overdose suicides among teenager;
- What proportion of suicide victims are intoxicated at the time they kill themselves; or
- What proportion of homicides are drug-related in any way?

Child Maltreatment - Over 1 million children each year are victims of maltreatment. CDC funds four state-based mortality surveillance projects (MI, CA, RI, MN) to compare alternative approaches to surveillance for fatal and nonfatal child maltreatment and three state-based morbidity surveillance projects (CA, MO, RI) to test methods that may be employed for the surveillance of violence at all ages.

The Child Maltreatment/Suicide/IPV/SV Data Collection Pilot continues a pilot test to collect epidemiologic information on child maltreatment, suicide, IPV and SV. Emergency Department visits include frequency of visits, injury details, multiple injury data, and social services referral information.

III. Prevention Research

Injury Prevention and Control Research - The CDC injury prevention and control research program funds and monitors extramural and intramural research in three phases of injury control: prevention, acute care, and rehabilitation. Research supported by the program focuses on the need to reduce morbidity, disability, death, and costs associated with injury. CDC's extramural research program supports individual, investigator-initiated research that is targeted to a specific studies; eleven research centers for broad-based injury control, ten centers for youth violence prevention, one center each for prevention of suicide and violence against women, and grants for small business innovative research. CDC also conducts evaluation research to ascertain the efficacy and effectiveness of interventions and other factors which put people at risk for injury. The extramural program supports a productive and relevant research portfolio and uses a peer review approach which is based on review by the Injury Research Grant Review Committee (IRGRC). The IRGRC is composed of experts in injury-related scientific disciplines or current research areas that enables their evaluation of the scientific and technical merits of grant applications. The value of CDC's injury prevention and control research is demonstrated in the long-term results of the research and educational activities it supports.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 246,329	Estimate
FY 2003:	$ 247,580	President's Budget
FY 2002:	$ 275,808	Enacted

II-L. Occupational Safety and Health

Research
Goal-by-Goal Performance Measurement

Performance Goal: Conduct a high quality research program in occupational safety and health that advances scientific knowledge and provides technically and economically utilizable results to workers, employers, other agencies, and the scientific community on occupational diseases, workplace hazards, risk factors, and effective methods of prevention.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the relevance of occupational safety and health research for future improvements in workplace protection.	**FY 04:** Increase relevance metric score by a percentage to be determined by '03 baseline study. **FY 03:** Conduct baseline evaluation among safety and health professionals of NIOSH research relevance for practical workplace results	**FY 04:** Fall 2005 (biennial review) **FY 03:** Fall 2003	**B** - 140 **HHS** - 4.1 **HP** - 20  #5
2. Ensure the quality of occupational safety and health research as measured by peer review.	**FY 04:** 70% of new internal research programs and 80% of research grants and cooperative agreements result in peer reviewed publications within one year of project completion. 60% of new internal research projects and 90% of new research grants and cooperative agreements are reviewed by external peer review at project inception.	**FY 04:** Fall 2004	**B** - 140 **HHS** - 4.1 **HP** - 20  #5

Research continued

Performance Measure	Targets	Actual Performance	Reference
(Continued)	**FY 03:** 60% of new internal research projects and 70% of research grants and cooperative agreements result in peer reviewed publications within one year of project completion. 40% of new internal research projects and 90% of new research grants and cooperative agreements are reviewed by external peer review at project inception.	**FY 03:** Fall 2003	
3. Increase intramural and extramural research in NORA priority areas, and ensure the quality and relevance of the research.	**FY 02:** Maintain large-scale intramural research programs in targeted NORA areas. Establish a measure of success for extramural activity. Maintain FY 01 funding; maintain intramural research; evaluate intramural research through NIOSH Board of Scientific Counselors or other external mechanism. (Continued)	**FY 02:** Maintained large-scale intramural research programs in targeted NORA areas. Funded a total of 170 extramural NORA grants. Funded 57 new NORA grants. Exceeded FY '01 NORA funding: Extramural $44.1 million; Intramural $50.7 million Funded 11 peer-reviewed new NORA projects totaling $1 million	**B** - 140

Research continued

Performance Measure	Targets	Actual Performance	Reference
3. Continued	**FY 01:** Increase FY 00 funding by 12%; establish 2 additional intramural research programs in targeted NORA areas. **FY 00:** $32.7 million in extramural grants; $42.8 million in intramural projects.	**FY 01:** Extramural $40.8 million; Intramural $47.9 million. Exceeded target. Established 4 large-scale intramural NORA programs (Organizational Risk Factors for Depression and CVD, Occupational Traumatic Injury Prevention and Identifying Effective Hearing Loss Prevention Strategies, and Strategies to Prevent Injuries Among Health Care Workers (Nurses). **FY 00:** Extramural: $32.7million; Intramural $42.8 million; 3 large-scale intramural programs.	
4. Expand involvement of other federal agencies in NORA-related research.	**FY 02:** Track funding of other federal agencies in NORA-related research; seek funding partners for grants and cooperative agreements; co-sponsor 5 research and scientific conferences. **FY 01:** Increase over FY 00; co-sponsor 3 research and scientific conferences with other federal agencies. **FY 00:** Increase over FY99.	**FY 02:** Federal funding of other agencies will be available 5/2003 14 federal agencies partnering in NORA grant/cooperative agreement funding, a 79% increase since FY 1998. Met target. Co-sponsored 5 research and scientific conferences **FY 01:** Exceeded target, 9 research and scientific conferences **FY 00:** $51 mil. reported by other federal agencies for NORA-related funding	**B** - 140

Research continued

Performance Measure	Targets	Actual Performance	Reference
4. Continued	**FY 99:** Determine current levels of CDC and other agencies' intramural and extramural research funding in NORA areas as a baseline, and calculate annual increases.	**FY 99:** In 1998, other federal agencies reported $23.4 million for NORA-related funding.	
5. Increase the science base for occupational safety and health through publications, innovations, and research partnerships.	**FY 02:** Increase the number of peer-reviewed publications by NIOSH and NIOSH-sponsored researchers; increase the number of NIOSH innovations.	**FY 02:** Complete Peer-reviewed publication data will be available 1/2003 Published 281 peer-reviewed journal articles * FY '01 publications reflects the baseline number of bibliometric counts of publications across the federal government related to NORA's 21 Priority Areas 5 employee invention reports submitted to CDC; 5 U.S./foreign patents issued; 4 new MOUs, 5 MOUs renewed, 2 innovations	**B** - 140
	FY 01: Establish baseline of peer-reviewed publications of NIOSH-sponsored researchers; establish baseline for NIOSH innovations such as inventions and technology developments.	**FY 01:** 1) Baseline of 42,300 pubs. for '93-95 established. (2) Baseline for NIOSH innovations: 3 devices, 3 training videos, 9 new patents and 58 continuing patents.	

Research continued

Performance Measure	Targets	Actual Performance	Reference
6. Demonstrate impact of NORA on research activity through bibliometrics and other proxy measures, such as accomplishments of NORA partnership teams.	**FY 02:** Continue to track frequency of publications in NORA priority areas and NORA team products, including publications, scientific meetings, etc. **FY 01:** Begin to track frequency of peer-reviewed publications in selected NORA priority areas for 1996-2000; track NORA team products, including publications and scientific meetings. **FY 00:** Establish baseline bibliometrics/citation counts for all NORA areas. **FY 99:** Establish protocol on the use of bibliometrics and other proxy measures.	**FY 02:** (1) 43 NORA publications, (2) 55 NORA peer-reviewed articles, (3) 13 Team Products, (4) 23 NORA Team meetings. **FY 01:** Specific NORA topic areas with increases greater than 30% between the baseline period and 1998-2000 included Asthma/Chronic Obstructive Pulmonary Diseases, Health Services Research, Intervention Effectiveness Research, and Risk Assessment Methods. **FY 00:** Achieved/baseline established for 9 remaining priority areas; early reviews for FY97-99 show a 26% increase in NORA-related publications. **FY 99:** Established baseline protocol using NLM and Institute of Scientific.	**B** - 140

Validation/Verification of Performance Measures: Information will be reported through the Project Planning System of the CDC Integrated Resources Information System (IRIS). CDC senior scientists will review all data for accuracy. Baseline data and data for subsequent years are collected in the same format to ensure accurate comparisons. Partnering efforts have increased the ability to track resources outside the organization.

Tracking Work Injuries, Illnesses, and Hazards
Goal-by-Goal Performance Measurement

Performance Goal: Increase the capacity for the collection and use of information on the occurrence and frequency of work injuries, illnesses, and hazards in order to access the actual burden of occupational injuries and illnesses.

Performance Measure	Targets	Actual Performance	Reference
1. Improve the quality and usefulness of tracking information for safety and health professionals and researchers in targeting research and intervention priorities; and measuring the success of implemented intervention strategies.	**FY 04:** Evaluate the role that tracking information had in designing research and intervention projects, as well as the role that follow-up tracking information can have in assessing the success of interventions. Heightened utilization of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by 4%	**FY 04:** Fall 2004	**B** - 140 **HHS** - 1.6 **HP** - 20.7
	FY 03: Establish a baseline by identifying those research and intervention projects that were based upon tracking information. Identify NIOSH intervention programs that have used tracking information to demonstrate success of the intervention strategy. Heightened utilization of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by establishing a baseline of the number of persons per 100,000 employed with elevated blood lead levels of 25 mcd/dL or greater.	**FY 03:** Fall 2003	

Tracking continued

Performance Measure	Targets	Actual Performance	Reference
2. Implement the strategic plan, and seek opportunities for enhancement via stakeholder interaction.	**FY 02:** Increase stakeholder activities.	**FY 02:** Best Practices in Workplace Surveillance Conference held in November 2001. Launched a new internet site *Work-Related Injury Statistics Query System* http://www2.cdc.gov/riqs/ to expand access to surveillance data for public health action through partnership with the Consumer Product Safety Commission and the National Electronic Injury Surveillance System (NEISS) Extramurally funded *Occupational Health Surveillance of Low Income, Minority Populations through Community Health Centers* to evaluate feasibility of collecting occupational health data and to promote occupational prevention measures through community health centers.	**B** - 140
	FY 01: Establish baseline for stakeholder activities.	**FY 01:** Established baseline	

Tracking continued

Performance Measure	Targets	Actual Performance	Reference
3. Collect, analyze, and disseminate tracking data on occupational illnesses, injuries, and hazards.	**FY 02:** Publish tracking reports on 2 topics annually; target 1 national activity annually; prepare/distribute public use data sets. (Continued)	**FY 02:** *Published Soluciones Simples: Ergonomia Para Tabajadores Agricolas* that provides guidelines and tip sheets for Spanish-speaking farm workers, employers, and safety professionals; *Surveillance and Prevention of Occupational Injuries in Alaska: A Decade of Progress, 1990-1999;* Administered a $11.8 million contract to compile medical findings from workers and volunteers who participated in rescue and recovery efforts at the World Trade Center. Published *5 Worker Health Chartbooks* that provide comprehensive data and summaries on the nature and prevalence of specific work-related illnesses, injuries, and deaths. Traumatic Occupational Injuries Topic Page released. This electronic 'Topic Page' includes pages on construction, confined spaces, etc. as well as data sets. Workshops/Conferences: *Identify and Assess Priorities, Strategies and Methods for Surveillance of Health and Safety Hazards in the Health Services Industry***.** Best Practices in Workplace Surveillance: Identification and Tracking of Workplace Injury, Illness, Exposures, and Hazards workshop cd available.	**B** - 140 **HP-** 20.1, 20.2

Tracking continued

Performance Measure	Targets	Actual Performance	Reference
3. Continued	**FY 01:** Initiate web-based data dissemination; pilot improved data collection methods; initiate hazard surveys, by workforce sector.	**FY 01:** Achieved, websites created: Farm Family Health and Hazard Survey (http://www2.cdc.gov/ffhhs/) National Electronic Injury Surveillance System (February 2002 launch date) *National Surveillance System for Pneumoconiosis Mortality* (http://mtn.niosh.cdc.gov/drds/sb/nsspmhlp.htm) Access to data from the Mine Safety and Health Administration. (future launch date)	
	FY 00: Collect, analyze, and disseminate data.	**FY 00:** Achieved. *Injury, Illness and Hazard Exposures in Mining Industry 1986-1995* was released in Summer 2000. MMWR article collected through the Toxic Exposure Surveillance System (TESS) published 6/9/00, Vol 29.	

Validation/Verification of Performance Measures: Information will be reported through the Project Planning System of CDC's Integrated Resources Information System (IRIS) and CDC-NIOSH's Adult Blood Epidemiology Surveillance Program (ABLES) database. CDC senior scientists and epidemiologists will review all data for accuracy.

Information, Training, and Capacity Building
Goal-by-Goal Performance Measurement

Performance Goal: Ensure safer and healthier work environments for all Americans through information dissemination, knowledge transfer, and training.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the quality, relevancy, and usefulness of NIOSH information and recommendations to occupational safety and health professionals, workers, employers, government, the scientific community, and the public.	**FY 04:** Increase use of NIOSH information and recommendations by occupational safety and health professionals, workers, employers, government, the scientific community, and the public (by percentage to be determined by '03 baseline study.) **FY 03:** Establish baseline.	**FY 04:** Fall 2004 **FY 03:** Fall 2003	**B** - 140 **HHS** - 4.4, 8.5 #4
2. Increase the percentage of people with safety and health responsibilities who have academic or continuing education training	**FY 04:** Increase by 3% the number with training **FY 03:** Establish baseline	**FY 04:** Fall 2004 **FY 03:** Fall 2003	**B** - 140 **HHS** - 4.3
3. Transfer scientific and technical information to employers, workers, the public, and the occupational safety and health community.	**FY 02:** Seek improvement. In addition to seeking improvement, create baseline measure for the # of requests for information via the web, telephone, and mail in Spanish. **FY 01:** Baseline level of information transferred via web-, telephone-, and print-based requests; quarterly review of NIOSH website.	**FY 02:** 10,704 requests for information via web, 117,500 requests via telephone and 4,587 requests via mail. Established baseline for Spanish website: 253 requests for information the web, 157 requests via telephone and 2 requests via mail. **FY 01:** 11,000 requests for information via web, 20,000 requests via telephone and 5,000 requests via mail.	**B** - 140 #4

Capacity Building continued

Performance Measure	Targets	Actual Performance	Reference
4. Conduct, arrange, and sponsor technology transfer and training sessions.	**FY 02:** Set target. **FY 01:** Establish baseline	**FY 02:** 77 technology transfer/training sessions given, 3 training videos released. **FY 01:** 28 training sessions given, 3 training videos released.	**B** - 140
5. Support capacity-building activities.	**FY 02:** Increase through establishment of NPPTL and OCAS. **FY 01:** Establish baseline.	**FY 02:** Increased capacity-building activities with 16 new partnerships through NPPTL and OCAS. Continued capacity building with NORA partners. **FY 01:** Baseline of 500 Partners supporting NORA efforts.	**B** - 140
6. Support training for occupational safety and health professionals.	**FY 02:** Continue support. **FY 01:** Continue support. (Continued)	**FY 02:** 16 ERC's in 15 states, totaling $15.4 million; 42 TPGs in 28 states and Puerto Rico totaling $3.1 million, and continued to fund 10 Ag Centers totaling $7.3 million. **FY 01:** 16 ERC's in 15 states, totaling $14.7 million,$2.9 million with 35 TPG's in 24 states plus Puerto Rico.	**B** - 140

Capacity Building continued

Performance Measure	Targets	Actual Performance	Reference
6. Continued	**FY 00:** Continue support.	**FY 00:** 1 new ERC for a total of 16 in 15 states, totaling $11.9 million; established Heartland Center for Occupational Health and Safety at the University of Iowa for Training Program Grants $2.3 million with 35 TPGs in 22 states plus Puerto Rico. **FY 99:** $10.3 million to 15 ERCs in 14 states; $2.6 million to 41 training program grants in 26 states/territories.	
7. Review a sample of documents, training materials, and communication efforts, and begin implementation of findings.	**FY 02:** Continue to review and implement findings. (Continued)	**FY 02:** Disseminated 3,206 videos or DVDs on TB related training, 1,100 videos on various training topics. Expanded and improved access to NIOSH bibliographic information on website through NIOSHHTC-2 database. Added 2,000 pages to the NIOSH website, made 64 topics on various occupational safety and health readily available on the web. Developed web pages to disseminate data from Best Practices in Workplace Surveillance http://www.cdc.gov/niosh/sbw. Communicated NIOSH findings at 101 major OSH presentations. Disseminated 1 new training package for respirators "Care and Maintenance of the SR-100 SCSR.	**B** - 140

Capacity Building continued

Performance Measure	Targets	Actual Performance	Reference
7. Continued	**FY 01:** Continue implementation of findings.	**FY 01:** Over 20,000 copies distributed of The NIOSH Pocket Guide to Chemical Hazards - CD-ROM version was the most requested NIOSH publication.	**B** - 140
	FY 00: Continue to review a sample of documents, training materials, and communication efforts, and begin implementation of findings.	**FY 00:** Distributed >34,000 copies of *Preventing Needlestick Injuries in Health Care Settings*; produced a video for healthcare workers, *Respirators: Your TB Defense.*	
	FY 99: Review the most widely distributed training materials to ensure readability, clarity, and usefulness for intended user	**FY 99:** Analyzed data and reported preliminary results of an evaluation of the NIOSH latex allergy alert; updated 30 analytical methods, based on a survey of 347 laboratories.	

Validation/Verification of Performance Measures: CDC will obtain data from internal reviews and will use Efficiency and Effectiveness Ratio Evaluations to compare actual to planned results.

Prevention Activities through Evaluation, Safety and Health Interventions and Recommendations
Goal-by-Goal Performance Measurement

Performance Goal: Increase safety and health in the workplace by demonstrating, communicating, and promoting technically and utilizable solutions to control workplace hazards and reduce work-related injuries, illnesses, and fatalities.

Performance Measure	Targets	Actual Performance	Reference
1. Reduce the annual incidence of work injuries, illnesses, and fatalities, in targeted sectors.	**FY 04:** 3% reduction of non-fatal injuries among youth ages 15-17; 5% reduction of work-related fatalities among youth ages 15-17; and 5% reduction in the annual number of silicosis deaths among U.S. residents age 15 and older. **FY 03:** Establish baseline incidence rates of non-fatal injuries and work-related fatalities among youth ages 15-17; establish baseline for the annual number of silicosis deaths among U.S. residents age 15 and older.	**FY 04:** Fall 2004 **FY 03:** Fall 2003	**B** - 140 **HHS** - 1.6 **HP** 20.1, 20.2, 20.4
2. Increase workplace utilization of control and personal protective technologies in targeted sectors.	**FY 04:** Increase the number of professional firefighters equipped with CBRN certified respirators to 15%; increase the percentage of U.S. pavers with installed engineering controls by 7% over the '03 level. **FY 03:** Increase the number of professional firefighters equipped with CBRN certified respirators to 5%; establish baseline percentage of U.S. pavers with installed engineering controls.	**FY 04:** Fall 2004 **FY 03:** Fall 2003	**B** - 140 **HHS** - 2.2

Performance Measure	Targets	Actual Performance	Reference
3. Respond to requests for workplace evaluations from employers, workers, and others while providing practical advice to address problems.	**FY 02:** Conduct site visits for at least 30% of HHE requests; provide consultation for the rest; conduct follow-up assessments via the HHE Effectiveness Evaluation Program with periodic data analysis/reports. **FY 01:** Report on results from the HHE Effectiveness Evaluation Program.	**FY 02:** Received 445 HHE requests and completed 389* (87%) of submitted requests. Conducted site visits for 15% (N=67) of HHE requests* and distributed 299 technical assistance letter reports conveying appropriate documents, guidelines, and recommendations. Distributed 422 follow-up surveys to past program consumers via the HHE Effectiveness Evaluation Program. * See performance summary for decrease in number of completed HHEs and site visits. **FY 01:** Responses received reflected positive feedback (see performance summary).	**B** - 140 **HHS** - 1.6 **HP** - 20.2, 20.3, 20.7, 20.8, 20.10, 20.11
4. Provide scientific support for policy development, testimony, and non-regulatory initiatives.	**FY 02:** Seek improvement. (Continued)	**FY 02:** Published 31 documents that provided support for policy development, testimony, and non-regulatory initiatives. Published 2 final rules related to Dose Reconstruction, 1 Congressional progress report on residual Radioactive and Beryllium Contamination, notice of proposed rulemaking related to the implementation of the Special Exposure Cohort (SEC).	**B** - 140

Performance Measure	Targets	Actual Performance	Reference
4. Provide scientific support for policy development, testimony, and non-regulatory initiatives.	**FY 01:** Establish baselines for number of international collaboration on occupational safety and health documents and criteria documents.	**FY 01:** Helped publish Concise International Chemical Assessment documents (CICADS), International Safety Cards (ICSC), and a criteria document on Occupational Exposure to Asphalt Fumes.	**B** - 140
5. Evaluate the extent to which recommendations are being implemented.	**FY 01:** Complete reports and analysis.	**FY 01:** The NIOSH FFIP report describes fire fighting activities in a vacant building and the subsequent outcome, and provides prevention recommendations which may be applicable to all fire departments in the U.S. *Six Career Fire Fighters Killed in Cold-Storage and Warehouse Building Fire - Massachusetts.* published.	**B** - 140
	FY 00: Begin evaluation.	**FY 00:** Conducted FFIP investigations; published prevention and intervention activities on website.	
	FY 99: Design and implement 2 model information dissemination and training programs for target hazards/ populations; with partners, develop a system to assess/determine a baseline and increase the use of CDC-recommended exposure limits.	**FY 99:** Developed and implemented training curricula on electrical safety for vocational and technical education; developed and implemented training program to prevent hearing loss in miners; initiated evaluation of use of CDC-recommended exposure limits.	

Validation/Verification of Performance Measures: NIOSH will obtain data from surveys of a representative sample from the occupational safety and health community and will develop evaluation reports for targeted intervention programs.

Overarching Program Description and Context

In an effort to create a more results-oriented and "user friendly " report, NIOSH has phased out its FY 2002 output-based performance measures and developed new outcome-focused performance measures that provide clear linkages to the NIOSH strategic plan, HHS goals, Healthy People 2010, and the President's Management Agenda. With a new set of performance measures supporting these federal agendas, NIOSH will continue leading the nation in occupational safety and health research and prevention.

Congress charges CDC with developing ways to improve and protect the health and safety of the American workforce. CDC's National Institute for Occupational Safety and Health (NIOSH) is the federal entity responsible for conducting research on and making recommendations for the prevention of work-related illness and injury. As the government's primary scientific organization that focuses on occupational safety and health, NIOSH succeeds in reaching its goal of reducing workplace injury, illness, and death only through the efforts of its partners. While proud of its own proven contribution to reducing injuries and illnesses, credit must be shared with NIOSH's public, private, and non-profit partners.

Americans are working more hours than ever before in environments that profoundly affect their health and safety. Despite improvements over the last several decades, numerous occupational injuries, illnesses, and deaths continue to occur on a daily basis. On average, 9,000 workers suffer disabling injuries on the job every day. Out of these 9,000 injured workers, 16 will die daily. In addition, occupational related diseases take the lives of 137 American workers every day. The economic burden of occupational injuries, illnesses, and violence is costly - the annual costs of occupational injuries alone are estimated to be $240 billion *(The Liberty Mutual 2002 Workplace Safety Index)*

NIOSH strives to reduce the incidence of occupational injuries and illnesses with an integrated national program that includes: tracking, research, workplace interventions, information dissemination, training, and capacity building. Through its tracking component, NIOSH identifies and monitors high risk workplace situations/environments and worker populations. NIOSH research focuses on developing new products and knowledge aimed at reducing occupational injury, illness, and death. Through its capacity building, NIOSH helps develop the capabilities of those individuals and agencies on the frontlines within the field of occupational safety and health through training and disseminating current and applicable occupational safety and health information to state and local health agencies, industrial hygienists, colleges/universities, and other safety and health professionals. Within the area of workplace interventions, NIOSH brings tools, techniques, information, and procedures into the workplace that are intended to improve the health and safety of workers. Thus reducing occupational injuries and illnesses, and ultimately saving lives.

Program-Specific Performance Analyses

Research
Program Performance Analysis

NIOSH is responsible for conducting research on the full scope of occupational disease and injury, from basic research on mechanisms and etiology of occupational diseases, to applied research on specific ways to prevent disease and injury in the workplace. The goal is to provide high quality, relevant research that advances scientific knowledge and provides results that are technically and economically useful to workers, employers, governmental agencies, and the scientific community. These research results can then be applied to improve workplace safety and diminish health hazards, thereby helping to prevent injuries, death, and disability. While maintaining the high quality of research is in itself a priority, it is also recognized that research results are not useful unless they are translated into practice in the workplace, and ultimately result in improved worker safety and health.

NIOSH has traditionally ensured relevance of its research program through broad stakeholder and customer involvement in priority setting activities. For example, approximately 500 groups and individuals were involved in the development of the National Occupational Research Agenda (NORA). This broad-based initiative focuses on 21 priority areas in three categories: disease and injury, work environment and workforce, and research tools and approaches. To date, 17 scientific organizations have replicated aspects of the NORA process. To extend the research and impact of NORA and to leverage federal research dollars, CDC developed joint funding opportunities with other federal agencies. These government partnerships grew from 3 in 1998 to 14 in FY 2002. The success of the NORA partnership was highlighted by its selection as a semi-finalist in the 1998 Innovations in American Government Award and continues to be a model program for innovative research practices. Both Maine and California have modeled the NORA process to develop occupational research agendas at the state level. NORA is also being replicated within academic settings as exemplified by the University of Washington's Pacific Northwest Agriculture Safety and Health Center's multi-disciplinary research agenda.

NIOSH has a strong record of evaluating the quality of its research through external peer review. Currently over 90% of all grants and cooperative agreements are awarded by scientific merit based peer review, and a significant and increasing percentage of internal NIOSH research projects are reviewed at inception by external scientific experts.

While the current efforts for ensuring quality and relevance are a good start, the new performance measures for FY 2003 and FY 2004 will greatly expand these activities in a systematic and measurable way. The quality and relevance of NIOSH research will be measured using (1) retrospective evaluation of translation of research finding to occupational safety and health practice, (2) retrospective evaluation of research for relevance to workers and employers, and (3) metrics of peer review for research projects at inception and at dissemination stages.

Tracking Injuries, Illnesses, and Hazards
Program Performance Analysis

Note: In FY 2004, NIOSH will be shifting from using the term "surveillance" to "tracking." For the purposes of this report, both terms will be used, reflecting current and future efforts in tracking work injuries, illnesses, and hazards through surveillance.

Occupational safety and health surveillance provides information on the occurrence and frequency of work injuries, illnesses, and hazards to safety and health organizations and professionals, researchers, employers and workers. The goal for tracking work injuries, illnesses and hazards at NIOSH is to accurately and thoroughly identify workplace illness and injury. To help meet this goal, CDC supports several state-based surveillance activities and maintains national databases of occupational injuries and fatalities. Linked to this health information is the identification of exposures to hazards that can lead to illness and injury. With this health and hazard surveillance information, specific research initiatives can be undertaken to understand the relationships between exposures and health outcomes. In turn, intervention strategies are then developed and implemented to reduce illness and injury.

During FY 2002, NIOSH was able to show the connection between surveillance and intervention by publishing several key documents. After a decade of surveillance activity in Alaska, NIOSH published *Surveillance and Prevention of Occupational Injuries in Alaska: A Decade of Progress, 1990-1999*, which highlights the Institute's collaborative efforts to reduce work-related fatalities in the state of Alaska. To educate the rising Hispanic worker population, NIOSH also provided Spanish speaking agriculture workers with intervention strategies based on surveillance findings through *Soluciones Simples: Ergonomia Para Tabajadores Agricolas.*

In FY 2002, as part of its post September 11th terrorism response and preparedness efforts, NIOSH administered a $11.8 million contract with the Mt. Sinai School of Medicine to identify and assess symptoms, injuries, or conditions that may indicate long-ter, physical and/or mental illnesses in workers and volunteers who participated in rescue and recovery efforts at the World Trade Center site. A database was also established to compile medical findings, allowing researchers to assess potential occupational illness and injury patterns among World Trade Center rescue workers and volunteers through surveillance data.

Information, Training, and Capacity Building
Program Performance Analysis

NIOSH is charged with maintaining the national cadre of occupational safety and health professionals. To this end, NIOSH maintains a program that trains professionals through extramural funding of Education and Research Centers (ERCs) and Training Project Grants (TPGs). Each year, over 500 students graduate from these programs, with training in nursing, industrial hygiene, and safety engineering. Within the ERCs, CDC funds more than 1,000 continuing education courses in occupational safety and health each year. Along with its ERCs, NIOSH also focuses on developing training materials for particular groups - specifically miners and young and new workers. In conjunction with its capacity building efforts, NIOSH has evaluated this effort and the nation's capacity most recently through the funding of the Institute of Medicine review and report, *Safe Work in the 21st Century: Education and Training Needs for the Next Decade's Occupational Safety and Health Personnel*. This report will also serve to focus future efforts in NIOSH's capacity building efforts.

Additionally, NIOSH engages in capacity building activities by means of information dissemination. CDC distributes >1 million paper copies of documents annually and also makes information available through the NIOSH website. In FY 2002, NIOSH received 10,704 requests for information via the web, 117,500 requests via telephone, and 4,587 requests via mail. To increase its information dissemination efforts to the growing number of Hispanic laborers within the U.S. workforce, NIOSH launched a Spanish version of its website in FY 2002. After its launch in December 2001, the website received 253 requests for information via the web and 157 requests via telephone during FY 2002.

Prevention Activities through Evaluation, Safety and Health Interventions and Recommendations
Program Performance Analysis

NIOSH conducts and participates in a variety of activities directed to achieve reductions in work-related injuries and illnesses. Work-related injuries, illnesses, and impairment comprise a substantial component of the total burden of injury and illness in the United States, including injuries and fatalities among children and youth, adult injuries and fatalities (including violence, chronic diseases among adults and elderly), and impairment and disability among the elderly. The principal intervention activities targeting reductions in this burden include the following: (1) health communications; (2) control technology assessment and technology transfer (patents, CRADAs, intervention demonstration projects); (3) educational outreach through partner organizations; (4) participation in national and international voluntary standard-setting groups; and (5) the provision of scientific information and science-based recommendations to safety and health regulatory agencies and programs of the U.S. Department of Labor, the U.S. EPA, the Department of Transportation, and other federal organizations.

The principal goal of intervention activities is the use of technically and economically utilizable solutions to control workplace hazards and reduce work-related injuries, illnesses, and fatalities. This goal can best be achieved through close integration with NIOSH surveillance and research activities. Using surveillance data, for example, NIOSH conducts intervention studies that target high-risk industries and occupations with the highest incidence of workplace injuries and illnesses.

Currently, NIOSH has several programs that specifically address workplace safety and health interventions. Each year, CDC's NIOSH Health Hazard Evaluation Program (HHE) conducts an estimated 300 investigations of occupational health problems at work sites in response to requests from employers, employees, and other government agencies. As a result of HHE staff's heavy and continuous involvement in post September 11th terrorism response and preparedness efforts, the HHE program experienced a decrease in completed HHEs and site visits. In FY 2002, the HHE program completed 389 HHE requests, a 7% decrease since last FY, and conducted 67 site visits, a 26% decrease since FY 2001. Fatality Assessment Control and Evaluation (FACE): The FACE program determines factors that contribute to fatal worksite events, identifies emerging hazards, and develops safety recommendations. In FY 2002, the FACE Program played an important role in working with OSHA and the National Association of Tower Erectors (NATE) to effectively communicate strategies for the prevention of injuries and fatalities among telecommunication tower workers. FACE findings from the investigations of tower-related deaths also played a pivotal role in developing a train-the-trainer course for OSHA compliance officers, contractors, tower erectors, tower owners, wireless service carriers, and tower component manufacturers. This program identifies causes of death among firefighters and provides recommendations for prevention and improved safety. Findings from FFIP investigations are used by fire departments throughout the country to modify standard operating procedures, justify and support equipment needs, and improving training.

Beginning in FY 2003, NIOSH will continue to provide various prevention activities within the workplace via safety and health interventions, evaluations, and recommendations. For the purposes of GPRA, NIOSH will highlight a few of its prevention activities within several targeted sectors, which represent the breadth of NIOSH's commitment to diverse sectors within the workforce needing effective interventions, evaluations, and recommendations targeted at reducing occupationally related injuries, illnesses, and fatalities. In addition, as post-September 11th terrorism preparedness and response efforts continue, NIOSH will play a pivotal role in protecting emergency responders through respirator development and certification as identified in the CDC's Terrorism GPRA section.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 134,966	Estimate
FY 2003:	$ 134,966	President's Budget
FY 2002:	$ 134,958	Enacted

II-M. Preventive Health and Health Services Block Grant

Goal-by-Goal Performance Measurement

Performance Goal: Provide interim dynamic support for high-priority state and local disease prevention and health promotion programs.

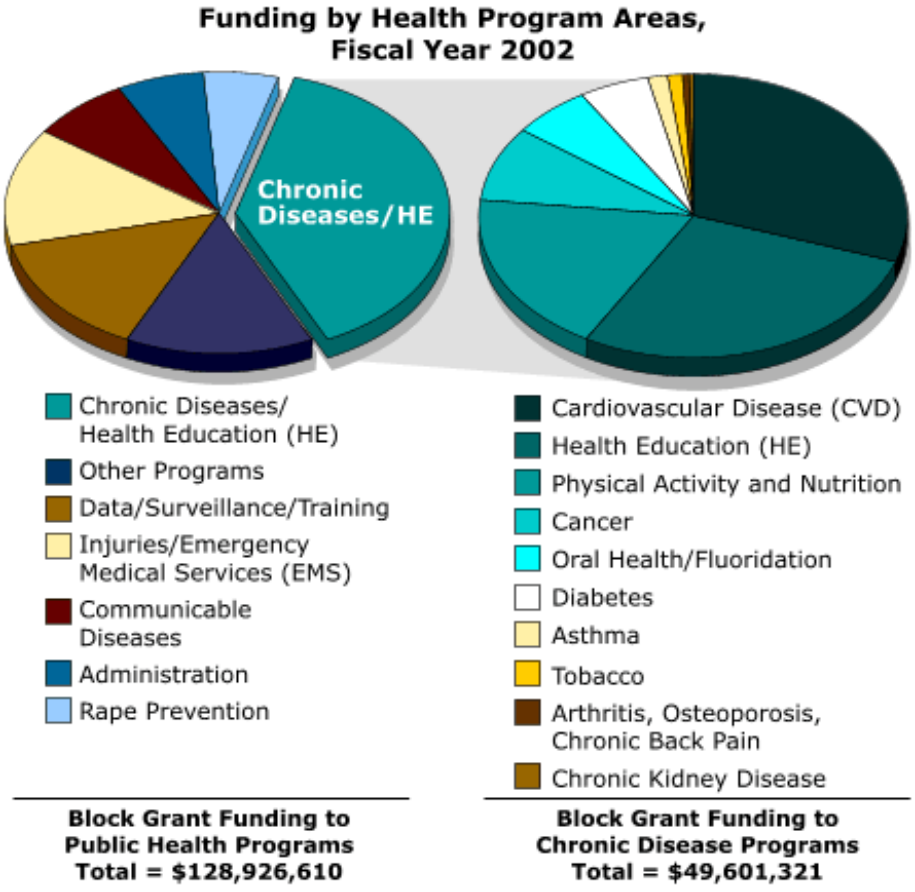
Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of grantees who submit as part of their annual report 1 health outcome impact success story.	**FY 02:** 25 grantees	**FY 02:** 3/2003	**B** - 149
2. Increase the number of grantees who submit both an annual application and annual report using the standardized electronic grant application and reporting system (GARS).	**FY 02:** 45 grantees	**FY 02:** 3/2003	**B** - 149  #4
3. At least 85% of total required data from all programs funded by the Preventive Health and Health Services Block grant will be reported to CDC annually.	**FY 01:** At least 85% **FY 00:** At least 85% **FY 99:** At least 80%	**FY 01:** 73% **FY 00:** 73% **FY 99:** 82% **FY 98:** 82% **FY 97:** 77%	**B** - 149

Program Description and Context

Authorized in Title XIX of the Public Health Services Act, the Preventive Health and Health Services (PHHS) Block Grant provides funding to state health departments to implement preventive health services that reduce illness, premature deaths and disabilities to improve the quality of life for their citizens. Congress recognizes that state health departments and the other grantees do not have adequate funding to combat all their leading causes of illness, death, disability, and injury. Block grant funding gives states the capacity to complement categorical and state funding when needed, or be used when no other sources of dollars exist to address the health concern. Through the PHHS Block Grant, CDC funds all 50 states, the District of Columbia, 8 Pacific Island territories, and 2 Native American Indian tribes.
The PHHS Block Grant is the primary source of funding which provides states the latitude to

choose and fund 265 of the national health objectives available in the nation's Healthy People 2010 health improvement plan. The PHHS Block Grant funds increase states abilities to respond and confront immediate, new, and emerging threats to the public's health within their communities. States use the Preventive Health Block Grant dollars to fund a variety of essential public health services including preventive screening, monitoring health status through data surveillance and analysis, outbreak control, workforce training, public education through various media, laboratory testing and support, establishing partnerships, developing policies and plans, enforcing existing regulations and laws, and evaluating programs. These essential services target such leading health problems as cardiovascular disease, cancers, diabetes, emergency medical services, injury and violence prevention, infectious diseases, environmental health, community fluoridation, and sex offenses. Because of the variance in the allowable uses of the funds, no two states allocate their Block Grant resources in the same way, and no two states provide similar amounts of funding to the same program or activities.

The pie chart below reflects how the grantees chose to use their PHHS block grant dollars in FY 2002:



Preventive Health and Health Services Block Grant

In FY 2001-2002, the Preventive Health and Health Services Block Grant supported and improved the public's health by:

- **Rapidly Responding to Unexpected Health Threat to the Public.** In September 2001, there was an outbreak of Dengue Fever in Hawaii. Preventive Health Block Grant funds were the sole source of funding to provide the statewide public education and communication effort through press releases and conferences, print media, television, and radio messages to alert the public. This allowed for the rapid containment of the virus, by reducing public exposure to potentially infectious mosquitoes.

- **Start-up Dollars for Health Care Programs.** In Washington, only 9% of the population know the recommendations for physical activity and health. To increase the number of people who engage in regular and sustained physical activity, an initial $25,000 investment of Preventive Health Block Grant dollars was used to support a county-wide physical activity program in Skagit County. The accomplishments and effective interventions of this county program attracted and received a $600,000 four-year grant by the Regence Northwest Health Management Organization to extend the physical activity interventions into three neighboring counties.

- **Supplemental Support for Categorical Funding**. In 2000, there were an estimated 382,562 persons in New Jersey with diagnosed diabetes and 11.7% of the state's hospitalization rates in 1999 were related to diabetes. New Jersey receives 61% of its Diabetes Program dollars from categorical funding, 28% from Preventive Health Block Grant funds, and an additional 11% from the state. The recently implemented South Jersey Diabetes Outreach and Education System (DOES) is funded 85% by Preventive Health Block Grant dollars. Without these vital Preventive Health Block Grant dollars, New Jersey would not have been able to provide DOES in these 5 counties until additional categorical funding became available.

CDC continues to help states obtain the optimum benefit from block grant dollars through technical assistance, an annual training workshop, and modifications to the electronic grant application and reporting system. In 2001 major modifications were made to the Block Grant's electronic grant and reporting system (GARS). The goal of the new GARS design is to provide States with an accountability tool to enhance their ability to do priority setting and program planning. The evaluation component in the annual report includes detailed reporting on program activities funded with block grant dollars and their successful impact on the health problem they address. In addition, modifications were made to link all Block Grant funded activities with the National Healthy People 2010 goals and objectives and the 10 Essential Service Areas as outlined by The Future of Public Health 1988 report by the Institute of Medicine.

In 2002, CDC established a website www.cdc.gov/nccdphp/prevbloc.htm to enable the states

to directly access the various online data resources now available to track the Healthy People 2010 goals and objectives. CDC feels this efficient and direct data tracking capability will be less burdensome to the states and provide them with more up-to-date and reliable data. Also, CDC created a web-board to provide a forum that will give CDC and the 61 PHHS Block Grantees a method of electronically sharing information pertinent to the challenges and successes of developing and implementing public health programs that utilize CDC PHHS Block Grant funds.

Program Performance Analysis

States vary widely in the programs they support and the funding allocated to each program. No single indicator or group of indicators can appropriately capture the activities of the grantees.

In FY 2001, states reported 73% of the data required from programs funded by the Block Grant, thus not meeting the goal of 85%. The reason for not meeting the goal was attributable to the inability to collect data items established in 1995 which had been changed and/or were no longer collected by federal data sources. This measure was eliminated FY 2001.

In FY 2002, states are required to submit annual reports reflecting progress on activities. Uniform data sets will not be required due to the transition into the Healthy People 2010 format. In FY 2002, two new measures were addressed. The goal of the new measures are to capture more program specific information on the impact of how and where PHHS block grant dollars are being invested by states. FY 2002 actual performance will be reported March, 2003. In an effort to eliminate process oriented measures, CDC will eliminate these 2 measures effective 2003. CDC will continue to include information on the PHHS block grant in the CDC Performance Plan.

Verification/Validation of Performance Measures: To verify and validate performance, CDC collects and reviews annual progress and impact reports from each funded program for the prior fiscal year's performance.

Total Funding
(Dollars in Thousands)

FY 2004:	$113,677	Estimate
FY 2003:	$117,081	President's Budget
FY 2002:	$148,306	Enacted

II-N. Public Health Improvement

Goal-by-Goal Performance Measurement
Public Health Practice

Performance Goal: Increase the number of frontline public health workers at the state and local level that are competent and prepared to respond to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies and prepare frontline state and local health departments and laboratories to respond to current and emerging public health threats.

Performance Measure	Targets	Actual Performance	Reference
1. Evaluate the impact on the performance/ preparedness of frontline public health practitioners resulting from education and training programs implemented or supported by CDC, including the Centers for Public Health Preparedness (CPHP) system.	**FY 04:** a) Evaluate impact in 30% of states b) 10% of local health depts. (LHDs) achieve certification under "Project Public Health Ready." c) 80% of states are served by a CPHP. d) 50% of LHDs deploy distributed learning technology in public health education and training. e) 20% increase in certified Distance Learning Centers (DLCs). **FY 03:** a) Initiate evaluation in 10% of states. b) Begin demonstration phase of "Project Public Health Ready." c) 50% of states served by a CPHP. d) 30% of LHDs deploy distributed learning technology in public heath and education and training. e) 10% increase in certified DLCs.	**FY 04:** a) 12/2004 b) 10/2004 c) 10/2004 d) 9/2004 e) 9/2004 **FY 03:** a) 9/2003 b) 9/2003 c) 10/2003 d) 9/2003 e) 9/2003	**B** - 152 **HP**- 23

Performance Measure	Targets	Actual Performance	Reference
1. (continued)	**FY 02:** Establish national evaluation framework. a) (revised): Establish % of states/territories that have working relationships w/1 or more CPHP. b) (revised): Establish baseline % of local health departments; determine number of DLCs.	**FY 02:** Evaluation framework developed; network of public health evaluators established in CPHPs to develop implementation strategies. a) (rev. Baseline): 30% of states. b) (revised): 3/2003	
2. Evaluate the impact on laboratory practice of training programs conducted by the National Laboratory Training Network.	**FY 04:** a) Evaluate effect of training on newborn genetic testing. b) 8 states implementing the NLS. **FY 03:** a) Evaluate distance learning "workshop-in-a-box" programs to assess changes in practices & improve inspections. b) 4 states implementing the NLS. **FY 02:** a) Lab training in BT response to increase labs participating in the laboratory response network; and increase adoption of protocols to identify agents of BT by State labs. b) 4 states implementing the NLS	**FY 04:** a) 8/2004 b) 4/2003 **FY 03:** a) 8/2003 b) 4/2003 **FY 02:** a) NLTN conducted 116 courses on BT, reaching 2040 participants. b) MI; MN; WA and NE implemented the NLS. **FY 01:** Continuous evaluation of NLTN programs.	**B** - 152 **HP**- 23

The Centers for Public Health Preparedness Program is a collaboration between CDC's Terrorism and

Public Health Improvement Programs.

Performance Measure	Targets	Actual Performance	Reference
3. Expand front-line PH practitioners' access to Internet based, CDC-approved PH practice guidelines, scientific/ disease reference images, health and medical data, and info on the effectiveness of PH interventions.	**FY 04:** Begin implementation of Knowledge Management and Media Asset Management systems. **FY 03:** 1) Expand the Public Health Image Library (PHIL). 2) Develop Knowledge Management System for public health practice information. **FY 02:** Continue implementation of plan.	**FY 04:** 10/2004 **FY 03:** 10/2003 **FY 02:** Developed capability to web-stream and archive live CDC/Public Health Training Network (PHTN) broadcasts. **FY 00:** Plan developed for continuos enhancement of online information resources.	**B** - 152 **HP** - 23 **4, 5** #4
4. Expand the connectivity and functionality of the Health Alert Network (HAN).	**FY 04:** 95% coverage **FY 03:** Extend HAN to local PH agencies to cover 90% of the US population.	**FY 04:** 12/2005 **FY 03:** 12/2004 **FY 02:** Baseline: 86% of local health counties/jurisdictions have high speed internet connectivity.	**B** - 152 **HP** - 23 #4

The Health Alert Network is a collaboration between CDC's Terrorism and Public Health Improvement Programs.

Public Health Improvement
Program Description and Context

Public Health Improvement promotes critical enhancements of the public health infrastructure through broad-based investments in the practice of public health, as well as targeted approaches to address specific areas of need. A sound public health infrastructure is essential for protecting community health. The three components of the basic public health infrastructure are:

- Workforce Capacity and Competency: the expertise of the approximately 500,000 professionals who work in Federal, State, and local public health agencies to protect the public's health.

- Information and Data Systems: up-to-date guidelines, recommendations, and health alerts and modern, standards-based information and communication systems that monitor disease and enable efficient communication among public and private health organizations, the media, and the public.

- Organizational Capacity: the consortium of local and State public health departments and laboratories, working side-by-side with private partners, to provide the essential services of public health.

These components are interrelated. Deficiencies in one area-or in one jurisdiction-have a ripple effect throughout the entire public health system. Therefore, the goal of strengthening public health's infrastructure is to achieve improvements in all three of these areas, in every part of the country.

CDC's approach to strengthening public health infrastructure has four components - a combination of broad-based efforts to build core public health capacities and targeted programs to address special needs:

- Strengthen public health practice by strengthening the components of the public health infrastructure that undergird public health - public health workforce, health departments and laboratories, and information, communications, and knowledge management systems.

- Stimulate extramural prevention research to discover how to apply the latest biomedical research at the local level and how to supply frontline public health workers with evidence of what works.

- Eliminate racial and ethnic health disparities in health status by developing targeted public health interventions and testing their effectiveness in racial and ethnic minority communities.

- Build the National Electronic Disease Surveillance System (NEDSS) to integrate disease

detection and monitoring and ensure rapid reporting and follow up.

Note: Immediately following this section is a summary of the activities and initiatives of Public Health Practice and Prevention Research, the broad-based components of the Public Health Improvement line that relate to the preceding performance measures. The performance measures and summary of REACH and NEDSS, which comprise the targeted elements of the Public Health Improvement line, follow after that.

Public Health Workforce
Program Description and Context

The health of America's communities hinges on the Nation's public health workforce-500,000 physicians, nurses, environmental health scientists, health educators, laboratorians, managers and other health professionals who practice on the front lines of public health. The ratio of public health workers to the U.S. population has declined significantly in the past decades, indicating continued erosion of the public health infrastructure. For over two decades, national reports have expressed concern about the preparedness of the public health workforce to address current and emerging health threats. Only 44% have any formal training in public health; only 22% of local public health officials have graduate degrees in public health; only 40% of public health nurses-the largest profession in public health-have received education on community health nursing; as of 1999 less than 6% of all workers had received any bioterrorism training. CDC has developed a National Strategic Plan for Public Health Workforce development and a complementary implementation plan to address these issues in collaboration with state, local and academic partners.

Building workforce capacity and competency to improve public health practice is a major goal of several CDC programs. For example:

- **Public Health Training Network (PHTN)** provides access to high quality, competency-based continuing education via a national distance learning system which reaches both public health and health care professionals.
- **National Laboratory Training Network (NLTN)** provides classroom, wet-lab, self-instruction and distance learning opportunities for laboratorians in the public and private sector.
- **Sustainable Management Development Program (SMDP)** is an award-winning, international program targeting current and future public health leaders assuring competency to effectively lead and manage in today's rapidly changing environment.
- **Public Health Leadership Programs** to address leadership and management training needs of public health professionals. Programs include the National Public Health Leadership Institute (PHLI), state and regional public health leadership institutes, the CDC Leadership Management Institute, and the Management Academy for Public Health (MAPH).

In September 2000, CDC established a national network of Centers for Public Health Preparedness to strengthen bioterrorism and emergency preparedness at the front lines by linking academic expertise and assets to state and local health agency needs. They are the key operational component of a national training plan for bioterrorism and public health emergency preparedness. There are currently 31 centers which includes 19 comprehensive academic centers, 7 specialty centers and 5 exemplar sites for advanced public health practice. Academic centers meet broad national/regional needs while specialty centers focus on specific disciplines (e.g. physicians, nurses, environmental health, etc.), content (law), technology applications (advanced distance learning) or emerging issues.

CDC, in partnership with the Association of American Medical Colleges (AAMC), is also implementing projects aimed at linking the disciplines of public health and medicine. The objectives of this collaboration include: promoting the teaching of prevention and public health in academic centers and promoting the training of public health and prevention researchers within academic medical centers. Examples of joint efforts include integrating genetics in medical school curricula and initiating the design of regional public health – medicine education centers.

Public Health Workforce
Program Performance Analysis

Since completion of the National Strategic Plan for Public Health Workforce Development in 1999, CDC has focused on critical elements of implementation, including:

- Establishing the national system of Centers for Public Health Preparedness;
- Expanding distributed learning capacity at the state/local level;
- Developing and implementing the National Bioterrorism Training Plan;
- Developing a national evaluation framework aimed at ascertaining the outcome of education and training at the learner level and describing the linkages among workforce competency, organizational effectiveness, and health outcomes; and
- Providing technical assistance to states in implementing Focus Area F and G of the 2002 Supplemental Funds for Public Health Preparedness and Response for Bioterrorism.

Over the past two years, the Centers for Public Health Preparedness (CPHPs) have closely collaborated and shared resources in the development and delivery of their programs and services for bioterrorism preparedness and response. Using a common framework developed in partnership with national public health organizations, the CPHPs focus on such topics as: critical bioterrorism agents, surveillance and epidemiology, incident command, health/risk communication, and legal authorities. Since inception, the CPHPs, in collaboration with their state and local partners, have prepared more than 180 educational products; trained more than 200,000 public health and health care professionals; and developed an inventory of faculty

expertise and assets available for local, regional, and national emergencies. Following the events of September 11th and the anthrax exposures, the CPHPs more than doubled their goals for outreach.

The Centers are an integral part of CDC's evaluation framework for ascertaining the outcome of education and training at the learner level and describing the linkages among workforce competency, organizational effectiveness, and health outcomes. The Centers are provided a national network of public health evaluators that will be working with us to develop strategies for implementing the evaluation framework. The Centers are also aiding in the implementation of "Project Public Health Ready," a training and certification program aimed at certification of all local health departments that have in place a public health emergency response plan and demonstrate that 80% of their staff have received certified training in emergency and bioterrorism preparedness and actively participate in the implementation of the local health department's plan.

The National Collaborative Training Plan for Bioterrorism Preparedness is a critical building block of CDC's strategic plan for Bioterrorism Preparedness and Response. The plan originally outlined training required by CDC personnel to implement the agency's event response operational plan (Phase 1) and strategies for training public health and medical facility personnel in collaboration with partners (Phase 2). In addition, the need to incorporate bioterrorism preparedness, response and recovery competencies into an overall national workforce development initiative for frontline public health professionals in state and local agencies was addressed (Phase 3). The events of 9/11 and the anthrax outbreaks last fall have greatly accelerated the original time line and influenced the content and focus on target audiences. Now, rather than a phased approach, CDC is simultaneously working on training for both internal staff and frontline public health. Following September 11th, CDC staff who would be deployed to the field were trained as Emergency Response teams; state, local, federal partners, and CDC staff have also received training on smallpox guidelines and response planning through the Public Health Training Network (PHTN). Moreover, in concordance with the plan, CDC and PHTN developed and disseminated the weekly *CDC Responds* series last fall, which has reached nearly 2 million public and private health practitioners, including members of the American Medical Association, National Medical Association, and the American Hospital Association. This satellite broadcast series encompasses a broad range of topics on aspects of bioterrorism preparedness and response.

In FY 2002, the National Laboratory Training Network (NLTN) conducted 267 courses, and trained over 7,500 laboratorians. These courses were developed on documented training needs and delivered in collaboration with State Public Health Laboratories. Courses were presented on topics ranging from bioterrorism, safety, HIV/AIDS and tuberculosis. Selected courses from the previous year were followed by impact studies to determine outcome. As a result of NLTN training on collection of bloodspot specimens for newborn screening presented in the state of Georgia, there was a decrease in specimens rejected from 13.9% in March of 2001 to 5.7% in October of 2001 to 3.9% in December of 2001. These results represent over 3,874 babies in a single state who did not have to be recalled and re-stuck during the first quarter of 2002. In addition to inconvenience and added pain, the delays resulting from rejected

specimens can result in death or mental retardation in certain genetic disorders. These results were so impressive, the NLTN will conduct training nationwide on this topic during 2003 followed by an impact study.

Health Departments and Laboratories
Program Description and Context

As with the public health workforce, the nation's state and local public health systems are not adequately prepared for rapidly evolving health threats. Independent studies have found that only one-third of the U.S. population is effectively served by public health agencies. A CDC study in 2000 - the first-ever assessment of the performance of state public health systems - yielded average performance scores of 40% to 56% for three state public health systems. Other studies have shown that local health departments provide somewhere between 50% and 70% of the services deemed essential for protecting the public's health. These data document the deficiencies in organizational capacity that constrain health departments in their efforts to serve and protect Americans.

CDC conducts public health systems research, develops tools for improving organizational effectiveness, and provides leadership and fosters collaborations with public health and clinical laboratories to ensure excellence in laboratory practice. Major initiatives include:

National Public Health Performance Standards Program, which enhances the performance of essential public health services through voluntary performance measurement, improvement planning, and systems development. The program, started in 1998, is a CDC partnership with various public health agencies. Partners have established model national public health performance standards and are facilitating their use by state and local public health systems and governing bodies. Instruments to assess state, local, and governance capacity to meet performance standards have been field tested in states and localities, preparing the way for voluntary adoption nationally. In addition, CDC and DOJ have assessed the capacity of local public health systems nationally to respond to bioterrorism and other community health emergencies.

National Laboratory System (NLS), which, upon full nationwide implementation, will assure the availability of consistent laboratory testing capacity for public health practice across the nation by connecting private laboratories to the public health system. The NLS vision is a strong system of integrated public health, hospital, and independent laboratories, working in concert to protect the health of the Nation's citizens. The core strategy to build the NLS is the integration of the work of the 170,000 clinical laboratories with public health to assure preparedness for bioterrorism (BT) and other public health threats through assessment, policy development, planning, and assurance of quality public health testing practice in clinical laboratories. At present, CDC is guiding four demonstration sites for the NLS in Washington, Nebraska, Minnesota and Michigan.

Model Performance Evaluation Program (MPEP) was implemented in 1986 to evaluate laboratories performing tests to detect human immunodeficiency virus type 1 antibody. MPEP

develops methods for evaluating quality in laboratory testing systems, develops strategies for identifying and correcting testing quality failures, and evaluates the effect of testing quality on public health.

Health Departments and Laboratories Program Performance Analysis

As part of the CDC-led National Public Health Performance Standards Program, model performance standards for essential public health services are already influencing changes in states where the tool was field tested. In Florida, performance assessment has been incorporated into the state's management and quality improvement program. In Mississippi, performance standards have been used in the legislature's review of public health agency responsibilities, and the Texas legislature has adopted the essential public health services as the basis for public health activity. CDC will continue working with American Indian/Alaskan Native governments to help them assess the preparedness and capacity of their public health systems. This is a continuation of the successful project we completed in FY 2001 regarding the National Public Health Performance Standards program and its use by tribal nations.

Because performance measures must link to the goals of states and communities, CDC and the National Association of County and City Health Officials are implementing a new tool - Mobilizing for Action through Planning and Partnerships - to help communities, health professionals, and their partners identify health priorities, mobilize to address them, and evaluate impact. These initiatives are laying the foundation for implementation of Sections 319 A-C of the Public Health Improvement Act of 2000. On the international front, CDC consults with WHO, PAHO, and the World Bank to assist in the adoption of public heath performance standards globally.

In addition to the broader NPHPSP, CDC also works on Public Health Practice programs in areas such as laboratory standards and improving laboratory practice.

In FY 2002, CDC conducted six courses on rapid detection methods for the agents of bioterrorism. These courses were attended by 59 laboratorians from 47 states and one territory, the FBI, the FDA, and the military. The participants learned rapid molecular and antigen detection techniques that enabled them to quickly identify suspected bioterrorism microbiological and chemical agents. In FY 2002, CDC analyzed the results of a six month follow-up impact study of the 60 participants from state and large city and county public health laboratories who attended a course on the confirmatory microbiological identification (Level B) procedures for the agents of bioterrorism in FY 2001. The participants indicated that as a result of the course they made the following changes to their procedures related to testing bioterrorism agents: 81% added special stains to laboratory identification procedures, 67% added procedures for testing environmental samples, 64% improved their laboratory's safety program, 64% developed or revised chain of custody procedures for the agents of bioterrorism. In FY 2002, The National Laboratory Training Network (NLTN) conducted 116 courses on bioterrorism preparedness and response that were attended by 2,040 participants.

In FY 2003, CDC will continue to collect and analyze findings from four demonstration projects to test elements of the envisioned National Laboratory System in conjunction with APHL. The projects will increase public-private laboratory interaction and improve testing practices for specific diseases. CDC will also continue to promote the core functions and capabilities of state laboratories articulated in a recent APHL consensus guideline and is

developing performance standards for state and local public health laboratories. Internationally, CDC will continue to improve laboratory infrastructure in less-developed countries through the Global AIDS Program, with a focus on quality assurance, policy development, and training in Africa and India. International projects include: creation of laboratory training programs in the Carribean; creation of guidelines and models for national laboratory quality programs with an emphasis on HIV and TB; and promotion of multi-organizational cooperation through laboratory training.

Information, Communication, and Knowledge Management Systems
Program Description and Context

As with the workforce, demands on our Nation's public health information infrastructure have never been greater. Today, global travel, immigration, and commerce can move microbes and disease vectors around the world at jet speed, yet our public health surveillance systems still rely, in many cases, on a time-consuming, resource-intensive "Pony Express" system of paper-based reporting and telephone calls.

In our day-to-day world of pagers, cell phones, and frequent e-mail communication between everyone from kindergartners to grandparents, it is sobering to consider the current status of public health's data and information systems. In 1999, CDC and the National Association of County and City Health Officers conducted an e-mail test to see how quickly local health departments could be contacted in the event of a health alert or bioterrorism emergency. In this test, only 35 percent of CDC's e-mails were delivered successfully, for a variety of reasons. Some public health laboratories - often the first to detect a new pathogen - still report their results by surface mail, with lag times up to 10 to 14 days.

In a February 1999 survey of local health departments, CDC found that only 45 percent had the capacity to send broadcast facsimile alerts (i.e., multiple "faxes" sent simultaneously to labs, physicians, State health agencies, CDC, or others). Similarly, fewer than half had high-speed continuous access to the Internet, and 20 percent lacked e-mail capabilities. Lack of access to communication networks is not the only issue of concern. In response to a 1998 survey about infrastructure problems, a local health department confessed to not reporting diseases because doing so would have meant a long-distance phone call. These gaps in the basic information infrastructure are troubling because not only do they prevent public health agencies from communicating with each other in a timely manner, but they also hinder communication between public health staff, private clinicians, or other sources of information about emerging health problems.

These basic communication gaps also exacerbate other problems, particularly the existing

fragmentation of surveillance systems and the variability between various jurisdictions in terms of their communication infrastructure. A strong and responsive communication and surveillance system cannot realize its full public health potential if some jurisdictions lack the skills and/or technology to detect and report emerging problems. The public health surveillance system is a network that simply cannot perform its protective function if its detection and reporting capacity is uneven.

Information, Communication, and Knowledge Management Systems Program Performance Analysis

Several current projects are addressing the need to disseminate scientific findings to the practice community and educate the general public. One of these systems is *CDC Recommends*, an online repository of CDC recommendations on a wide range of public health topics, available through CDC's Internet web site. *CDC Recommends* is updated weekly with new publications, and user inquiries are being answered on a continuing basis. The maintenance and usability of the system are being reviewed and improved to enhance scientific readiness and ease of use.

Another project is testing the introduction of CDC recommendations into physician workstations at the point of practice. Pilot testing has concentrated on clinical recommendations for tuberculosis management, in partnership with a managed care organization. Detailed algorithms have been jointly developed by partners to indicate the stream of decision-making and the points at which recommendations should be made and which recommendations are appropriate. Preliminary indications reveal this type of infrastructure can increase the efficiency of patient interactions and renders quality assurance processes that enhance the effectiveness of clinical care.

Complimenting our knowledge management system is the Public Health Image Library, a unique online gallery of scientific photographs, electronic images, stored video, and other objects representing significant public health visual information. This gallery is currently being expanded with images from a wide range of CDC and public health partners, including additional smallpox images.

A third system, the Health Alert Network, is a major component of CDC's Terrorism Initiative, and is serving the "dual use" of providing a platform for rapid electronic communications for terrorism events as well as for other health threats. An important aspect of HAN is technical advice and knowledge for public health practice that facilitates a compatible interface of best practices and information technology. When fully deployed, the network will link local health departments to each other, with other local agencies critical to emergency response, to State health departments, to CDC, and to other federal agencies. Functionally, the network will support an "early warning and response" system, rapid communication and response coordination, rapid communication of laboratory disease test results, distance-based training delivered to public health workers' desktops, as well as the National Electronic Disease Surveillance System application described below.

In addition to funding all states and several territories and large cities, CDC supports 5 local health departments as Centers for Advanced Practice to develop progressive public health

applications for sister agencies to replicate nationwide. The Network is being jointly developed by local, State, and Federal partners.

Eliminating Racial and Ethnic Disparities
Goal-by-Goal Performance Measurement

1. **Performance Goal:** Improve the lives of racial and ethnic populations who suffer disproportionately from the burden of disease and disability, and develop tools and strategies that will enable the nation to eliminate these health disparities by 2010.

Performance Measure	Targets	Actual Performance	Reference
1. Fund selected communities to implement REACH 2010 interventions based on community planning activities.	**FY 02:** Provide continuation funding to Phase II grantees;	**FY 02:** 10/2003	**B** - 152
	FY 01: Provide continuation funding to Phase II grantees; announce the availability of funds for new Phase II coalitions.	**FY 01:** Six new Phase II projects funded based on objective competition.	
	FY 00: Fund selected communities to implement Phase II interventions; fund 4-6 more Phase l grantees.	**FY 00:** Funded 14 Phase I coalitions and 24 Phase II coalitions.	
	FY 99: Develop a community planning RFA; fund 1 Phase I grantee.	**FY 99:** Funded 32 Phase I coalitions.	

Performance Measure	Targets	Actual Performance	Reference

2. Develop national strategies (recommendations) for eliminating gaps in each of the six health priority areas based on the interventions and disseminate findings from the REACH 2010 Projects.	**FY 04:** Develop recommendations to enhance the ability of community-based coalitions to contribute to the elimination of health disparities at the local level.	**FY 04:** 10/2005	**B** - 152
	FY 03: Convene panel of experts to review strategies developed to date. Convene annual meeting of grantees to review and describe strategies developed to date.	**FY 03:** 10/2004	
	FY 02: Convene annual meeting of grantees to review and describe strategies developed to date. Receive guidance from a group of evaluation experts supported by CDC to evaluate community-driven strategies to eliminate health disparities. Establish database of strategies developed by grantees. Assist DHHS with the implementation of a National Leadership Summit on Health Disparities highlighting effective strategies with input of REACH 2010 grantees.	**FY 02:** Strategies were reviewed at annual meeting of grantees - 8/2002. Guidance received from expert consultants- 10/2002. Database is currently being developed with assistance of contractor. CDC contributed both in-kind staff time and financially to the planning and implementation of the National Leadership Summit.	
	FY 01: Complete strategies not expected until FY 2005. Interim measures include: abstracts, presentations and publications on grantee planning and implementation strategies.	**FY 01:** Published article and abstract in peer-reviewed journals on strategies to eliminate racial and ethnic health disparities.	

2. Performance Goal: Improve the lives of American Indian and Alaska Native populations who

suffer disproportionately from the burden of disease and disability, and develop tools and strategies that will enable the nation to eliminate these health disparities by 2010.

Performance Measure	Targets	Actual Performance	Reference
CDC will support AI/AN organizations to address health priorities, prevention gaps, and service delivery interventions for their communities.	**FY 02:** 5 organizations **FY 01:** 5 organizations	**FY 02:** Continuation funding for five organizations was awarded. **FY 01:** Five AI/AN organizations were awarded funding 9/2001 **FY 99:** 0 (baseline)	**B** - 152

Eliminating Racial and Ethnic Disparities
Program Description and Context

There are continuing disparities in the burden of illness and death experienced by African-Americans, Hispanics, American Indians, Alaska Natives, Asian-Americans, and Pacific Islanders compared to the U.S. population as a whole. For example, rates of death from stroke are 40% higher among African-Americans than among whites. The prevalence of diabetes is about 1.7 times higher among African Americans, 1.9 times higher among Hispanics than among non-Hispanic white Americans of similar age. Although African-American and Hispanic persons represent 25% of the country's population, more than half the AIDS cases reported to CDC have been among these minority populations; for children, the contrasts are even more dramatic, with African-American and Hispanic children representing 82% of pediatric AIDS cases.

Healthy People 2000 progress reviews of the specific health needs of American Indians and Alaska natives identified disparities between these groups and the general population in several priority areas. For example, infant mortality is 1.5 times higher for Native Americans compared to whites. Native Americans suffer nearly three times the average rate of diabetes, and one tribe, the Pimas of Arizona, has the highest known prevalence of diabetes of any population in the world. Alaska Native men and women suffer disproportionately higher rates of cancers of the colon and rectum compared to whites; American Indian/Alaska Native women also have low rates of screening and treatment for breast and cervical cancers. Age-adjusted death rates from homicides, suicides, and unintentional injuries for American Indians and Alaska Natives are also higher than for the total population.

The demographic changes that are anticipated over the next decade amplify the importance of

addressing disparities in health status. Racial and ethnic groups will increase in upcoming decades as a proportion of the total U.S. population; therefore, the future health of America will be influenced substantially by our success in improving the health of these populations. A national focus on disparities in health status is particularly important as changes unfold in the delivery and financing of health care.

Launched in 1999, Racial and Ethnic Approaches to Community Health 2010 (REACH 2010) is a demonstration project to support community-based coalitions that have a high potential to develop, implement, and evaluate innovative strategies to eliminate racial and ethnic disparities in health. The program's six target areas are: infant mortality, breast and cervical cancer screening and management, cardiovascular disease, diabetes, HIV/AIDS, and immunizations. Target populations are African-Americans, American Indians, Hispanic Americans, Asian Americans, Pacific Islanders, and Alaska Natives. The 5-year demonstration project is being implemented in two phases. During a 12 month planning phase, REACH 2010 grantees use local data to develop a community action plan that addresses one or more of the six priority areas and targets one or more of the racial and ethnic minority groups. During the 4-year implementation phase, community coalitions carry out activities outlined in their community action plans and evaluate program activities.

The evaluation of the REACH 2010 program is of critical importance in determining the program's effectiveness in reducing health disparities. Working with its grantees and partners, CDC has developed an evaluation model to guide the collection of national data. This model evaluates programs on the effectiveness in the following areas: building community capacity, developing targeted actions, improving health systems and agents of change, decreasing risk behaviors and increasing protective behaviors, and reducing disparity-related illness and death. In addition, CDC has selected the University of South Carolina to manage a special interest project to develop evaluation guidance for REACH 2010 and other projects aimed at eliminating health disparities.

Program Performance Analysis

In FY 2002, the REACH 2010 Program is in the third year of the five year demonstration period. Currently, 31 projects are funded. Twenty four grantees are in the third year of implementation. Seven grantees are in the second year of implementation. In addition to the demonstration program, CDC provides funds to 5 AI/AN organizations to address health priorities, prevention gaps, and service delivery interventions for their communities.

As grantees move through the continuum of the evaluation logic model (see program description above), not only do the requirements vary by health priority areas, but also by race ethnicity and cultural/community norms. For instance, the factors involved in creating systems change among an American Indian tribe in North Carolina with a focus on diabetes are very different than those among African-American women in New Orleans also focusing on diabetes.

As expected, the community partners, strategies developed and processes undertaken are

unique. What was not anticipated was the pace at which some changes would occur. For example, grantees have reported substantial changes concerning capacity building, targeted action plans and changes among systems and change agents. The following is an excellent example of actual reductions in health disparities by one grantee:

- In South Carolina, in two communities disparities in care were identified by one REACH 2010 project for about 12,000 African-Americans. These differences were documented through annual chart audits of care. In the planning year, disparities were noted in most recommendations for care except for flu and pneumonia vaccines. Multiple approaches used to decrease the disparities include community development, empowerment, and education for diabetes, health systems change related to access, care, and education, and coalition advocacy. Following 12 months of implementation, disparities in A1c testing have decreased from 15% to 2%, and disparities in lipid testing from 28% to 11%. Although lower initially, after one year, overall testing is higher than percentages nationally for Medicare and Medicaid patients with diabetes and also for those enrolled in community plans. Current and future efforts are focused on eliminating the disparities in care and improving health outcomes through continuation of community-driven interventions.

For most REACH 2010 projects, changes in behavior are being documented through evaluation processes and mechanisms. Findings are not anticipated for at least another 12 months.

CDC will continue to provide continuation funding to REACH 2010 demonstration projects and to the five AI/AN organizations. Effective FY 03, CDC proposes to eliminate the related performance measures for these activities in that they are process measures. CDC will continue to report on the status of these activities in the program performance analysis section.

CDC continues to work towards the development of national strategies (recommendations) for eliminating gaps in each of the six health priority areas based on the interventions and findings from the REACH 2010 Projects. The dissemination of the most promising strategies and of lessons learned is critical to the overall effectiveness of this demonstration project. Preliminary measures have been taken to assess the dissemination strategies used by other programs at CDC. Some initial recommendations have been drafted. A CDC task force has been created and will be expanded to include external consultants and grantees to develop a comprehensive process for disseminating findings from the REACH 2010 projects. Additional partners that are critical in developing the dissemination plan include: the funded communities, evaluation experts, external consultants, private partners, and other Federal agencies such as the Office of the Assistant Secretary for Planning and Evaluation, and the Office of Minority Health.

In FY 03, CDC will convene a panel of experts to review strategies developed to date. During FY 04, CDC will develop recommendations to enhance the ability of community-based coalitions to contribute to the elimination of health disparities at the local level. This target speaks directly to defining CDC's role in supporting communities in the elimination of health disparities. The communities make the changes - CDC is the conduit through which this happens. The processes and strategies utilized by CDC will be documented for replication at

the Federal level and with private partners such as the California Endowment. Partnerships established with the private sector and evaluation experts are critical components of this demonstration program.

Verification/Validation of Performance Measures: Grantees will report on the development of implementation and evaluation plans, which will be reviewed by CDC staff. Site visits and data acquired by the CDC grant reporting system are also used. No data lags are expected.

Verification/Validation of Performance Measures (American Indian): The measure will be verified by the CDC grant reporting system.

National Electronic Disease Surveillance System (NEDSS)
Goal-by-Goal Presentation of Performance

1. **Performance Goal:** Develop a national, integrated, standards-based public health surveillance infrastructure that is securely linked to healthcare practice.

Performance Measure	Targets	Actual Performance	Reference
1. Conduct pilot projects to develop and test electronic linkages between public health agencies and the healthcare sector.	**FY 03:** Fund 10 states **FY 02:** Fund 10 states **FY 01:** Fund 5 states **FY 00:** Fund 1 state	**FY 03:** 12/2003 **FY 02:** Funded 19 states **FY 01:** Funded 19 states **FY 00:** Funded 14 states to build capacity for linkages. **FY 99:** 0	**B** - 152 **HP -** 23
2. Increase the number of states using electronic laboratory reporting.	**FY 03:** 40 states **FY 02:** 30 states **FY 01:** 15 states **FY 00:** 10 states	**FY 03:** 12/2003 **FY 02:** 34 states **FY 01:** 15 states **FY 00:** 10 (baseline)	**B** - 152 **HP** - 23

National Electronic Disease Surveillance System (NEDSS)
Program Description and Context

Public health surveillance - the ongoing, systematic collection, analysis, and interpretation of health-related data - is the foundation of CDC's programs to protect the health of Americans. Public health surveillance is essential to program planning, implementation, and evaluation. Public health surveillance is needed to detect outbreaks, epidemics, and bioterrorism events. Current systems are neither complete nor efficient, but CDC is using advances in information technology to improve public health surveillance.

CDC has been instrumental in developing a public health conceptual data model and guidelines that recommend a minimum set of demographic data that should be collected as part of routine public health surveillance. As a result of this effort, in FY 2000, CDC created the National Electronic Disease Surveillance System (NEDSS) with $20 million made available for this purpose. Approximately $10 million was used to set up the necessary CDC infrastructure, such as training, hardware, and software for the system. The remainder was awarded to states to begin development. In FY 2000, CDC funded 14 states for NEDSS development and 32 states and 3 large metropolitan areas for assessment of current health department information systems and ways to implement NEDSS specifications and standards. In FY 2001 and 2002, a total of 36 health jurisdictions (35 states, 1 city) were awarded funds for NEDSS development activities, including 20 who will receive the NEDSS Base System.

NEDSS is planned as a national, integrated, standards-based public health surveillance infrastructure that will: (1) allow rapid reporting of disease trends to control outbreaks; (2) create public and private healthcare sector linkages to increase the volume, accuracy, completeness, and timeliness of the data available for disease monitoring; and (3) provide local health departments with Internet access to permit rapid sharing of information on infectious disease outbreaks, bioterrorism incidents, and other health threats. NEDSS will result in solutions that can be generalized, whether in systems developed by states or CDC. NEDSS standards are also consistent with relevant software industry standards to facilitate use of commercial software products when appropriate.

To implement NEDSS, CDC is: (1) developing and implementing national data standards for public health surveillance and reporting; (2) providing technical infrastructure support for state and local communities; (3) establishing local, state, and regional demonstration projects that create linkages between the public health and healthcare data systems; and (4) providing standards and technical assistance to maintain stringent security standards to protect confidentiality.

Program Performance Analysis

CDC met goals for FY 2001 and FY 2002 in all areas, and anticipates awarding new funding to states in FY 2003 to meet NEDSS' goals. A total of 35 states and one large city (Philadelphia) were awarded funds in FY 2001 and FY 2002 for the development of NEDSS surveillance systems, including 20 jurisdictions awarded the NEDSS Base System. With some of the FY 2002 funds, CDC has continued work to develop the NEDSS Base System which will be available to some states that request it during this funding cycle. Version 1.0 of the NEDSS Base System has been delivered and is undergoing integration testing in Tennessee and Nebraska and Louisiana. In addition, CDC continued to support electronic message development, membership in public health standards organizations, and integration of disease-specific systems into the NEDSS architecture. NEDSS compatible Program Area Modules for Hepatitis, Vaccine Preventable Diseases, and Bacterial Meningitis and Invasive Respiratory Diseases are included in the current version of the NEDSS Base System.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 114,000	Estimate
FY 2003:	$ 184,000	President's Budget
FY 2002:	$ 296,000	Enacted

II-O. Buildings and Facilities

Goal-by-Goal Performance Measurement
Revised Presentation for FY 03 and FY 04 Measures

Performance Goal: Implement scheduled improvements, construction, security, and maintenance consistent with available resources and priorities identified in CDC's master facilities planning process.

Performance Measure	Targets	Actual Performance	Reference
1. Design CDC East Campus Consolidated Lab Facility buildings.	Clifton Road Campus *Roybal East Campus Consolidated Lab Project* **FY 03:** Begin Design.	*Roybal East* **FY 03:** 10/2003	**B -** 166
2. Construct CDC buildings.	Clifton Road campus *New Headquarters, Building 21* **FY 04:** Begin construction. *Security Buffer Zone* **FY 04:** Complete construction **FY 03:** Continue infrastructure hardening *Scientific Communications Center* **FY 03:** Begin construction *New Emerging Infectious Disease Laboratory, Building 18* **FY 03:** Continue construction	Clifton Road campus *Building 21* **FY 04:** 10/2004 *Security Buffer Zone* **FY 04:** 10/2004 **FY 03:** On schedule *Scientific Communications Center* **FY 03:** On schedule *Building 18* **FY 03:** Construction on schedule	**B -** 166

Verification/Validation of Performance Measures: CDC will collect data through contractor reports and on-site verification.

Performance Measure	Targets	Actual Performance	Reference
Construct buildings (continued)	Chamblee Campus *Infectious disease laboratory, Building 109* **FY 03:** Complete construction of Phase II *Environmental Toxicology Laboratory, Building 110* **FY 04:** Complete construction **FY 03:** Continue construction.	Chamblee Campus *Building 109* **FY 03:** On schedule *Building 110* **FY 04:** 10/2004 **FY 03:** Continue construction	**B -** 166

Presentation of measures for FY 2001-2003

Performance Measure	Targets	Actual Performance	Reference
1. Construct Phase II of Building 17 (Infectious Disease Research Laboratory) at the Clifton Road campus.	**FY 02:** Occupy Phase II. **FY 01:** Complete construction of Phase II. **FY 00:** Construct Phase II.	**FY 02:** Occupy Phase II (Complete). **FY 01:** Projected occupancy Sept 01 (Complete). **FY 00:** Construction on schedule and on budget; structure up to 3rd floor. **FY 99:** Construction on schedule and on budget; structure up to 3rd floor. **FY 98:** Planning stage.	**B -** 166
2. Design and construct a new Emerging Infectious Disease Laboratory, Building 18, Clifton Road campus, to vacate and modernize Building 1 South, house bioterrorism activities, and provide additional BSL-4 capacity.	**FY 02:** Continue construction. **FY 01:** Complete design. **FY 00:** Begin design.	**FY 02:** Construction on schedule. **FY 01:** On schedule -- construction contract award estimated by September 01. **FY 00:** Acquisition of A/E contract underway; task order award anticipated. **FY 99:** Acquisition of A/E contract underway; task order award anticipated. **FY 98:** Planning stage.	**B -** 166

Performance Measure	Targets	Actual Performance	Reference
3. Begin design of a Scientific Communications Center to replace Building 2 and vacate and modernize Building 3, Clifton Road campus.	**FY 02:** Complete design. **FY 01:** Begin design. **FY 00:** Complete A/E and CMC contract acquisition.	**FY 02:** On schedule. **FY 01:** On schedule – Design at SD stage. **FY 00:** Achieved. **FY 99:** POR to develop program, location, budget, and implementation strategies completed. **FY 98:** Planning stage.	**B -** 166
4. Complete construction of infectious disease laboratory, Building 109, to replace Buildings 4, 6,7,8, and 9, Chamblee campus.	**FY 02:** Complete construction. **FY 01:** Complete construction. **FY 00:** Begin construction.	**FY 02:** Construction completed. **FY 01:** Complete – Occupancy estimated for January 2002. **FY 00:** Acquisition of construction contract underway; task order award anticipated in 2000. **FY 99:** Design underway; expected to be completed on schedule/within budget. **FY 98:** Planning stage.	**B -** 166
5. Complete construction of infrastructure project in Security Buffer Zone, Clifton Road campus.	**FY 02:** Design hardened campus perimeter. **FY 01:** Complete construction. **FY 00:** Complete construction.	**FY 02:** Completed fencing; Begin installation of enhanced alarm, communication and camera system. **FY 01:** Complete. **FY 00:** Construction temporarily delayed. **FY 99:** Property acquisition and demolition 99% complete; initial work ahead of schedule. **FY 98:** Planning stage.	**B -** 166
6. Design and construct an Environmental Toxicology Laboratory, Building 110, to replace Buildings 17, 25, 31, and 32, Chamblee campus.	**FY 02:** Complete design; begin construction. **FY 01:** Begin design.	**FY 02:** Begin construction. **FY 01:** On schedule. Design at SD stage. **FY 98:** Planning stage.	**B -** 166

Performance Measure	Targets	Actual Performance	Reference
7. Begin design of New Headquarters Building 21, Clifton Road campus, for lease consolidation project.	**FY 02:** Complete design. **FY 01:** Begin design.	**FY 02:** Construction start delayed. **FY 01:** Construction start delayed. **FY 98:** Planning stage.	**B -** 166

Verification/Validation of Performance Measures: CDC will collect data through contractor reports and on-site verification.

Program Description and Context

CDC's management has responsibility for ensuring that: 1) CDC facilities and equipment are adequate for carrying out the agency's public health mission; 2) all facilities, particularly laboratories, are safe for both workers and the community; 3) taxpayers' investment in these facilities is protected through effective maintenance and operations; 4) facilities meet applicable fire and safety codes; and 5) facilities are operated in a responsible manner to reduce energy consumption.

Although CDC has expanded its workforce and responsibilities considerably since its post-World War II origins, the agency's buildings and laboratories have not kept pace. The majority of CDC's infectious disease and environmental laboratories are so crowded and outdated that they could create safety hazards for employees testing organisms and hazardous substances. As public health challenges have become more serious and complex, CDC's laboratory- and non-laboratory-based programs have also expanded to meet changing needs. Because of this growth, CDC-owned buildings cannot house current staff. Approximately half of CDC's Atlanta workforce is scattered in 23 leased office spaces that cost more than $20 million to rent each year.

Beginning in 1993, CDC undertook a master facilities planning effort to identify and systematically address severely inadequate conditions at CDC's Clifton Road and Chamblee campuses in Atlanta, Georgia. In this process, CDC has assessed the work needed to consolidate Atlanta operations into two secure campuses and to properly maintain existing facilities. CDC continues to update this assessment to ensure that the appropriate needs receive the highest priority.

CDC uses the assessments from the facilities planning effort and its annual Repair and Improvements (R&I) Plan to determine the need for and to schedule major and minor renovation, construction, and other facilities projects. CDC's goal is to provide safe, modern, efficient, and physically secure laboratories and support facilities in the most economical manner possible.

Program Performance Analysis

As of December 2002, implementation of approved projects was proceeding according to schedule, with adjustments to reflect actual authorization and appropriations. Organizational and structural changes to CDC's facilities continue to be implemented. For example, all facilities offices (planning, leasing, design construction, engineering, operations and maintenance) have been consolidated under one office, the Facilities Planning and Management Office. CDC conducted a nationwide search and recruited an outstanding Director with a PhD. in Civil Engineering to lead this office.

CDC has implemented the first part of an innovative new contracting structure to speed the procurement of major capital projects. CDC will use a highly competitive process to "pre-qualify" architecture and construction firms to form a pool of resources readily available for use on a task order basis for design and construction. To date, CDC has successfully procured design services for six major new construction projects in approximately one-third to one-quarter the time normally needed for traditional procurements. Another feature of the contract is to bring the architect and builder together from inception of a project rather than after the design is complete. This feature will ensure a better final product, reduce change orders, and allow better adherence to budget and schedule. These features combine to provide much greater control of risk for the owner, CDC. CDC will monitor projects currently entering the design and construction cycle to obtain quantitative data on performance objectives.

Total Funding
(Dollars in Thousands)

FY 2004:	$ 59,707	Estimate
FY 2003:	$ 50,652	President's Budget
FY 2002:	$ 49,077	Enacted

II-P. Office of the Director

The Office of the Director (OD) manages and directs CDC's programs. Goals and performance measures are displayed under 5 categories: (1) science policy and technology transfer; (2) minority health; (3) program planning and evaluation; and (4) health communication.

Office of Science Policy and Technology Transfer
Goal-by-Goal Performance Measurement

1. Performance Goal: Identify, evaluate, and protect novel technologies.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of employee invention reports (EIRs) filed per year.	**FY 03:** 50 EIRs **FY 02:** 50 EIRs **FY 01:** 50 EIRs **FY 00:** 35 EIRs	**FY 03:** 12/2003 **FY 02:** 37 **FY 01:** 42 **FY 00:** 45 **FY 99:** 31	**B -** 171
2. Review and manage CDC's patent portfolio to maximize return for public health benefit.	**FY 02:** See Change Chart **FY 01:** <30% of unlicensed patents maintained beyond 4 years of issue date. **FY 00:** <30% of unlicensed patents maintained beyond 4 years of issue date.	**FY 02:** See Change Chart **FY 01:** 64% of unlicensed patents maintained beyond 4 years of issue. **FY 00:** New evaluation needed due to transfer of mining patent files to CDC from the former Bureau of Mines; early estimate is 70% of unlicensed patents maintained beyond 4 years of issue. **FY 99:** 38% of unlicenced patents maintained beyond 4 years of issue.	**B -** 171

Science Policy and Technology Transfer Continued

2. Performance Goal: Promote private-sector participation and investment in applications of novel research discoveries.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of patent license agreements (PLAs), CRADAs, Material Transfer Agreements, Clinical Trial Agreements, and other CDC-private sector research cooperation mechanisms.	**FY 04:** 5% increase from previous year **FY 03:** 5% increase from previous year **FY 02:** 5% increase from previous year **FY 01:** 5% increase from previous year **FY 00:** 5% increase from previous year	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** 27 Agreements **FY 01:** 11 CRADAs **FY 00:** 10 CRADAs **FY 99:** 6 CRADAs	**B -** 171

Office of Science Policy and Technology Transfer
Program Description and Context

The Office of the Associate Director for Science (ADS) provides direction and training on matters of scientific integrity and human subjects protection. The ADS also manages CDC's intellectual property (e.g., patents, trademarks, copyrights) and promotes the transfer of new technology from CDC research to the private sector to facilitate and enhance the development of diagnostic products, new research methods, vaccines, and other products, and methods to improve occupational safety.

Program Performance Analysis

In FY 2002, the Office of the ADS provided training and technical assistance for CDC staff on scientific integrity, protection of human subjects, and technology-transfer policies and procedures.

Technology Transfer

Federal technology transfer is generally defined as an active partnership between the Government and its scientists/engineers with members of the commercial enterprise to bring Federally developed technologies into practical application more rapidly than is likely to be achieved by passive sharing of information. Success in technology transfer requires effective activity at both ends of that partnership.

The number of employee invention reports increased from 29 in FY 1998 to 34 in FY 1999 to 45 in FY 2000, with slight reductions in FY 2001 and FY 2002 that we believe reflect the need in 2001to redirect a substantial portion of CDC's research effort to focus more on terrorism prevention and control. The number of patent applications filed and issued tend to follow invention reports by one or more years, and reflect the patentability and marketability of the inventions. They are a reflection of the strength and breadth of the Agency's portfolio of technologies available for practical application by the private sector.

Largely as a result of the Agency's increasing marketing efforts, companies continue to recognize the value of CDC research and intellectual property rights. CDC has executed 15 new patent license agreements, 4 other intellectual property (trademark/copyright) licenses, and 8 new CRADAs, reflecting a continuing increase in licensing and partnership activities.

Overall, we continue to have increasing success in making our researchers aware of the opportunities available through the technology transfer program, and in recruiting private sector involvement in developing, manufacturing, and marketing new CDC technologies to the benefit of the American economy and the public welfare.

Office of Minority Health
Goal-by-Goal Performance Measurement

1. **Performance Goal:** Prepare minority medical, veterinary, pharmacy, and graduate students for careers in public health.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of minority students participating in the Hispanic Health Professions Internship Program, Ferguson Emerging Infectious Disease Fellowship Program, Public Health Summer Fellowship Program, and Project IMHOTEP.	**FY 03:** 65 students **FY 02:** 65 students **FY 01:** 59 students **FY 00:** 57 students	**FY 03:** 9/2003 **FY 02:** 100 **FY 01:** 64 **FY 00:** Exceeded/2 **FY 99:** 55 (baseline)	**B -** 171

Minority Health Continued

2. **Performance Goal:** Support Historically Black Colleges and Institutions, Hispanic Serving Institutions, and Tribal Colleges and Institutions.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of funding mechanisms and the number of minority-serving institutions receiving support.	**FY 04:** 4 cooperatives and 67 schools **FY 03:** 4 cooperative agreements and 67 schools **FY 02:** 4 cooperative agreements and 67 schools **FY 01:** 4 cooperative agreements and 37 schools	**FY 04:** 1/2005 **FY 03:** 1/2004 **FY 02:** 4 cooperative agreements, 67 schools **FY 01:** 4 cooperative agreements, Exceeded number of schools/30	**B -** 171

3. **Performance Goal:** Foster a stronger collective departmental perspective on AI/AN issues.

Performance Measure	Targets	Actual Performance	Reference
Working in conjunction with IHS, identify and pursue areas of mutual interest and benefit.	**FY 03:** Clarify/ quantify CDC resources targeting AI/AN populations **FY 02:** Create a Senior Policy Group comprising Executive-level staff from CDC and IHS who will identify areas for collaboration.	**FY 03:** 1/2004 **FY 02:** IHS and CDC Senior Policy Group held one strategic planning.	**B -** 171

Office of Minority Health
Program Description and Context

The Office of Minority Health provides leadership, coordination, assessment and evaluation for minority health initiatives, policy initiatives targeting improving the health of ethnic populations and Executive Branch activities. The Office also supports cooperative agreements with academic institutions and national non-governmental organizations to conduct prevention research, program development and analysis and evaluation to improve the health status of minorities and reduce health disparities.

Office of Minority Health
Program Performance Analysis

The FY 2002 performance goal to support Historically Black Colleges and Institutions, Hispanic-Serving Institutions, and Tribal Colleges and Institutions was achieved through the award of cooperative agreements. In FY 2002, a total of 67 schools were reached through four cooperative agreements. CDC has continued to strengthen its efforts to expand and diversify partnerships with academic institutions and to increase the competence and diversity of the public health workforce. Data for FY 2003 will not be available until January 2004.

CDC surpassed the FY 2002 target to enroll 65 students in four summer training programs designed to encourage minority students to pursue graduate careers in public health and to diversify the public health workforce. Demographic data are compiled for all student training programs annually. FY 2003 data will be available in September 2003.

In FY 2003, CDC will continue to strengthen existing partnerships with Historically Black Colleges and Institutions, Hispanic-Serving Institutions, and Tribal Colleges and Institutions. These partnerships will expand training opportunities, foster development of minority health research capabilities at colleges and universities, and enhance recruitment opportunities.

Office of Equal Employment Opportunity
Goal-by-Goal Performance Measurement

1. Performance Goal: Enhance agency recruitment efforts to ensure the availability of applicant pools that include qualified minorities, women, and persons with disabilities.

Performance Measure	Targets	Actual Performance	Reference
Increase our participation in the Agency's recruitment activities with HBCUs, HACUs, Tribal Colleges & Universities, Persons with Disabilities and build and expand other partnerships.	**FY 03:** Increase participation by 30% **FY 02:** Increase participation by 30% **FY 01:** Increase participation by 20%	**FY 03:** 10 sessions **FY 02:** 8 sessions **FY 01:** 7 sessions **FY 00:** 6 sessions	**B -** 171

Equal Employment Opportunity Continued

2. Performance Goal: Provide continuing EEO and diversity training to managers, supervisors, and employees.

Performance Measure	Targets	Actual Performance	Reference
Increase the opportunities for EEO Training for CDC/ATSDR workforce.	**FY 02:** Increase training by 20% **FY 01:** Increase training by 20%	**FY 02:** 97 Sessions **FY 01:** 81 Sessions **FY 00:** 16 Sessions	**B -** 171

3. Performance Goal: Through early intervention and Alternative Dispute Resolution (ADR), reduce the number of EEO complaints.

Performance Measure	Targets	Actual Performance	Reference
Reduce the number of complaints in the inventory.	**FY 02:** 10% Reduction of complaints **FY 01:** 10% Reduction in complaints	**FY 02:** 46 **FY 01:** 51 **FY 00:** 75	**B -** 171

4. Performance Goal: To provide a tool to measure CIO performance and management accountability under the EEO Program.

Performance Measure	Targets	Actual Performance	Reference
Develop and disseminate an EEO report to each CIO quarterly.	**FY 01:** Quarterly dissemination	**FY 01:** Achieved **FY 00:** NA	**B** - 171

Office of Equal Employment Opportunity
Program Description and Context

The Office of Equal Employment Opportunity (OEEO) is responsible for advising management on EEO program requirements and providing technical advice to agency employees, union officials, employee organizations, and applicants on the EEO program and complaint process: conducting a continuing campaign to eradicate every form of prejudice or discrimination; managing an accountability system for achieving the agency's EEO objectives of a diverse workforce; and establishing a system for periodically evaluating the effectiveness of the agency's overall equal employment opportunity effort. Our civil rights responsibilities, mandated by Federal legislation (29 CFR 1614, Equal Employment Opportunity Commission (EEOC) Management Directives 710, 713, and 714), require that we develop and issue internal policy guidance on the implementation of nondiscrimination statues in the agency programs and/or activities.

In FY 2002, the OEEO provided developmental opportunities for 1 student from the Hispanic Association of Colleges and Universities (HACU), Tribal Colleges and Universities, and Historically Black Colleges and Universities (HBCU). This is in keeping with our performance goal to enhance minority recruitment and a commitment to the process.

Program Performance Analysis

After FY 2002, OEEO will discontinue the below listed Performance Goals:

Goal 2. Provide continuing EEO and diversity training to managers, supervisors, and employees. We have provided training to the CDC/ATSDR workforce in these areas, thereby reaching our measurable goal. OEEO will continue to provide refresher training on an annual basis.

Goal 3. Through early intervention and Alternative Dispute Resolution (ADR), reduce the number of EEO complaints. The target for FY 03 for the performance measure "reduce the number of complaints in the inventory" has been eliminated because of the number of variables which can not be controlled. Significantly, the EEO requirement for inclusion of complaints on appeal as a part of the pending inventory has resulted in this determination.

Goal 4. To Provide a tool to measure CIO performance and management accountability under the EEO Program. The Human Resource Management Office (HRMO) has automated data on workforce statistics and provided management this information through the intranet.

Office of Program Planning and Evaluation
Goal-by-Goal Performance Measurement

1. Performance Goal: Provide leadership and coordination for support activities across CDC.

Performance Measure	Targets	Actual Performance	Reference
1. Develop and provide technical assistance and consultation for CDC staff.	**FY 02:** Conduct 2 training sessions for GPRA staff; disseminate training materials on OMB clearance via website; provide technical assistance to all recipients of 1% evaluation funds. **FY 01:** Conduct 2 training sessions for GPRA staff; disseminate training materials on OMB clearance via website; provide technical assistance to all recipients of 1% evaluation funds.	**FY 02:** Achieved **FY 01:** Achieved **FY 99:** 1 training session; clearance materials/guidance for statements of work available electronically by request.	**B -** 171
2. Coordinate the development and timely submission of correspondence, reports, and OMB clearance packages.	**FY 02:** Meet 90% of suspense deadlines for controlled correspondence; reduce review time for clearance packages to 10 days. **FY 01:** Reduce outstanding Reports to Congress by 10%; reduce review time for clearance packages to 10 days.	**FY 02:** Achieved **FY 01:** Achieved. **FY 99:** 15-day review time for clearance packages; inventory of outstanding Reports to Congress.	**B -** 171

Program Planning and Evaluation Continued

Performance Measure	Targets	Actual Performance	Reference
3. Enhance the capacity of CDC policy staff to perform their official duties through training, team building, and sharing best practices, and promote better collaboration among policy teams.	**FY 02:** Conduct a major conference that provides training for and enhances collaboration among policy staff; develop Intranet website providing information on OPPE's roles and responsibilities in relation to CDC policy staff.	**FY 02:** Achieved	**B -** 171

2. Performance Goal: Improve the quality of CDC's Performance Plan.

Performance Measure	Targets	Actual Performance	Reference
1. Develop and implement a formal process for evaluating performance goals and measures	**FY 02:** Begin a cross-CIO review process utilizing specific review criteria to enhance performance stories.	**FY 02:** Achieved	**B -** 171
2. Develop and implement a process to ensure narrative goals and measures are more effectively linked to CDC's budget	**FY 02:** Begin disseminating to CIOs joint instructions for budget and Performance Plan.	**FY 02:** Achieved	**B** - 171

Office of Program Planning and Evaluation
Program Description and Context

The Office of Program Planning and Evaluation (OPPE) provides leadership, liaison, and service to CDC/ATSDR Centers, Institute, and Offices. OPPE is part of the CDC Office of the Director. OPPE's mission is to provide leadership to CDC in strategically anticipating future needs; guiding policy-making, planning, and evaluation; and establishing priorities, programs, and partnerships to address public health needs. OPPE serves the agency and its partners by facilitating and evaluating CDC program activities and by coordinating efforts, both internal and external, that cross-cut the agency.

Office of Program Planning and Evaluation
Program Performance Analysis

In FY 2002, OPPE met and/or exceeded all of its targets. One-on-one training sessions for each of the CIOs were conducted on GPRA, with particular emphasis on CIO-specific measurement issues and technical assistance was provided to all recipients of 1% evaluation funds. An intranet website providing information on OPPE's roles and responsibilities in relation to CDC policy staff was launched in FY 2002. Among its resources, new training materials on OMB clearance and an OMB clearance tracking database can be accessed from the site. The first-ever major CDC policy conference was convened in December 2002. The purpose of this conference was to (1) provide training on legislation, policy, performance, and evaluation issues; and (2) enhance collaboration among CDC policy and program staff.

Office of Health Communication
Goal-by-Goal Performance Measurement

1. Performance Goal: Increase awareness of public health issues.

Performance Measure	Targets	Actual Performance	Reference
1. Build strong partnerships with national, international public health agencies, non-governmental agencies, and relevant private sector partners.	**FY 02:** Establish at least two *new* partnerships. **FY 01:** Maintained one strategic partnership (NPHIC).	**FY 02:** Achieved **FY 01:** Achieved	**B -** 171
2. Develop a multi-tiered strategy for working with the private sector on communication initiatives.	**FY 02:** Establish guidance document for facilitating public-private sector partnerships.	**FY 02:** Achieved	**B -** 171
3. Develop a strategy for working with the news media on communicating about biological and chemical terrorist events.	**FY 02:** Establish a pro-active mechanism to brief journalists about BT issues.	**FY 02:** Achieved	**B -** 171

Health Communication Continued

2. **Performance Goal:** Strengthen the science and practice of health, risk, and crisis communication through *research* and *capacity building.*

Performance Measure	Targets	Actual Performance	Reference
1. Increase the amount of funds allocated for communication research and evaluation among CDC's programs and CDC's public health partners (through cooperative agreements, fellowships, or competitive grants processes).	Among CDC programs: **FY 02:** 25 programs will allocate a total of $4,500,000. **FY 01:** 22 programs allocated a total of $4,365,000. Among CDC's partners: **FY 02:** Fund 2 external research projects totaling $55,000.	**FY 02:** Achieved with 81 programs allocated a total over $21 million. **FY 01:** Achieved, 22 programs allocated $10,230,000 **FY 00:** 24 programs allocated a total of $4,095,000. **FY 99:** 12 programs allocated a total of $1,905,000. **FY 02:** Achieved **FY 01:** None funded	**B -** 171
2. Conduct research that advances the science and practice of risk and crisis communication in a Bioterrorism response.	**FY 02:** Conduct formative research.	**FY 02:** Achieved	**B -** 171
3. Increase the number of publications authored by CDC communication professionals.	**FY 02:** To collect baseline data so that goals can be established.	**FY 02:** Achieved and sponsored a special issue of the Journal of Health Communication addressing the lessons learned from anthrax.	**B -** 171
4. Enhance the capacity of CDC's public health partners to rapidly and accurately communicate critical information about biological and chemical terrorist events.	**FY 03:** Develop CD-ROM based job-aid to respond effectively **FY 02:** Conduct risk communication training.	**FY 03:** 12/2003 **FY 02:** Achieved	**B -** 171

Performance Measure	Targets	Actual Performance	Reference
5. Recruit, train, and retain health communication interns, fellows, and professionals.	**FY 02:** Recruit between 4-6 health communication interns.	**FY 02:** Achieved using various mechanisms in hiring 3 health communication interns, 1 ATPM fellow, 3 health communication fellows, and 8 ORISE fellows with some converting to permanent CDC positions. **FY 01:** Established the health communication internship program.	**B -** 171

Office of Health Communication
Program Description and Context

The Office of Communication (OC) provides leadership in the development of CDC principles, strategies, and practices for effective communication and functions as a CDC-wide forum for the discussion, development, and adoption of health communications policies and procedures. The Office also coordinates intramural and extramural communication research, provides communication infrastructure, and provides reactive communication to the public. The federal policy to make information readily available to the public, the importance of providing information to healthcare providers and the public to make informed health and prevention decisions, and the rapid expansion of electronic access to information through the Internet and other means are driving factors for leveraging electronic communication avenues for health communications.

Program Performance Analysis

In 2002, OC met and/or exceeded all of its targets. OC has worked with CIO counterparts to: put programs and partnerships in place to increase public health awareness; provide assistance and facilitation for CDC conducted and sponsored research on crisis and emergency risk communication; and develop training opportunities on crisis and emergency risk communication for CDC staff and public health partners.

Total Funding
(Dollars in Thousands)
FY 2004: $1,116,156* Estimate
FY 2003: $1,116,740* President's Budget
FY 2002: $1,102,419* Enacted
**This figure does not include funding for small pox activities or the Strategic National Stockpile.*

II-Q. Terrorism

Goal-by-Goal Performance Measurement

Deterrence/Prevention

1. Performance Goal: Continue efforts to protect public health by ensuring the safety and security of laboratorians regarding the handling and processing of dangerous biological agents and toxins.

Performance Measure	Targets	Actual Performance	Reference
Inspect public health laboratories in accordance with the Select Agent Rule.	**FY 04:** 300 laboratories **FY 03:** 200 laboratories **FY 02:** 90 laboratories **FY 01:** 65 laboratories **FY 00:** 50 laboratories	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Exceeded/103 **FY 01:** Achieved/60 (correction) **FY 00:** 36 **FY 99:** 14	**B -** 177

Preparedness and Response Capacity

2. **Performance Goal:** Enhance the capacity of CDC and state and local health departments to prepare for and respond to biological, chemical, radiological, and mass trauma hazards related to terrorism.

Note: The former performance goal was achieved and new performance goals have been inserted to better reflect current understanding of homeland security and public health needs. ***Former Performance Goal: Enhance the capacity of CDC and state and local health departments to prepare for and respond to a biological or chemical terrorism event.***

Performance Measure	Targets	Actual Performance	Reference
1. Enhance preparedness by assuring state, territorial, and local jurisdiction projects have written plans to respond to biological, chemical, radiological and mass trauma hazards related to terrorism, the plans address all seven focus areas of the CDC cooperative agreement.	**FY 04:** 50% of the 62 state, territorial and local jurisdictions funded by CDC have these written plans.	**FY 04:** 12/2004	**B** - 177
2. Enhance preparedness by ensuring that projects have demonstrated proficiency in responding to threats in the four key areas of: biological, chemical, radiological and mass trauma hazards related to terrorism.	**FY 04:** 30% of the 62 state, territorial and local jurisdictions funded by CDC have met this target.	**FY 04:** 12/2004	**B** - 177
3. Enhance preparedness by assuring written plans for multi-state/multi-jurisdiction public health preparedness coordination are in place for all grantees and these plans include signed agreements between jurisdictions and conform to standard ICM structures and terminology.	**FY 04:** 40% of the 62 state, territorial and local jurisdictions funded by CDC have met this target.	**FY 04:** 12/2004	**B** - 177

Preparedness and Response Capacity Continued

Performance Measure	Targets	Actual Performance	Reference
4. Assure that all clinicians in the U.S. have access to training and information resources that prepare them to diagnose, treat and/or refer for treatment persons exposed to biological, radiological, chemical or mass trauma events related to terrorism.	**FY 04:** 80% of clinicians involved in triage, general practice, and emergency medicine have access to these resources.	**FY 04:** 12/2004	**B** - 177
5. Establish state and local bioterrorism preparedness and response planning activities.	**FY 03:** 62 states or localities **FY 02:** 62 states or localities **FY 01:** 11 states or localities **FY 00:** 11 states or localities **FY 99:** 5 states or localities	**FY 03:** Achieved **FY 02:** Achieved/62 **FY 01:** Achieved/11 **FY 00:** Achieved **FY 99:** Exceeded/11	**B** - 177

Surveillance and Epidemiology Capacity

3. **Performance Goal:** Enhance the capacity of CDC and state/local health departments to rapidly detect and investigate potential biological events.

Performance Measure	Targets	Actual Performance	Reference
Increase the number of state and major city health departments and other sentinel sites with expanded epidemiology and surveillance capacity to detect, investigate and mitigate health threats by bioterrorism.	**FY 04:** 62 sites **FY 03:** 62 sites **FY 02:** 62 sites **FY 01:** 55 sites **FY 00:** 40 sites **FY 99:** 40 sites	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Achieved/62 **FY 01:** Achieved/55 **FY 00:** Exceeded/55 **FY 99:** 34 **FY 98:** 0	**B -** 177

4. **Performance Goal:** Assure that CDC has the capacity to lead a nation-wide public health response to a radiological or chemical terrorist attack, addressing the unique and complex public health threats that these types of events would present.

Performance Measure	Targets	Actual Performance	Reference
Conduct at least 1 internal and 1 external response exercise or training for both radiological and chemical terrorist events. Prepare comprehensive annexes to the CDC Emergency Response Plan for radiological and chemical terrorist attacks.	**FY 04:** 2 **FY 03:** 2	**FY 04:** 12/2004 **FY 03:** 12/2003	**B** - 147

Laboratory Capacity

5. Performance Goal: Enhance the laboratory capacity of CDC and state and local health departments to rapidly and accurately identify biological and chemical agents that can pose a terrorist threat.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of laboratories in the Laboratory Response Network.	**FY 04:** 235 laboratories **FY 03:** 140 laboratories **FY 02:** 120 laboratories **FY 01:** 100 laboratories **FY 00:** 43 laboratories	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Achieved/120 **FY 01:** Achieved/100 **FY 00:** Achieved **FY 99:** 43	**B** - 177
2. Increase the capacity of state and major city laboratories to provide or gain access to rapid testing for potential bioterrorism agents.	**FY 04:** 100 laboratories **FY 03:** 60 laboratories **FY 02:** 54 laboratories **FY 01:** 54 laboratories **FY 00:** 40 laboratories **FY 99:** 2 laboratories	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Achieved/54 **FY 01:** Achieved/54 **FY 00:** Exceeded/43 **FY 99:** Exceeded/43 **FY 98:** 0	**B** - 177
3. Increase the number of rapid diagnostic tests to be developed for potential bioterrorism agents.	**FY 04:** 20 tests **FY 03:** 15 tests **FY 02:** 10 tests **FY 01:** 6 tests	**FY 04:** 12/2004 **FY 03:** 12/2003 **FY 02:** Achieved/10 **FY 01:** Exceeded/7	**B** - 147
4. Number of laboratories qualified to provide surge capacity for analysis of chemical agents.	**FY 03:** 5 laboratories **FY 02:** 5 laboratories **FY 01:** 5 laboratories **FY 00:** 4 laboratories	**FY 02:** Maintained/5 **FY 01:** Achieved/5 **FY 00:** Exceeded/5 **FY 99:** 4	**B** - 177
5. Increase the number of toxic substances likely to be used in chemical terrorism that can be rapidly measured in blood and urine.	**FY 03:** 150 substances **FY 02:** 150 substances **FY 01:** 120 substances **FY 00:** 100 substances **FY 99:** 50 substances	**FY 03:** 12/2003 **FY 02:** Achieved/150 **FY 01:** Achieved/120 **FY 00:** 90 **FY 99:** Achieved/50 **FY 98:** 0	**B** - 177
6. Enhance laboratory capacity for testing and submission of biological agents that could be used in identification is available for all U.S. jurisdictions.	**FY 04:** →100% of state labs will have the ability to accept, package and submit for transport all Category A and B biological agents. →100% of state labs will have the ability to test for agents on the Category A list and to refer hemorrhagic fever agents to CDC for analysis.	**FY 04:** 12/2004	**B** - 177

Strategic National Stockpile

6. Performance Goal: Procure, maintain and upgrade the materials and supplies in the Strategic National Stockpile as necessary to augment federal, state and local response to a bioterrorist event.

It is important to note that according to the "Homeland Security Act of 2002 (Title V, Section 502(6))," formal authority of "the Strategic National Stockpile of the Department of Health and Human Services" is transferred to the Department of Homeland Security. However, the Stockpile is still administered within the CDC/ATSDR and therefore the following performance measures are provided.

Performance Measure	Targets	Actual Performance	Reference
1. Maintain a Strategic National Stockpile for deployment in response to terrorist use of biological or chemical agents against the U.S. civilian population.	**FY 03:** Maintain a stockpile as per the FY 03 DHHS Bioterrorism Strategic Plan.	**FY 03:** 12/2003	**B** - 177
	FY 02: Maintain a stockpile, as per the FY02 DHHS Bioterrorism Strategic Plan.	**FY 02:** The stockpile met and exceeded all of the performance measures in the FY 02 Bioterriorism Strategic Plan, including increasing the number of Push Packages from 8-12.	
	FY 01: Maintain a Strategic National Stockpile for deployment to respond to terrorist use of biological or chemical agents, including the ability to medically treat civilians for biological and chemical agents as delineated in the Draft HHS Bioterrorism Strategic Plan.	**FY 01:** The stockpile continued to develop throughout the year. Several 12-hour Push Packages became the initial response; Vendor Managed Inventory became the follow-on response. Together, these two stockpile response components built the capacity to fully treat or give full prophylaxis for selected threat agents to citizens to an extent beyond the FY01 targets listed in the Draft HHS Bioterrorism Strategic Plan.	

Strategic National Stockpile Continued

Performance Measure	Targets	Actual Performance	Reference
(continued)	**FY 00:** Maintain a Strategic National Stockpile for deployment to respond to terrorist use of biological or chemical agents, including the ability to medically treat civilians for biological and chemical agents as delineated in the Draft HHS Bioterrorism Strategic Plan. **FY 99:** Create a stockpile, including the ability to protect 1million - 4 million civilians from anthrax attacks.	**FY 00:** Exceeded/12-hour Push Package and VMI components provided capacity beyond targets. **FY 99:** Achieved	
2. Increase the number of state and local health departments to be funded to create guidance for the receipt, breakdown and distribution of the Strategic National Stockpile.	**FY 03:** 62 **FY 02:** 62	**FY 03:** 12/2003 **FY 02:** Achieved/62	**B** - 177
3. The number of 12-Hour Push Packages.	**FY 03:** Maintain 12 **FY 02:** 12 **FY 01:** 8	**FY 03:** 12/2003 **FY 02:** 12/2002 **FY 01:** Achieved/8	**B** - 177
4. Create training, education and demonstration packages that can be used during exercises as a tool to help understand the concept of a Push Package.	**FY 03:** Maintain 2 **FY 02:** 2	**FY 03:** 12/2003 **FY 02:** Achieved/2	**B** - 177

Information and Communication Systems

7. Performance Goal: Enhance the capacity of CDC and state and local health departments to rapidly and accurately communicate critical information about biological and chemical terrorism events.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the number of state and local public health professionals who use *Epi-X* to share intelligence regarding outbreaks and other emerging health events including those suggestive of bioterrorism.	**FY 03:** 1,300 **FY 02:** 750 **FY 01:** 230	**FY 03:** 12/2003 **FY 02:** Exceeded/1,000 **FY 01:** Exceeded/650	**B** - 177
2. Number of reports of disease outbreaks and other emerging health events posted on Epi-X	**FY 03:** 800	**FY 03:** 12/2003 **FY 02:** 599 (baseline)	**B** - 177
3. Increase the number of states, major metropolitan areas with access to the national secure public health communications network, *Epi-X*.	**FY 03:** 75 jurisdictions	**FY 03:** 12/2003 **FY 02:** 56 (baseline)	**B** - 177

Worker Safety
Goal-by-Goal Performance Measurement

8. **Performance Goal:** Continue efforts to protect the health and safety of first responders during chemical, biological, radiological, and nuclear (CBRN) terrorism events.

Performance Measure	Targets	Actual Performance	Reference
1. Increase the availability of CBRN certified respirators for use during a CBRN event by professional firefighters.	**FY 04:** Increase the availability of CBRN certified respirators for use during a CBRN event to 10% of the professional firefighters. **FY 03:** Increase the availability of CBRN certified respirators for use during a CBRN event to 3% of the professional firefighters. **FY 02:** Revised Target*: Establish the baseline availability of CBRN certified respirators for use during a CBRN event by professional firefighters. * Target modified to more accurately reflect respirator certification outcomes Previous Target: Establish baseline of CBRN trained professional firefighters equipped with CBRN certified respirators.	**FY 04:** 11/2004 **FY 03:** 11/2003 **FY 02:** Baseline established at 1. May 2002: issued first approval of self-contained breathing apparatus (SCBA) respirators for occupational use by emergency responders against CBRN agents. Additional approvals are expected early in 2003.	**B -** 177

Performance Measure	Targets	Actual Performance	Reference
2. Increase the number of certification standards and user guidelines for respirators to protect emergency responders in a CBRN event.	**FY 04:** Increase the number of CBRN respirator standards to 5 classes of respirators. **FY 03:** Increase the number of CBRN respirator standards to 3 classes of respirators: SCBA's, APR's, and Escape APR's. **FY 02:** Establish baseline of CBRN respirator standards.	**FY 04:** Fall 2004 **FY 03:** Fall 2003 **FY 02:** Baseline: Established at 1. A NIOSH CBRN SCBA standard was implemented in January 02. Approval applications from five manufacturers have been processed. More than 10 approval applications have been received and are being completed. Cautions, limitations and restriction of use statements have been incorporated into CBRN SCBA labels and user instruction manuals.	**B** - 177
3. Develop certification standards and user guidelines for respirators to protect workers and emergency responders.	**FY 02:** Establish certification standards for self-contained breathing apparatus for protection against weapons of terrorism. Process applications for certification. Produce user guides for proper use of self-contained breathing apparatus against weapons of terrorism. (Continued)	**FY 02:** SCBA approved 12/2001. Processing of applications began 1/2002.	**B** - 177

Performance Measure	Targets	Actual Performance	Reference
3. Develop certification standards and user guidelines for respirators to protect workers and emergency responders.	**FY 01:** Issue a report reviewing industrial chemicals that are potential weapons of terrorism. Issue a report reviewing national and international standards applicable to the performance of respiratory protection.	**FY 01:** Vulnerability Assessment Report and Terrorism Hazards Report issued 3/2002.	**B** - 177

Verification/Validation of Performance Measures: Performance will be verified in partnership with manufacturers and fire departments through surveillance of professional fire departments to determine the availability of CBRN respirators. The number of standards for certification of respirators can be verified through Laboratory approval records, and user guidelines through inspection of CBRN respirator approval labels, user instruction manuals, and other documents.

Overarching Program Description and Context

Terrorism

Advancing public health readiness has always been part of the CDC/ATSDR mission. However, since the events of September 11, 2001, public health readiness has become even more critical, demanding that CDC/ATSDR increase its efforts to rapidly improve the capacity of public health to prepare for and respond to events of terrorism, including chemical, biological, radiological, nuclear and mass trauma events.

To increase the visibility and coordination of terrorism readiness activities across the agency, CDC/ATSDR formed the Office of Terrorism Preparedness and Response (OTPR). OTPR, formed in August 2002, sits within the Office of the Director and the OTPR Director reports to the CDC Director. As one of its first actions, OTPR initiated a process to develop a GPRA-compliant strategy and performance plan to articulate the role, direction and progress of the various terrorism preparedness and response efforts executed across the various centers, institutes and offices of CDC/ATSDR. This planning, begun in October 2002, continues today and is expected to provide both the strategy and performance plan in early 2003.

The strategy and performance plans are expected to challenge and improve significantly the performance of the CDC/ATSDR terrorism effort. These challenges and improvements will be reflected in new performance measures that will be provided in the agency's update to the performance plan in June 2003. This significant planning effort will help the program establish strong links between strategy, budget and performance.

CDC is responsible for leading national efforts to detect, respond to, and prevent illnesses / injuries that result from the deliberate release of biological agents. In addition CDC has a key role in dealing with health-related issues from release of chemical, and radiological agents, as well as the mass trauma issues that can occur from bio / chem / rad terrorism or "conventional" weapons (explosives, use of vehicles for terrorism, explosives combined with bio / chem / rad agents etc.).

Terrorism preparedness continues to be a priority for the U.S. public health community. Scientific and technological advances are increasing the ease with which persons are able to obtain and weaponize biological chemical, and radiological agents. In addition, there is significant potential for mass trauma from more conventional weapons or from technology not traditionally thought of as weapons in the past (such as aircraft). These factors have been identified by the Office of Homeland Security and the Department of Justice as increasing the potential for terrorism to threaten the health of the U.S. public. Taken together, they represent an expanded "all hazards" framework that CDC must respond to our public health preparedness activities. The potentially catastrophic impact from each of these avenues demonstrates the critical need for local, state, tribal and federal public health capacity to rapidly detect, identify, and respond to a widespread infectious disease outbreak, chemical or radiological assault and / or mass trauma event.

Preparing the nation to address the dangers of terrorism is a major challenge to public health and healthcare systems. The tools and expertise - surveillance, epidemiology, laboratory capacity, and coordinated control measures - that will be most valuable in the event of a CBRN attack will also aid public health in the investigation and control of other infectious disease outbreaks. However, these tools must be enhanced to ensure implementation of the rapid response necessary to minimize the impact of a bioterrorism agent, such as smallpox or plague. Additional resources and enhanced expertise in chemical, radiological and mass trauma response is needed by CDC and by our partners at the federal, state and local levels to ensure a timely and sufficient response.

Early detection of biological and chemical terrorism requires increased awareness among members of the medical community, who are often in the best position to report suspicious illnesses and injuries, and improved linkages between the healthcare and public health communities. State and local health agencies require enhanced capacity to detect and investigate unusual events and unexplained illnesses, and diagnostic laboratories need to be equipped to rapidly identify biological and chemical agents that are rarely seen in the United States. All facets of the public health and healthcare systems require extensive training in planning for and responding to not only biological, but chemical, radiological and other mass trauma events related to terrorism. The private sector also requires technical assistance in responding to bio / chem / rad / mass trauma events. State and local entities must also be trained to receive and distribute the contents of the Strategic National Stockpile. Fundamental to these efforts is comprehensive, integrated planning and training to ensure core competency in the primary elements of public health preparedness and a high degree of scientific expertise among all partners.

The *Federal Response Plan* (FRP) outlines the mechanism and structure by which the Federal Government mobilizes resources and activities to address the consequences of any major disaster; except for a chemical or oil spill (*National Contingency Plan* [NCP]) or a radiological event (*Federal Radiological Emergency Response Plan* [FRERP]). The various plans identify a relatively consistent set of responsibilities and functions for CDC/ATSDR following a disaster, regardless of the nature of the event. This set of responsibilities includes:

- Radiological, Chemical, Biological Hazards Consultation (FRP ESF-8; CDC is lead HHS agency);
- Assessment of Health/Medical needs;
- Health Surveillance (CDC is lead HHS agency);
- Deploy the Strategic National Stockpile and other supplies as needed;
- Mass immunization/prophylaxis;
- Food, Drug, Medical Device Safety;
- Worker Health and Safety (CDC is lead HHS agency);
- Public Health Information (CDC is lead HHS agency);
- Vector Control (CDC is lead HHS agency);
- Potable Water/Waste Water and Solid Waste Disposal;
- Advise states in the development, implementation and maintenance of emergency response plans; and
- Conduct and participate in emergency response exercises.

Advances have been made at the State and local level to strengthen national capacity for terrorism response. The CDC cooperative agreement program, Public Health Preparedness and Response for Bioterrorism, currently provides funding to 50 states, 4 localities and 8 U.S. territories to enhance some or all of the primary components of terrorism preparedness. CDC's Bioterrorism Preparedness and Response activities are a cross-cutting effort which integrate the activities of various offices at CDC, the Agency for Toxic Substances and Disease Registry, and other federal entities such as the FBI, the Federal Emergency Management Agency, and the Department of Justice Programs. CDC provides leadership and coordination for this national capacity-building effort, with emphasis on interdependent focus areas as outlined in the cooperative agreements:

A) Preparedness Planning and Readiness Assessment;
B) Surveillance and Epidemiology Capacity;
C) Laboratory Capacity-Biologic Agents;
D) Laboratory Capacity-Chemical Agents;
E) Health Alert Network/Communications and Information Technology;
F) Communicating Health Risks and Health Information Dissemination; and
G) Education and Training.

By implementing and coordinating terrorism preparedness activities at the federal level, CDC will be better able to support State and local partners in their efforts to establish comprehensive terrorism preparedness and response programs. Activities being implemented at the CDC/ATSDR complement efforts being made around the country. Some of these activities will also support work related to chemical, radiological and mass trauma response.

Overarching Program Performance Analysis

Terrorism

As a result of the achievement of the performance measures listed above, local, state, and federal preparedness for biological and chemical terrorism has been strengthened. Additional resources for preparedness for biological, chemical and radiological terrorism in FY 2004 will further enhance our strength.

In light of the possibility of additional terrorist attacks against Americans domestically, it is critical that CDC be able to help public health agencies and professionals in all states and territories, as well as many other major cities, achieve the same level of planning, preparedness, and training that exist in New York and Washington. With supplemental funds provided in FY 2002, CDC will continue to address existing deficiencies by creating a nationwide comprehensive, coordinated emergency public health preparedness planning and training program. The supplemental funding will accelerate training opportunities, CDC field staff assignments, and CDC-led emergency response exercises would be made available to every state and territory, as well as the major cities deemed to be most at risk from a terrorist attack. CDC will continue its efforts to strengthen national preparedness for terrorism by: (1) further developing and maintaining activities such as improving preparedness and response capabilities; (2) improving capacity for laboratory diagnosis of biologic and chemical agents; (3) strengthening surveillance systems and epidemiologic tools for detection of bioterrorism; (4) strengthening the public health workforce capacity; (5) establishing communications and training networks to improve terrorism readiness and response; (6) maintaining and expanding the Strategic National Stockpile; and (7) building partnerships to ensure coordinated, comprehensive plans for response to terrorism. All of these activities will continue to be conducted at federal, state, tribal and local levels.

Program Descriptions, Context, and Analyses

Deterrence/Prevention
Program Description and Context

DHHS, through its CDC regulation (i.e. Select Agent Rule), as mandated by the Antiterrorism and Effective Death Penalty Act of 1996, has oversight of the national Laboratory Registration/Select Agent Transfer (LR/SAT) program. This rule requires the monitoring of approximately 40 biological agents and toxins ("select agents") that pose a severe threat to public health and safety. To administer the Select Agent Rule, CDC requires the registration of specific facilities that transfer or receive these agents. This is to ensure that they are equipped and capable of safely working with them. CDC may also perform inspections on these facilities during the 3 year registration period. The Select Agent Rule also requires CDC to maintains data on shipments of select agents between registered facilities and works with law enforcement agencies when violations of the regulation occur or are suspected of having occurred.

On June 12, 2002, the President signed Public Law 107-188, Public Health Safety and Bioterrorism Preparedness and Response Act of 2002. The new law gives HHS authority to regulate possession and use, as well as transfer of such select agents. Regulations must require persons to register in order to possess, transfer, or use select agents and are to include security requirements. CDC and HHS will be working with the United States Department of Agriculture (USDA), who will be initiating similar regulations for their agents that USDA determines have the potential to pose a severe threat to animal or plant health or to animal or plant products, on developing these new regulations.

Program Performance Analysis

To assist with national deterrence efforts, CDC continues to register and inspect laboratories that transfer or receive select agents. In FY 2002, 106 new registrations were issued under the LR/SAT program, resulting in a total of 355 laboratories currently registered and certified with CDC to transfer select agents.

CDC executed two task orders during FY 2002 to bolster the ability to conduct facility registrations and facility inspections. With the additional assistance from these contracts a total of 43 inspections were performed under the Select Agent Rule, for a cumulative total of 103 laboratories inspected under the program. In FY 02, CDC documented a total of 1,352 transfers of select agents between government agencies, universities, research institutions, and commercial entities.

During FY 03, CDC will initiate efforts to incorporate both security and technological upgrades to the select agent data base. This will expand our capabilities of providing assistance to law enforcement authorities. CDC will also initiate efforts to expand programmatic infrastructure to increase timeliness of facility registrations and inspections.

Preparedness and Response Capacity
Program Description and Context

The prospect of terrorists unleashing biological, chemical, radiological or conventional weapons is a terrifying one, in part because of a fear of the unknown. It is expected that an act of terrorism will occur with no warning. In order to protect the health of Americans, CDC assists state and local health departments as they prepare to respond to deliberate acts of terrorism. A well planned, rapid and effective response will be critical in minimizing illnesses and deaths associated with such an event. Across the country, state health department officials are reconsidering the capabilities of their departments to respond to a biological, chemical, radiological and conventional weapons terrorism incident. Any of these events may also involve the need for mass trauma response. Traditionally, the responsibilities of the state health departments have been disease surveillance and management. Health departments now are defining their roles to respond effectively to an intentional release of a terrorist agent into an unsuspecting population.

Program Performance Analysis

CDC initiated a cooperative agreement program for state and major local health departments to help improve their preparedness and response capabilities for terrorism. State and local grantees are completing comprehensive assessments of their capacity for CBRN terrorism preparedness and response. Analysis of these assessments will allow grantees to prioritize their resources and efforts. All the states and some territories will have initiated some preparedness and response activities in FY 2002. By the end of FY 2002 at least 48 of the states and territories receiving funding will have completed their vulnerability assessments and 42 will have completed their draft public health emergency response plans. In addition, state, territorial, and local health departments will have begun to build critical communication links with other assets in the health-care and emergency response community (e.g., hospitals, emergency departments, acute-care centers, police, fire, EMS, local emergency management agencies and other first response organizations) to assess local capacities and coordinate responses. Finally, a community emergency response demonstration program will be established to develop methodology to assure integrated state and local public health emergency response capabilities. As described earlier, these plans must be expanded to an "all-hazards" approach that considers not just biological and chemical but also radiological events, and events caused by these or conventional weapons resulting in mass trauma.

Three exemplar centers for public health preparedness have been established and are implementing model information technology projects that will provide assistance for states and localities developing public health information systems. CDC has also collaborated with the Department of Justice in development of an assessment of public health capacity for terrorism preparedness and response. CDC expects to work closely with HHS, other federal agencies and the proposed Department of Homeland Security in the development, deployment and coordination of these efforts.

Surveillance and Epidemiology Capacity
Program Description/Context

Because a covert biological or chemical attack will most likely be detected locally, disease tracking systems at state and local health agencies must be ready to detect unusual patterns of disease and injury, and epidemiologists at these agencies must have expertise and resources for responding to reports of rare, unusual, or unexplained illnesses. CDC is working to integrate surveillance for illness resulting from biological and chemical terrorism into the U.S. disease surveillance systems. CDC is also developing new methods for rapidly detecting, evaluating, and reporting suspicious health events that might indicate covert terrorist acts. CDC has provided funding for terrorism surveillance and epidemiology coordination to all state health departments and selected major metropolitan cities and territories.

Program Performance Analysis

Funding for this component includes awards for building core capacity, as well as special projects. In FY 2000 all 50 states, 4 localities, and 8 U.S. territories were funded for the core capacity component of the cooperative agreement. Additionally, eight projects were identified to develop special surveillance and epidemiology activities. States and localities have used their cooperative agreement funds to enhance their capacity to detect, investigate and mitigate health threats posed by bioterrorism agents. In addition, expansion of *Epi-X*, the *Epidemic Information Exchange*, an Internet-based, secure communication system promotes easier, more accurate, and real-time reporting of suspect outbreaks or other emerging health threats, including those related to bioterrorism. Increased funding for upgrading state and local capacity allowed for funding 14 additional sites and expansion of *Epi-X* to a larger number of public health professionals. *Epi-X* is also supporting the development of secure communications systems at three jurisdictions (Florida, Kansas, and Chicago).

A variety of technical assistance has been completed, including: provision of epidemiologic assistance in the investigation of an outbreak of West Nile virus in New York, enhanced surveillance support for the World Trade Organization Ministerial Conference in Seattle, Democratic and Republican National Conventions, and 2001 Super Bowl.

Laboratory Capacity
Program Description and Context

Laboratory capacity for biologic agents: Because most bioterrorist agents have little public health impact on a day-to-day basis, the ability for rapid laboratory diagnosis of these infections is limited, both at the national level and in state and local public health laboratories. CDC is responsible for providing the nation with an accurate and timely determination of any etiologic agent causing a public health threat, including both naturally occurring diseases and bioengineered organisms used in a biological terrorism attack. CDC also ensures that state and large city public health laboratories are prepared to rapidly and accurately diagnose agents causing public health problems. To meet these needs, CDC, in collaboration with APHL established the Laboratory Response Network (LRN). This multilevel network of public health laboratories provides essential diagnostic capabilities in state and large metropolitan areas and centralized, state-of-the-art national reference capacity at CDC. CDC under a unified operational structure using standardized protocols, reagents, and secure communications. The LRN is a collaborative partnership to establish front line lab-based biodetection for rapid agent identification and communications needed to support sentinel surveillance, epidemic response, and population based public health decision making. CDC's Rapid Response and Advanced Technology Laboratory provides molecular approaches to rapid identification of biological agents that are rarely seen in the United States. Other disease- specific laboratories at CDC provide additional research and surge capacity for diagnostic testing in response to any incident. CDC and partners have identified the biological agents most likely to be involved in a terrorist attack and continue to develop rapid assays to assist in detecting these agents at the state and local levels.

Laboratory capacity for chemical agents: Chemical attacks by terrorists, such as the release of the deadly gas sarin in a Tokyo subway, underscore the need to quickly and reliably determine the identity of the chemical agent, find out who has and has not been exposed, and determine the extent of exposure. Public health laboratories currently do not have the infrastructure to test human samples for chemical agents. In the event of a chemical terrorist incident, not only would there be a need to analyze samples from persons who were actually exposed to an agent, but there also could be extensive demand for services for persons who think they were exposed. To address these deficiencies, CDC has developed a rapid toxic screen that can identify up to 150 different chemical agents in blood and urine samples.

Laboratory Capacity
Program Performance Analysis

Laboratory capacity for biological agents: Laboratory Response Network (LRN) laboratorians from all 50 states have been trained in the handling and testing of critical biologic agents. The public health infrastructure has been strengthened as evidenced by the many public health laboratories across the country that have been renovated and upgraded to allow adequate safety for improved diagnosis of potential bioterrorism agents and the addition of new, trained laboratorians. Currently, 55 laboratories in 53 states and localities receive funds to enhance their capacity for identification of biologic agents. All of these laboratories are also members of the Laboratory Response Network (LRN). New rapid assays are being developed for utilizing real-time PCR and antigen detection for potential bioterrorism agents.

Laboratory capacity for chemical agents: CDC has funded 5 regional laboratories to address chemical agents and has worked with grantees to accomplish the purchase, installation, and training associated with new state-of-the-art laboratory equipment required to carry out this highly measurement of nerve agents in human samples and successfully completed a round of proficiency testing to demonstrate their understanding of the method. Additionally, states are also receiving training on measurement of sulphur mustards in human samples.

CDC capacity: CDC has organized teams of laboratory professionals whose sole responsibility is to provide the laboratory services needed to rapidly and accurately triage and analyze specimens that are suspected to be potential bioterrorism threat agents. CDC's Rapid Response and Advanced Technology Laboratory (RRAT) for bioterrorism was established to receive suspect clinical and environmental samples for rapid identification. Since the World Trade Center attack on September 11, 2001 until the report of the first confirmed case of anthrax on October 4, 2001, an estimated 7,500 laboratory samples were processed at CDC's RRAT and specialty laboratories. In addition, agent-specific laboratories at CDC have been established or strengthened to perform confirmatory testing and strain characterization of critical biologic agents and provide surge capacity during an event.

CDC has developed testing methods for nerve agents, nitrogen mustards, sulfur mustards, lewisite, hydrogen cyanide, cyanogen chloride, BZ, tricothecene mycotoxins, ricin, heavy metals, selected toxic industrial chemicals, and incapacitating agents.

Strategic National Stockpile
Program Description and Context

It is important to note that according to the "Homeland Security Act of 2002 (Title V, Section 502(6))," formal authority of "the Strategic National Stockpile of the Department of Health and Human Services" is transferred to the Department of Homeland Security. However, the Stockpile is still administered within the CDC/ATSDR, therefore the following Program Description and Program Performance Analysis are provided.

Congress gave CDC the mission to manage and oversee the Strategic National Stockpile (SNS) in January 1999. CDC was expected by January 1, 2000 to be capable of meeting an expected terrorist threat and met this mandate on time, declaring that it had drugs and medical material ready to deploy and an air cargo service ready to deliver it. One of two SNS Program components are the "12-hour Push Packages." A 12-hour Push Package can reach a site within 12 hours of a federal order to deploy. There are twelve 12-hour Push Packages located throughout the country for security reasons and in case of multiple attacks. In a terrorist event, CDC staff will meet the arriving SNS, transfer custody to state officials, and offer technical assistance on SNS organization, repackaging, and distribution to medication dispensing sites.

The second SNS Program component is "vendor-managed inventory" (VMI), or a stockpile of drugs and material made and stored for CDC by firms that produce or distribute them. VMI is meant to help treat many casualties over time. During FY 2000 the 12-hour Push Package became fully operational and ready for deployment. During FY 2001 VMI contracts were awarded and the material they represent came on-line ready for deployment. Maintaining and upgrading the materials and supplies (purchase of additional antidotes, antibiotics, medical supplies, equipment, etc) in both the12-hour Push Package and VMI will continue to be a priority activity of the SNS Program and replace stock that is used during a response.

In FY 2002, the SNS program will achieve and maintain a capacity to provide post-exposure prophylaxis to 12 million persons for possible exposure to anthrax, and an equal or greater number of persons who may be exposed to plague or tularemia. Each of the 50 states, 8 U.S. Territories, 3 cities, and the District of Columbia will continue to have the opportunity to put a process in place to effectively manage and use the SNS should a deployment occur in a terrorist or other catastrophic event. In FY 2003 the SNS program will conduct preparedness planning, training, and exercises; sustain anthrax prophylaxis capability; sustain non-anthrax vendor managed inventory with 12 hour push-package capability; and cover routine operational expenses such as personnel, storage, and transport. SNS will develop a series of strategic vaccines repositories and make arrangements for rapid vaccine deployment.

Strategic National Stockpile
Program Performance Analysis

The Strategic National Stockpile (SNS) was deployed for the first time in response to the September 11, 2001 terrorist attacks in New York City and Washington, DC. CDC mobilized a SNS "push package" to NYC within 7 hours of an approved deployment as well as a push package to Washington, DC in the days following the attack on the Pentagon. The initial push package consisted of over 50 pallets of medical material. In addition, the SNS program, already on 24-hour, fully-staffed alert from the September 11th event, arranged CDC's immediate response to the first case of anthrax in Florida. At the request of the state of Florida and local officials, CDC arranged through the SNS program for the transportation of CDC epidemiologists and its Technical Advisory Response Unit (TARU) to Florida and North Carolina to investigate the anthrax exposures. In October and November, CDC used the SNS program to deliver almost 3.75 million tablets of three different antibiotics (amoxicillin, ciprofloxacin, and doxycycline) for post-exposure prophylaxis of employees in affected buildings, postal workers, mail handlers, and postal patrons.

Information and Communication Systems - Program Description/ Context

Most health departments lack the modern, secure electronic systems needed to detect disease outbreaks rapidly, respond to outbreaks, and communicate with CDC, other government agencies, and the public during public health emergencies. Through the Health Alert Network, CDC is aiding state and local health departments to raise their capacity and preparedness to deal with public health threats – including not only bioterrorism but also emerging infectious diseases, chronic diseases, and environmental hazards. This means that the nation reaps the benefits of these investments every day, not just in the event of a chemical attack. Key elements are modern information and communication systems, a fully trained workforce, and robust organizational capacity to address the full spectrum of public health issues. The network allows high-speed Internet communications, including early-warning broadcast alerts, among CDC and state and local health departments.

The need for rapid communication, research, and response has become an essential element of public health. Local outbreaks can develop rapidly into pandemics, previously unidentified diseases emerge, contaminated food or defective products are disseminated, and the threat of terrorism preparedness is increasing. The availability of a secure Web-based communications network for public health investigation and response would simplify and expedite the exchange of routine and emergency public health information between CDC and state and local health departments. In the absence of such a network, reports and discussions are extremely difficult and timely investigative and prevention efforts are delayed.

To help public health officials share information on outbreaks, CDC officially launched the Epidemic Information Exchange (*Epi-X*). *Epi-X* is the secure, web-based communications system that simplifies and enables "real time" sharing of routine and emergency public health information about disease outbreaks and other acute health events including those related to bioterrorism among public health officials at the local, state, and federal levels. *Epi-X* was designed with input from a range of public health officials and organizations. Examples of *Epi-X* reports include infectious disease outbreaks; newly recognized environmental, product, occupational and recreational hazards; recommendations regarding availability and use of vaccines; and bioterrorism threats and acts.

Information and Communication Systems Program Performance Analysis

Within four hours of the attack on the World Trade Center, the Health Alert Network was activated and began transmitting emergency messages to the top 250 public health officials in 50 States, 7 large cities and Guam. In the months that followed, over 67 health alerts, advisories and updates were transmitted reaching an estimated 1 million frontline public and private physicians, nurses, laboratorians, and State and local health officers. Using in-state systems built with CDC funds, States were able to augment and tailor the HAN alerts to their unique situations. CDC and its HAN grantees also established and maintained Internet websites to provide information to the public. Since September 11th there have been 73 million hits, 5 million visits, and 12 million requests for information on the CDC bioterrorism website.

A second national conference, focused on Health Alert efforts (such as internet connectivity, broadcast alert, and distance learning), was held in August 2001 in Columbus, Ohio. A variety of communication and program management tools have been developed including LIST SERVs, E-mail group codes, websites, and an ACCESS database. Site visits are continuing at all of the HAN project areas and technical assistance has been provided. In FY 2001 additional HAN funding became available which increased the number of funded states/areas to 55.

To address the public health problem of being able to share information delays in reporting outbreaks, CDC, with the input of over 300 health officials, developed the *Epidemic Information Exchange* (*Epi-X*). *EPI-X* was launched in December 2000. As of September 30, 2001, 650 public health officials, including all state epidemiologists or their designees, local health officials, and members of the military, participate on *Epi-X*. *Epi-X*, which has medical editorial staff available 24 hours/day, 7 days/week, is moderated for quality by CDC staff. Responding to ideas from public health officials, *Epi-X* plans to provides secure communications for multi-state outbreak response teams, and plans to develop links between disease surveillance programs and local health alert systems and improved software to automate the recognition of similar disease outbreaks across jurisdictions.

Worker Safety
Program Description and Context

Since local responders will be the first on scene of a biological or chemical terrorism event, the quality of protective equipment and clothing used against biological and chemical weapons is critical to the response effort. Mechanisms for ensuring that respirators and protective clothing adequately protect against chemical and biological terrorism must be evaluated.

Program Performance Analysis

CDC's National Institute for Occupational Safety and Health (NIOSH) is developing guidelines and certification standards for various classes of respiratory protective equipment. Laboratory and staff capabilities will be acquired to process certification applications. User guidelines specifying cautions and limitations of use will be developed and disseminated. A National Personal Protective Technologies Laboratory to study and develop improved personal protective equipment for first responders and other workers has been established.

Currently, emergency responders to chemical, biological, radiological, and nuclear terrorist events are not equipped with ample personal protective respirators tested and certified for use with the many hazards possible in acts of terrorism. Similarly, non emergency workers in areas identified as high terrorist threat locations are not provided escape respirators tested and certified to address possible terrorist hazards. The reason for the lack of certified respirators is that criteria for identifying the required protection and respirator performance have not existed in the past. In 1998 CDC identified this glaring gap in personal protective equipment and has since been working with the U.S. Military and other stakeholders to develop respirator standards, implement respirator certification programs, provide guidance on respirator use and direct research focused on deficiencies in scientific information in the area of respirator performance.

In May 2002, CDC issued its first approval of self-contained breathing apparatus (SCBA) respirators for occupational use by emergency responders against chemical, biological, radiological, and nuclear agents. It is anticipated that beginning in 2003, CDC will develop similar criteria for approving other types of respirators, such as air-purifying devices, for use by emergency responders.

In addition to developing respirator certification standards and user guidelines, CDC is committed to assuring that CBRN protective respirators are available to professional firefighters. Beginning in FY 2002, CDC began efforts to increase the availability of CBRN certified respirators for use during a CBRN event by professional firefighters.

Program Management is not a budget line item activity; however, it represents cross-cutting activities at CDC.

II-R. Program Management and Support

Program Management
Goal-by-Goal Performance Measurement

Performance Goal: Fully achieve the President's Management Agenda in all five areas of Strategic Management of Human Capital; Competitive Sourcing; Improved Financial Performance; Expanded Electronic Government; and Budget and Performance Integration.

Performance Measure	Targets	Actual Performance	Reference
President's Management Agenda stoplight ratings as issued by HHS or OMB.	**FY 04:** 4 greens, 1 yellow **FY 03:** 3 greens, 2 yellows	**FY 04:** 12/2004 **FY 03:** 12/2003	**B** - 206 **8** #1, 2, 3, 4, 5

Program Management - Overarching Program Description and Context

CDC's program management goals, performance measures, and initiatives are directly supportive of all five areas of the President's Management Agenda (PMA) and additional initiative of the HHS Secretary's Management Objectives including results oriented management, program and administrative efficiencies, and improved management of grants, acquisition, information technology, facilities, and security.

In order to achieve the President's Management Agenda and the HHS Secretary's management objectives, CDC must develop and successfully implement plans and strategies to reach the goals in all five management areas. For example, CDC's Restructuring and Delayering Plan delineates specific goals and time lines. In brief, these goals are:

- Improve supervisory ratio;
- Increase span of control/organizational control;
- Reduce the number of organizational units;
- Increase delegations of authority;
- Eliminate duplicative administrative functions;
- Eliminate 8 sections in the Procurement and Grants Office and balance the workload;
- Out source the Vessel Sanitation Program;
- Out source the Tuskegee Medical Voucher Program;
- Consolidate or out source specialized travel; and
- Re-engineer/restructure to support the centralization of HR and Financial Systems.

Additional discussion on CDC's efforts to fulfill the five PMA goals is offered in Appendix E.

Program Support
Goal-by-Goal Performance Measurement

Information Access, Security, and Reliability

1. Performance Goal: Provide a variety of standardized and integrated means for access to CDC information resources by health practitioners and the public.

Performance Measure	Targets	Actual Performance	Reference
Enhance CDC's information content and technology infrastructure to increase public access to CDC information resources through the CDC website and CDC's Voice/Fax Information Service (VIS).	**FY 04:** 20% increase **FY 03:** 20% increase **FY 02:** 20% increase **FY 01:** 25% increase **FY 00:** 25% increase **FY 99:** 25% increase	**FY 04:** 12/2005 **FY 03:** 12/2004 **FY 02:** 5.49M website visitor/month; 41K VIS calls/month, combined (51.5% increase) **FY 01:** 3.6M website visitors/month; 54,000 VIS calls/month (combined 29% increase) **FY 00:** 2.8M website visitors/month; 46,000 VIS calls/month (combined 47% increase) **FY 99:** 1.9M website visitors/month; 51K VIS calls/month (combined 171% increase) **FY 98:** 0.7M website visitors/month; 45K VIS calls/month	**B -** 206 #4

Information Access, Security, and Reliability, Competitive Sourcing, Financial Assistance, and Performance-Based Contracting Measures to be Phased Out After FY 03

2. Performance Goal: Enhance CDC's information security program.

Performance Measure	Targets	Actual Performance	Reference
Protect CDC's information system from serious losses, alterations, or releases of data or information that are critical, highly sensitive, or covered by privacy or confidentiality requirements.	**FY 03:** No serious losses, alterations, or releases. **FY 02:** No serious losses, alterations, or releases. **FY 01:** No serious losses, alterations, or releases. **FY 00:** No serious losses, alterations, or releases. **FY 99:** No serious losses, alterations, or releases. **FY 98:** No serious losses, alterations, or releases.	**FY 03:** 11/2004 **FY 02:** No serious losses, alterations, or releases. **FY 01:** No serious losses, alterations, or releases, one limited and contained system compromise. **FY 00:** No serious losses, alterations, or releases. **FY 99:** No serious losses, alterations, or releases security measures. **FY 98:** No serious losses, alterations, or releases.	**B -** 206 #4

3. Performance Goal: Ensure that critical information systems and infrastructure operate reliably.

Performance Measure	Targets	Actual Performance	Reference
Ensure the reliable and continuous operation of CDC's critical information systems and information technology infrastructure (data center, wide area network, e-mail, Internet/web services, and telecommunications).	**FY 03:** 99.5% continuous availability **FY 02:** 99.5% continuous availability **FY 01:** 99% continuous availability **FY 00:** 98% continuous availability	**FY 03:** 11/2003 **FY 02:** 99.89% continuous availability (78% better than goal) **FY 01:** 99.94% continuous availability (89% reduction in service unavailability) **FY 00:** 99.46% continuous availability	**B -** 206 #4

Competitive Sourcing, Financial Assistance, and Performance-Based Contracting

Goal-by-Goal Performance Measurement

1. Performance Goal: Implement competitive sourcing for analyzing and conducting program activities that are commercial in nature.

Performance Measure	Targets	Actual Performance	Reference
Directly convert to contract and/or conduct cost comparison studies of CDC staff performing commercial functions listed in the CDC FAIR Act inventory.	**FY 03:** 423 FTEs **FY 02:** 217 FTEs	**FY 03:** 11/2004 **FY 02:** All 217 FTEs were directly converted in FY 2002	**B -** 206 #2

2. Performance Goal: Establish performance measures for grants and cooperative agreements.

Performance Measure	Targets	Actual Performance	Reference
Document grantee performance relevant to the purpose of Program Announcements, Healthy People 2010 Goals and appropriate Programmatic GPRA goals by incorporating performance measures into Program Announcements.	**FY 03:** 100% compliance of new competitive announcements **FY 02:** 100% compliance of new competitive announcements after January 11, 2002.	**FY 03:** 11/2004 **FY 02:** Fully achieved	**B -** 206 #2

Financial Assistance/Performance-Based Contracting Continued

3. Performance Goal: Streamline financial assistance programs (grants and cooperative agreements) through consolidation.

Performance Measure	Targets	Actual Performance	Reference
Consolidate competitive grant and cooperative agreements through the use of umbrella Program Announcements.	**FY 03:** 50% of all competitive Program Announcements will be reviewed and considered for consolidation. **FY 02:** 20% of all competitive Program Announcements will be reviewed and considered for consolidation with a focus on chronic diseases.	**FY 03:** 11/2004 **FY 02:** 22% of competitive program announcements reviewed resultin in 72% consolidation in the chronic diseases area.	**B -** 206  #2

4. Performance Goal: Enhance the effectiveness of service contracts through performance-based contracting.

Performance Measure	Targets	Actual Performance	Reference
Increase the use of performance-based contracting.	**FY 03:** 20% of eligible service contracting dollars are awarded as performance-based contracts. **FY 02:** 20% of eligible service contracting dollars are awarded as performance-based contracts.	**FY 03:** 11/2004 **FY 02:** 29% of new service contracting awards were made as performance-based.	**B -** 206  #2

Information Access, Security, and Reliability, Competitive Sourcing, Financial Assistance, and Performance-Based Contracting

Overarching Program Description and Context

CDC's program support goals, performance measures, and initiatives are directly supportive of the President's Management Agenda and the HHS Secretary's Management Objectives including human capital, competitive sourcing, financial performance, E-Government, budget-performance integration, results oriented management, program and administrative efficiencies, and improved management of grants, acquisition, information technology, facilities and security.

CDC has played a significant contributing role to the Secretary's five-year Enterprise Information Technology Plan resource commitments, program management, and technical expertise. CDC has also ensured that our efforts in all these areas directly align with the "One HHS" theme embodied in the HHS enterprise architecture business model.

CDC awarded approximately $3 billion in extramural funds in FY 2001 through grants, approximately 70% of which went to states and the extramural funding is expected to reach $5 billion in FY 2002. CDC is actively consolidating and streamlining its grants programs particularly in the area of chronic diseases in FY 2002.

Other CDC activities which reinforce the Administration's emphasis on E-Government and citizen-centered services include:

- Re-engineering the CDC web site to serve as a public health portal for information;
- Meeting the Government Paperwork Elimination Act goals and deadlines; and
- Conducting E-Commerce business through E-Procurement and E-Grants.

Information access, security, and reliability: CDC is an information-intensive organization. CDC's mission largely revolves around the collection, analysis, and dissemination of data and information on health events, vital statistics, and other health determinants. Access to authorized data and information assets is vital to personal and public health decision making, research, policy development, and program management. Protecting the confidentiality, privacy, and integrity of sensitive data and information is of utmost importance to CDC, the agency's data-provider partners, and the persons and organizations that entrust public health agencies with these data. Ensuring the reliable and continuous operation of critical systems is also vital as programs and business processes are dependent on information technology and systems.

Competitive Sourcing: CDC has developed and is implementing a Competitive Sourcing Plan that aligns with the competitive sourcing goals in the President's Management Agenda. The activities described in this Plan have been, and will continue to be, undertaken in tandem with analytical improvements and refinements in the development of the FAIR Act inventory that is the foundation for competitive sourcing. These improvements are designed to ensure the completeness and accuracy of the CDC FAIR Act inventory, as well as the Competitive Sourcing Plans that are derived from it.

Financial Assistance: CDC is establishing a higher degree of accountability in its financial assistance programs through the development of performance measures for all programs and streamlining programs through appropriate consolidations.

Service Contracting: CDC is improving service contracting effectiveness by increasing use of performance-based contracting for service contracts in alignment with Administration and HHS goals.

Overarching Program Performance Analysis

Information access: CDC's success in developing and providing useful data and information for a wide range of uses such as personal health choices, medical practice, public policy, health research, etc., can be measured in part by tracking the number of people who seek and access such information. CDC has two primary methods for providing information related to CDC's many public health programs to the public, health professionals, and others. These are the CDC Voice/FAX Information Service (VIS) and CDC's website. This performance measure is based on the number of people who request CDC's information rather than a measure of documents, pages, website hits, or other possible measures.

CDC's VIS provides callers with immediate access to automated prerecorded voice information on public health topics over the phone or automated faxed information, data, and graphics to any fax machine upon request at any time. While the web has become extremely popular for accessing information, the CDC VIS remains an important method to ensure access by persons without Internet access or convenient access at the time of need. The CDC VIS is toll-free, multilingual, and serves persons with hearing disabilities. CDC's website is one of the most popular government websites of all types and is especially important in providing trusted health information to consumers and health professionals.

Information security: CDC has a comprehensive security program for establishing and operating a secure technology and information environment through controls, systems, processes, expertise, awareness, and other means. While the risks and vulnerabilities from the complexity of computer software and world-wide exposure to the Internet continue to increase, CDC has concomitantly increased its focus on prevention, detection, and response capabilities.

Information systems reliability: Information systems that are critical to the CDC mission and the underlying information technology infrastructure that supports those systems need to be reliable, available, and operational round-the-clock every day. This is especially important given the global access to CDC's information products as well as the global locations of CDC staff. Consequently, critical systems and infrastructure must be engineered, managed, and monitored such that any unscheduled loss of service is minimized.

Competitive Sourcing: The CDC Competitive Sourcing Plan for FY 2002 specified completion of public-private competitions or direct conversions (as permitted under OMB Circular A-76) on not less than 5% of the CDC FTE listed in its FAIR Act inventory as performing commercial type work. The 5% goal for FY 2002 required public-private competitions or direct conversions of approximately 217 FTE listed in the CDC FAIR Act inventory. For FY 2003, CDC will complete public-private competitions and/or direct conversions (as permitted under OMB Circular A-76) of not less than an additional 10% (approximately 423) of the CDC FTE listed in its FAIR Act inventory as performing commercial work. Goals beyond FY 2003 have not yet been established.

Financial Management Processes and Internal Controls
Goal-by-Goal Performance Measurement

1. Performance Goal: Ensure the proper preparation and presentation of CDC's financial statements.

Performance Measure	Targets	Actual Performance	Reference
Achieve 100% audited financial statements with no qualifications.	**FY 03:** 100% with no qualifications. **FY 02:** 100% with no qualifications. **FY 01:** 100% with no qualifications. **FY 00:** 100% with no qualifications.	**FY 03:** 1/2004 **FY 02:** Achieved **FY 01:** Achieved **FY 00:** Achieved **FY 99:** 100% with no qualifications. **FY 98:** 100% with no qualifications.	**B -** 206 #3

Verification/Validation of Performance Measures: Audited financial statements are published annually in the Chief Financial Officer's Report for CDC and ATSDR. The measure and goal will be validated and verified by the published report of an independent audit firm.

Program Description and Context

The Chief Financial Officers' Act requires federal agencies to have audits of their financial statements. An audit consists of a review of the agency's financial statements and an assessment of the accounting principles used and significant estimates made by management. To receive an "unqualified" opinion from an auditor, the agency's financial statements must be determined to present fairly, in all material respects, the financial position of the agency in conformity with generally accepted accounting principles.

Program Performance Analysis

CDC's first financial statement audit was performed in FY 1997, and CDC received a qualified opinion. Since then, CDC has received four consecutive unqualified opinions for FY 1998, FY 1999, FY 2000, and FY 2001. Although CDC is pleased with the success of the financial audits, CDC is devoting significant resources to upgrading the accounting system, improving management controls over budget execution, and increasing training opportunities for financial staff members.

Recruitment Timeliness
Goal-by-Goal Performance Measurement

1. Performance Goal: Decrease the time needed to classify positions and refer candidates for vacancies.

Performance Measure	Targets	Actual Performance	Reference
Decrease the time needed to refer candidates to fill positions.	**FY 03:** < 55 days to refer **FY 02**: < 60 days to refer **FY 01:** < 60 days to refer **FY 00:** 25% time reduction.	**FY 03:** 12/31/03 **FY 02:** 13.4 days to classify; 61.1 days to refer **FY 01:** 14.1 days to classify; 64.3 days to refer **FY 00:** Achieved/13.9 days to classify; 59.3 days to refer **FY 98:** 15 days to classify; 80 days to refer	**B -** 206 #1

Verification and Validation of Performance Measures: Data are collected through the Staffing Tracking and Reporting System (STARS) in the Human Resources Management Office, CDC. This system is monitored monthly for system errors and data irregularities**.**

Program Description and Context

CDC's workforce is a critical strength of the agency. A top priority is the recruitment of highly qualified staff who represent the public.

Program Performance Analysis

CDC slightly missed the goal of reducing time for referral of candidates. The time to classify positions decreased from 14.1 days in FY 01 to 13.4 days in FY 02 and the time to refer candidates increased from 64.3 days to 61.1 days during this same time period. However, this still falls just short of the goal of 60 days to referral. Classification and referral of candidates are integrally linked when filling any position. A contributing factor was the added complexity of the hiring controls that were placed on CDC in January 2001 and continued into FY 2002. These hiring controls affected a number of job series across CDC and all supervisory positions. Due to the uncertainty of when the hiring controls may be lifted, many selecting officials preferred not to receive certificates (which expire in 30 days) for positions they may not be authorized to fill for many months. Frequently, they opted to receive certificates only after the hiring controls for those specific occupational series were lifted. This practice resulted in the delays reflected in the data.

Workforce Planning: Restructuring and Delayering Initiatives
Goal-by-Goal Performance Measurement

1. Performance Goal: Enhance workforce planning efforts at CDC.

Performance Measure	Targets	Actual Performance	Reference
1. Improvement of supervisory ratio	**FY 04:** Increase supervisory ratio to 1:9 **FY 03:** Increase supervisory ratio to 1:8 **FY 02:** Increase supervisory ratio to 1:7	**FY 04:** 10/31/04 **FY 03:** 12/31/03 **FY 02:** Supervisory ratio is 1:6.8 **FY 01:** Supervisory ratio is 1:5.5 (baseline)	**B** - 206 #1
2. Increase in the span of control and organizational size.	**FY 03:** Increase the minimum number of FTEs required to 11 FTEs per branch and 6 FTEs per section. **FY 02:** Increase the minimum number of FTEs required to 10 FTEs per branch and 5 FTEs per section.	**FY 03:** 12/31/03 **FY 02:** The current CDC guidance requires a minimum of 10 FTEs per branch and a minimum of 5 FTEs per section. **FY 01:** The current CDC guidance requires a minimum of 9 FTEs per branch and a minimum of 5 FTEs per section. (Baseline)	**B -** 206 #1
3. Reduction in the number of organizational units.	**FY 03:** Reduce the number of organizational units to 499. **FY 02:** Reduce the number of organizational units to 527.	**FY 03:** 12/31/03 **FY 02:** There are currently 520 organizational units in CDC/ATSDR. **FY 01:** There are currently 555 organizational units in CDC/ATSDR. (Baseline)	**B -** 206 #1

Workforce Planing: Restructuring and Delayering
Program Description and Context

The CDC Restructuring and Delayering Plan delineated specific goals and time lines for achievement of those goals. Additional detail about the plan is provided within the plan, submitted in tandem with this budget. In brief, some of the goals of the CDC Restructuring and Delayering Plan are to:

- ✓ Improve supervisory ratio;
- ✓ Increase span of control/organizational control;
- ✓ Reduce the number of organizational units;
- ✓ Increase delegations of authority;
- ✓ Eliminate duplicative administrative functions; and
- ✓ Re-engineer/restructure to support the centralization of HR and Financial Systems.

Program Performance Analysis

The supervisory ratio of the organization increased from 1:5.5 in FY 2001 to 1:6.8 in FY 2002 and falls just short of the goal of 1:7. However at this rate of progress, we believe that this objective will be accomplished in the near future. The goal for increasing span of control was fully met by changing CDC guidance to require a minimum of 9 FTEs per branch and a minimum of 5 FTEs per section. The goal of reducing the number of organizational units was exceeded (520 actual vs. 527 target). Progress in all of these areas is attributable to our aggressive workforce restructuring efforts, which includes delayering and consolidation.

SES Performance Contracts
Goal-by-Goal Performance Measurement

1. Performance Goal: Develop and implement SES Performance Contracts.

Performance Measure	Targets	Actual Performance	Reference
Develop and implement use of SES Performance Contracts.	**FY 03:** SES Performance Contracts will continue to be used for appraisal and pay increase decisions. Changes will be made to contracts as needed to better enhance accountability. **FY 02:** Develop and implement SES Performance Contracts for 26 SES members.	**FY 03:** 12/31/03 **FY 02:** Goal was fully met – SES performance contracts were put in place for all 26 SES members.	**B -** 206 #1

Program Description and Context

As part of the President's Management Agenda, agencies have been asked to develop and implement Senior Executive Series (SES) Performance Contract for all SES members. SES Performance Contracts will measure specific program outputs and focus on results. CDC/ATSDR plans to use the SES Performance Contracts for appraisals, pay increase decisions, and to enhance managerial accountability.

Program Performance Analysis

The FY 2002 goal of implementing performance contracts for all 26 SES staff members was fully met and continued progress is expected in this area.

Recruitment and Retention Strategies
Goal-by-Goal Performance Measurement

1. Performance Goal: Increase Hispanic/Latino representation at CDC.

Performance Measure	Targets	Actual Performance	Reference
Increase percentage of Hispanic/Latino representation in the workforce.	**FY 02:** 5.07%	**FY 02:** 3.2% (baseline)	**B** - 206

2. Performance Goal: Recruitment and retention of a highly qualified workforce.

Performance Measure	Targets	Actual Performance	Reference
1. Use of above the minimum appointments to attract superior candidates.	**FY 03:** 87 **FY 02:** 81	**FY 03:** 12/31/03 **FY 02:** 40 **FY 01:** 78	**B -** 206  #1
2. Use of recruitment bonuses for hard-to-fill positions.	**FY 03:** 32 **FY 02:** 29	**FY 03:** 12/31/03 **FY 02:** 22 **FY 01:** 25	**B -** 206  #1
3. Use of retention allowances to retain essential employees.	**FY 03:** 12 **FY 02:** 9	**FY 03:** 12/31/03 **FY 02:** 3 **FY 01:** 9	**B -** 206  #1

Program Description and Context

CDC/ATSDR utilizes several recruitment strategies to attain a high-quality, diverse workforce. The Human Resources Management Office, Outreach and Marketing Branch, in coordination with each Center, Institute, or Office (CIO) prepares a recruitment plan. This plan addresses the gains, losses, predicted retirements, and racial breakdown of the workforce. It allows planning for new initiatives and projected retirements. CDC/ATSDR is also placing more emphasis on utilizing non-competitive authorities in the recruitment process. Some of these include the Persons with Disabilities program, Veteran Readjustment Program, Outstanding Scholar, Bilingual/Bicultural Program, Presidential Management Intern (PMI) Program, Student Career Experience Program, Hispanic Association of Colleges and Universities (HACU) National Internship Program, other student programs and the various hiring flexibilities offered by Title 42.

CDC/ATSDR also utilizes current human resource compensation authorities to assist in recruitment and retention, such as "above the minimum" appointments, recruitment bonuses, and retention allowances. Current law and regulations permit the appointment of a candidate at a rate above the minimum rate of the appropriate grade because of the candidate's superior qualifications or a special need of the government for the candidate's services. Recruitment bonuses may be used to pay a newly appointed employee up to 25% of the annual basic rate of pay when there is difficulty in filling the position. When the unusually high or unique qualifications of an employee or a special need of the agency for the employee's services makes it essential to retain an employee and the agency determines that the employee would be likely to leave the Federal service, an agency may authorize a retention allowance of up to 25% of the employee's basic pay.