DEPARTMENT of HEALTH and HUMAN SERVICES

Centers for Disease Control and Prevention

FY 2010 Online Performance Appendix

INTRODUCTION

The FY 2010 Congressional Justification is one of several documents that fulfill the Department of Health and Human Services' (HHS) performance planning and reporting requirements. HHS achieves full compliance with the Government Performance and Results Act of 1993 and Office of Management and Budget Circulars A-11 and A-136 through the HHS agencies' FY 2010 Congressional Justifications and Online Performance Appendices, the Agency Financial Report, and the HHS Citizens' Report. These documents are available at http://www.hhs.gov/asrt/ob/docbudget/index.html.

The FY 2010 Congressional Justifications and accompanying Online Performance Appendices contain the updated FY 2008 Annual Performance Report and FY 2010 Annual Performance Plan. The Agency Financial Report provides fiscal and high-level performance results. The HHS Citizens' Report summarizes key past and planned performance and financial information.

MESSAGE FROM THE ACTING DIRECTOR

As Acting Director of the Centers for Disease Control and Prevention (CDC) and Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR), I am pleased to present the FY 2010 Online Performance Appendix for the Centers for Disease Control and Prevention. The report represents the monitoring and management of CDC's portfolio of health protection and preparedness programs.

The mission of CDC is to create the knowledge, tools, and networks that people and communities need to protect their health: health promotion, prevention of disease, injury and disability, and preparedness for health threats. CDC accomplishes its mission by working with States, communities, and other partners throughout the Nation and world to monitor health, detect and investigate health problems, conduct research, implement prevention strategies, promote healthy behaviors, foster safe and healthful environments, and provide leadership and training.

We center our efforts on a set of fundamental Health Protection Goals designed to accelerate health impact, reduce health disparities, and protect people at home and abroad from current and imminent health threats. These overarching goals articulate CDC's vision in the following four areas: *Healthy People in Every Stage of Life*; *Healthy People in Healthy Places*; *People Prepared for Emerging Health Threats*; and *Healthy People in a Healthy World*. Through the use of performance data, CDC can monitor programs, policies and extramural awards to ensure the agency is on track to meet its public health protection goals.

To the best of my knowledge, the performance data reported by CDC for inclusion in the FY 2010 Online Performance Appendix is accurate, complete, and reliable.

Sincerely,

/Richard E. Besser/

Richard E. Besser M.D.
Acting Director, Centers for Disease Control and Prevention, and
Acting Administrator, Agency for Toxic Substances and Disease Registry

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AMERICAN REINVESTMENT AND RECOVERY ACT (ARRA)

The American Reinvestment and Recovery Act (ARRA) was signed into law by President Obama on February 17, 2009. It is an unprecedented effort to jumpstart our economy, create or save millions of jobs, and put a down payment on addressing long-neglected challenges so our country can thrive in the 21st century. The Act is an extraordinary response to a crisis unlike any other since the Great Depression, and includes measures to modernize our nation's infrastructure, enhance energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief, and protect those in greatest need.

CDC has received $340 million in total ARRA funding. As part of this total, the Section 317 Immunization Program and healthcare-associated infections (HAI) prevention programs have received funding.

The Section 317 Immunization Program has received a one-time, time-limited appropriation of $300 million provide a historic opportunity to make the benefits of vaccination available to more Americans by providing a 40 percent increase in Section 317 Immunization funding over the two-year funding period:

HAI has received $40 million for HAI prevention that will be available to states, the District of Columbia, and Puerto Rico. These investments will ramp up state and local efforts to monitor and reduce HAIs by creating or expanding state-based HAI prevention collaboratives that will implement HHS recommendations and use CDC's National Healthcare Safety Network (NHSN) to measure outcomes and prevent HAIs. These investments will also enhance states abilities to assess where HAIs are occurring and evaluate the impact of hospital-based interventions in other healthcare settings and build a public health workforce in health departments that can lead state-wide initiatives to ensure progress towards the national prevention targets outlined in the HHS action plan.

More information on these and other ARRA programs can be found at www.hhs.gov/recovery.

SUMMARY OF TARGETS AND RESULTS TABLE

The table below provides a summary of CDC's performance measures.

Fiscal Year	Targets	Results Reported	Results Reported ÷ Targets	Targets Met	Targets Unmet	Targets Unmet But Improved	% of Targets Met
2005	59	55	93%	36.03	18.97	6.33	66%
2006	85	77	91%	56.74	20.26	5.71	74%
2007	118	102.67	87%	68.34	34.33	11.33	67%
2008	135	68	50%	60	8	1	88%
2009	133	N/A	N/A	N/A	N/A	N/A	N/A
2010	136	N/A	N/A	N/A	N/A	N/A	N/A

PERFORMANCE DETAIL

INFECTIOUS DISEASES

Immunization and Respiratory Diseases

Measure	FY	Target	Result
1.E.1: Make vaccine distribution more efficient and improve availability of vaccine inventory by reducing the number of vaccine inventory depots in the U.S. *(Efficiency)*	*2010*	Maintain 98% reduction in inventory depots	Jan 31, 2011
	2009	Reduce inventory depots by 98%	Jan 31, 2010
	2008	Reduce inventory depots by 50%	98% reduction (Target Exceeded)
	2007	Reduce inventory depots by approximately 17%	36% reduction (Target Exceeded)
	2006	Award contract to centralize distribution, validate existing baseline	Yes (Target Met)
	2005	Baseline	400

Measure	Data Source	Data Validation
1.E.1	Grantee annual report (VFC Management Survey), grantee interviews, and site visits were used to gather the baseline information. A VMBIP semi-annual survey instrument is being developed and will be administered to grantees to track vaccine storage locations.	Data submitted from grantees will be analyzed by the CDC program staff and validated through a regularly scheduled review process.

Efficiency Measure 1.E.1:

The Section 317 grant program was among the first round of programs to undergo the formal program assessment in 2002 with results reported in the FY 2004 budget submission. Assessors gave the 317 program high marks for its design, function, and success in achieving dramatic disease reduction through childhood vaccination. Program assessors from OMB found that the program would be improved by a more specific mechanism to link successful outcomes to program processes and budgets. Subsequent to the assessment, the program initiated the vaccine management business improvement project (VMBIP) to revamp the entire vaccine distribution and ordering process and enhance the efficiency and accountability of vaccine management systems. The reduction of vaccine inventory depots has been achieved ahead of schedule. The program will develop a new efficiency measure to address continued program improvements.

In September 2006, CDC awarded a national centralized vaccine distribution contract to increase the efficiency, visibility, and management of publicly purchased vaccines by centralizing and consolidating vaccine inventory and distribution. As of July 1, 2008, all of the 64 immunization program grantees have successfully transitioned to centralized distribution. The program has consistently met its targets for this measure. The number of depots has been reduced by 98 percent (from 396 depots to eight).

Efficiencies anticipated from consolidation of vaccine depots include improved management of vaccine inventory through use of distribution best practices and increased visibility of the location of vaccines throughout the pubic vaccine supply chain. These efficiencies will enhance CDC's ability to address public health emergencies such as vaccine shortages supplying vaccine needs due to outbreaks, and natural disasters. Full implementation of this new vaccine purchase and distribution operating model is anticipated to gain additional efficiencies by reducing vaccine wastage and reducing inventory holding costs.

Measure	FY	Target	Result
Long Term Objective 1.1: Reduce the number of indigenous cases of vaccine-preventable diseases.			
1.1.1a: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Paralytic Polio. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	0	Sep 30, 2010
	2008	0	Sep 30, 2009
	2007	0	0 (Target Met)
	2006	0	0 (Target Met)
	2005	0	0 (Target Met)
1.1.1b: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Rubella. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	5	Sep 30, 2010
	2008	8	Sep 30, 2009
	2007	8	12 (Target Not Met)
	2006	15	11 (Target Exceeded)
	2005	15	7 (Target Exceeded)
1.1.1c: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Measles. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	25	Sep 30, 2010
	2008	35	Sep 30, 2009
	2007	45	14 (Target Exceeded)
	2006	50	24 (Target Exceeded)
	2005	50	42 (Target Exceeded)
1.1.1d: Reduce or maintain the number of indigenous cases at	*2010*	0	Sep 30, 2011
	2009	75	Sep 30, 2010

Measure	FY	Target	Result
0 by 2010 for the following: Haemophilus influenzae. *(Outcome)*	*2008*	150	Sep 30, 2009
	2007	150	202 (b + unknown) (children under 5) (Target Not Met but Improved)
	2006	150	208 b + unknown (Target Not Met but Improved)
	2005	150	226 b + unknown (Target Not Met)
1.1.1e: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Diphtheria. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	3	Sep 30, 2010
	2008	4	Sep 30, 2009
	2007	4	0 (Target Exceeded)
	2006	5	0 (Target Exceeded)
	2005	5	0 (Target Exceeded)
1.1.1f: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Congenital rubella Syndrome. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	2	Sep 30, 2010
	2008	3	Sep 30, 2009
	2007	4	0 (Target Exceeded)
	2006	5	0 (Target Exceeded)
	2005	5	0 (Target Exceeded)
1.1.1g: Reduce or maintain the number of indigenous cases at 0 by 2010 for the following: Tetanus. *(Outcome)*	*2010*	0	Sep 30, 2011
	2009	8	Sep 30, 2010
	2008	10	Sep 30, 2009
	2007	13	6 (Target Exceeded)
	2006	25	12 (Target Exceeded)
	2005	25	5 (Target Exceeded)
1.1.2: Reduce the number of indigenous cases of mumps in persons of all ages	*2010*	0	Sep 30, 2011
	2009	100	Sep 30, 2010
	2008	200	Sep 30, 2009

Measure	FY	Target	Result
from 666 (1998 baseline) to 0 by 2010. *(Outcome)*	*2007*	200	800 (Target Not Met but Improved)
	2006	200	6,584 (Target Not Met)
	2005	200	314 (Target Not Met)
1.1.3: Reduce the number of indigenous cases of pertussis among children under 7 years of age. *(Outcome)*	*2010*	2,000	Sep 30, 2011
	2009	2,150	Sep 30, 2010
	2008	2,300	Sep 30, 2009
	2007	2,300	3,106 (Target Not Met but Improved)
	2006	2,300	3,841 (Target Not Met but Improved)
	2005	2,300	7,347 (Target Not Met)

Measure	Data Source	Data Validation
1.1.1 - 1.1.3	National Notifiable Disease Surveillance System (NNDSS), National Congenital Rubella Syndrome Registry (NCRSR), Active Bacterial Core Surveillance (ABCs), Emerging Infections Programs.	NNDSS - CDC receives reports of notifiable diseases from the 50 state health departments, New York City, the District of Columbia, and five U.S. Territories. These reports are initiated when health care providers suspect or diagnose a case of a notifiable disease. Clinical laboratories also report results consistent with reportable diseases. Reporting of nationally notifiable diseases to CDC by the states is voluntary and only mandated (i.e., by state legislation or regulation) at the state level. All case reports, especially for low incidence and internationally quarantinable diseases, must be verified by the appropriate state officials. NNDSS case counts are likely incomplete, and therefore, these data are considered to represent a minimum number of cases. State reporting practices and some administrative procedures used in processing the NNDSS data may impact surveillance data reports and analyses. CDC staff provides technical assistance relevant for data verification to ensure data accuracy, completeness, and timeliness. Specifically, assistance includes: computer specifications and software for reporting from state and territorial health departments, development and implementation of procedures to validate surveillance data, and identification of incomplete records, transmission errors, and deviations from expected numbers. NCRSR - CDC maintains the NCRSR with supplemental information to NNDSS. The registry includes data only on cases classified as confirmed or compatible. Cases are also classified as indigenous (exposure within the U.S.) and imported (exposure outside the U.S.) and are tabulated by year of birth. In contrast, cases reported to the NNDSS are tabulated by year of report. ABCs is an active laboratory and population-based surveillance system

Measure	Data Source	Data Validation
		for invasive bacterial pathogens of public health importance, and currently operates in 10 sites in the U.S. For each case of invasive disease in the surveillance population, a case report with basic demographic information is completed and bacterial isolates are sent to CDC and other reference laboratories for additional laboratory evaluation. The ABCs program provides routine laboratory audits to ensure the completeness of data collection. Each month, CDC staff review data and communicate potential errors to state personnel for evaluation. Performance standards for active surveillance have been established in each site to permit aggregation of data collected via somewhat different approaches. Detailed instructions for completion of case report forms ensure consistency across sites. Timeliness and completeness of reporting in ABCs is evaluated using threshold percentages of isolate collection and enrollment into special studies. Surveillance "fatigue" or operational problems are assessed using isolate shipping schedules, audit sensitivities, and the timeliness of the audit data being completed by set deadlines.

Long-term Objective 1.1, Performance Measure 1

Vaccination programs have made a major contribution to the elimination of many vaccine-preventable diseases and significantly reduced the incidence of others. National recommendations provide guidance for use of vaccine to prevent or eliminate 17 vaccine-preventable diseases. Nine of the 17 diseases currently vaccine-preventable are represented by this objective to reduce the incidence of indigenous cases of vaccine-preventable disease. The sub-objectives for Long-Term Objective 1.1 correspond to many of the diseases prevented by vaccine coverage objectives tracked in Long-Term Objective 1.2 which ensure that children age 19 to 35 months are appropriately vaccinated.

The ambitious 2010 targets for these sub-objectives are consistent with the Healthy People (HP) 2010 goals set prior to 2000. Some targets need to be reconsidered. For instance, tetanus is a non-infectious vaccine-preventable disease which is naturally occurring in the environment, thus a disease reduction goal of zero is not realistic, even with universal vaccination. The process for developing goals and targets for HP 2020 is in its very early stages progressing. The Healthy People goal review is process will initiate extensive program-level consideration of objectives and corresponding targets for the next decade. In cases in which the program is consistently not meeting its targets, consideration is given for how targets can be set more appropriately through the HP 2020 process.

In 2006, 55 cases of measles were reported in the United States (U.S.). Thirty-one of these 55 cases were classified as imported cases and 24 were classified as indigenous. In 2007, a total of 43 measles cases were reported in the U.S. of which 29 were classified as importations and 14 were classified as indigenous (i.e. acquired in the U.S.). The HP 2010 and GPRA goal is indigenous measles cases, therefore, in 2007; the goal of less than 45 cases was achieved. Although the target for indigenous measles cases was exceeded in 2007, there are factors that make it unlikely that the target will be achieved or exceeded each year. The number of imported cases and the locations in which those cases occur greatly impact the number of indigenous

cases the majority of which are acquired (spread) from imported cases. The imported cases in 2007 did not occur in areas with low vaccination coverage rates and thus there was very limited spread from the importations. Reaching the 2010 goal of zero cases may be unlikely for multiple reasons: 1) measles is still endemic in many parts of the world; 2) no vaccine, including MMR, is 100 percent effective; and 3) some groups of persons in the U.S., including infants less than 12 months and persons with severe immunocompromising conditions, are not recommended for vaccination. Until measles is eliminated globally, there continues to be a risk of measles transmission to U.S. residents. CDC will continue to work with state health departments and immunization partners to ensure high routine 2-dose MMR coverage and MMR vaccination of selected high-risk groups as defined by the Advisory Committee on Immunization Practices (ACIP). CDC will also continue to be a major partner in the global measles elimination initiative. Given the continued risk of measles transmission in the U.S., CDC subject matter experts will consider the above mentioned issues when setting the HP 2020 goal for measles.

The Pan American Health Organization developed a comprehensive strategy in 2004 to eliminate rubella and Congenital Rubella Syndrome (CRS) from the Americas by 2010. In 2004, the endemic transmission of rubella was declared eliminated from the United States. Countries have demonstrated progress toward the rubella and CRS elimination goal. Of the 12 cases of rubella in the United States in 2007, six were associated with importation from another country. Though the sources for the remaining six cases were unknown, there is no evidence that endemic transmission continues in the United States. Until rubella is eliminated from the Americas and other countries, rubella cases may be imported to the United States from international sources. In light of this, the targets may be reconsidered as part of the HP 2020 process.

Haemophilus influenzae type B (Hib) – conjugate vaccines for the prevention of Hib are highly effective. Hib is no longer the leading cause of meningitis among children younger than five years old in the United States. The number of possible cases reported increased was 196 cases in FY 2004, 226 cases in FY 2005, and 208 in 2006. The FY 2006 target of 150 cases remains unmet. In accordance with the HP 2010 goal, this measure includes both type b cases (for which vaccine would be effective) and those with unknown serotypes. The majority of these cases have unkown or missing serotype, so the total number of Hib cases is unconfirmed. Neither HP 2010 targets or PART/GPRA targets have been adjusted to account for cases with unknown serotype. Therefore, the actual number of Hib cases may be less than 150, and small changes in the number of possible cases should be interpreted with caution. To address this issue of incomplete serotyping, CDC is working with state partners to provide technical assistance for enhanced Hib serotyping and to identify systematic errors in data transmission. As the program sets forth goals for the next decade through the HP 2020 process, Hib reduction targets and measures should be revised to ensure that reductions in Hib disease are more clearly distinguishable.

Long-term Objective 1.1, Performance Measure 2

In 2007, there were 800 cases of mumps in the United States. Although this represents a dramatic drop in cases the target is unmet. The mumps disease targets were not met in FY 2007 due to a large national mumps outbreak that began in December 2005 and peaked in 2006 with 6,584 reported cases. During FY 2007, a higher number of mumps cases continued to be reported than before the 2006 outbreak likely due to higher awareness and enhanced surveillance, as well as a true increase in the number of cases as a consequence of the large outbreak. As a result of the 2006 outbreak, vaccination recommendations were modified in 2006 to better define evidence of immunity, ensure routine two-dose vaccination for high risk adult

groups including college students and healthcare workers, and address additional vaccination needs for persons in outbreak settings.

Surveillance activities have also been enhanced to encourage reporting of all confirmed and probable mumps cases. Surveillance definitions for confirmed, probable and suspect mumps cases were revised by the Council for State and Territorial Epidemiologists (CSTE), in collaboration with CDC, in 2007 and the new definitions went into effect on January 1, 2008. CDC is currently involved in studies to assess the level of protection from mumps from one and two doses of measles, mumps and rubella (MMR) vaccine to better understand why the 2006 outbreak occurred and use the information to prevent future outbreaks. CDC is also working to develop better laboratory tests to reliably diagnose mumps, especially in vaccinated persons.

Prior to FY 2004, there was some progress in mumps disease reduction - reflected by a two-thirds reduction in cases from FY 1998 (666 cases) to FY 2003 (231 cases) meeting the reduction target that year of 250 cases. However, in FY 2004, the reduction target was 200 and the number of reported mumps cases was 258, thus CDC did not meet the disease reduction target for that year or for FY 2005. Studies conducted during a small mumps outbreak in Maine in 2005 and during the large 2006 mumps outbreak showed that two doses of mumps or MMR vaccine was 79 percent - 91 percent effective in preventing mumps with lower effectiveness (79-88 percent) in settings of high exposure and transmission (college campuses). Thus, given the effectiveness of two doses of mumps vaccine and the continued risk of mumps importations, meeting the 2010 goal of zero indigenous cases may not be feasible. Even if the U.S. is successful in achieving elimination of endemic transmission of mumps (not yet documented), importations of mumps will continue into the U.S. because only 58 percent of countries around the world use mumps vaccines and it is expected that some spread will occur from these cases. As a result of lessons learned during the 2006 mumps outbreak, CDC will also work with state health departments, and with laboratory, immunology and mumps disease subject matter experts to reassess the current mumps targets to determine if changes need to be made. Changes, if necessary, will be made in conjunction with the HP 2020 process.

Long-term Objective 1.1, Performance Measure 3

Pertussis (whooping cough) is a highly contagious, vaccine-preventable bacterial illness characterized by prolonged and severe cough. Although pertussis affects all age groups, complications and death are most frequently recognized among unvaccinated infants. The FY 2007 target was to reduce the number of pertussis cases among children under seven years of age to 2,300. The actual number of cases in this age group was 3,106. Although the target was unmet, there was a 48 percent reduction in the number of cases in 2006 compared to 2005 and 20 percent reduction in the number of cases in 2007 compared to 2006. Many cases occur among infants who are exposed to pertussis before they have received the complete series of vaccinations at 15-18 months. Introduction in 2006 of adolescent and adult versions of improved acellular pertussis vaccines combined with a tetanus and diphtheria booster (Tdap vaccine) provides new opportunities for reducing severe pertussis and its complications in all age groups in the U.S. This measure and corresponding targets are consistent with HP 2010 goals. The 1998 baseline for this performance measure was 3,417; advances in disease surveillance and diagnostics for pertussis have dramatically increased the number of reported cases since the Healthy People 2010 target of 2,000 cases was set a decade ago. A review of prior performance indicates that targets set a decade ago were possibly too ambitious and have not been adjusted to account for progress in diagnostics and disease surveillance. CDC pertussis subject matter experts and infectious disease control partners will work to reconsider this goal. It is possible to adjust targets for HP 2020, but is it also important to consider whether or not this

performance measure, given performance to date, continues to be the best one to demonstrate progress in the prevention and control of pertussis.

Measure	FY	Target	Result
Long Term Objective 1.2: Ensure that children and adolescents are appropriately vaccinated.			
1.2.1a: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 4 doses DTaP vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	85% (Target Not Met)
	2006	90%	85% (Target Not Met)
	2005	90%	86% (Target Not Met)
1.2.1b: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 3 doses Hib vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	93% (Target Exceeded)
	2006	90%	93% (Target Exceeded)
	2005	90%	94% (Target Exceeded)
1.2.1c: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 1 dose MMR vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	92% (Target Exceeded)
	2006	90%	92% (Target Exceeded)
	2005	90%	92% (Target Exceeded)
1.2.1d: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 3 doses of hepatits B vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	93% (Target Exceeded)
	2006	90%	93% (Target Exceeded)

Measure	FY	Target	Result
	2005	90%	93% (Target Exceeded)
1.2.1e: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 3 doses polio vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	93% (Target Exceeded)
	2006	90%	93% (Target Exceeded)
	2005	90%	93% (Target Exceeded)
1.2.1f: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 1 dose varicella vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	90% (Target Met)
	2006	90%	88% (Target Not Met)
	2005	90%	88% (Target Not Met)
1.2.1g: Achieve or sustain immunization coverage of at least 90% in children 19- to 35-months of age for: 4 doses of pneumococcal conjugate vaccine (PCV7). *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	75% (Target Not Met but Improved)
	2006	90%	68% (Target Not Met)
1.2.2: Achieve or sustain immunization coverage of at least 90% in adolescents 13 to 15 years of age for: 1 dose of Td containing vaccine. *(Output)*	*2010*	90%	Sep 30, 2011
	2009	90%	Sep 30, 2010
	2008	90%	Sep 30, 2009
	2007	90%	69% (Target Not Met but Improved)
	2006	Baseline	56.7%

Measure	Data Source	Data Validation
1.2.1	Childhood data are collected through the National Immunization Survey (NIS) and reflect calendar years.	The NIS uses a nationally representative sample and provides estimates of vaccination coverage rates that are weighted to represent the entire population, nationally, and by region, state, and selected large metropolitan areas. The NIS, a telephone-based survey, is administered by random-digit-dialing to find households with children aged 19 to 35 months. Parents or guardians are asked about the vaccines, with dates, that appear on the child's "shot card" kept in the home; demographic and socioeconomic information is also collected. At the end of the interview with parents or guardians, survey administrators request permission to contact the child's vaccination providers. Providers are then contacted by mail to provide a record of all immunizations given to the child. Examples of quality control procedures include 100% verification of all entered data with a sub-sample of records independently entered. The biannual data files are reviewed for consistency and completeness by CDC's National Center for Immunization and Respiratory Diseases, Immunization Services Division - Assessment Branch and CDC's National Center for Health Statistics' Office of Research and Methodology. Random monitoring by supervisors of interviewers' questionnaire administration styles and data entry accuracy occurs daily. Annual methodology reports and public use data files are available to the public for review and analysis.

Measure	Data Source	Data Validation
1.2.2	Since 2006, CDC has conducted the National Immunization Survey-Teen (NIS-Teen) to estimate vaccination coverage from a national sample of adolescents aged 13-17 years. The NIS-Teen data reported in 2007 were collected fourth quarter 2006. Vaccination coverage among adolescents will continue to be monitored annually.	The NIS Teen Survey was initiated in FY 2006 and provides national level estimates of vaccination coverage for 13-17 year old adolescents. It follows the same methodology of the NIS except that it is conducted only in the fourth quarter of the year. The NIS Teen Survey may be expanded in FY 2008 to provide vaccination coverage estimates by state and selected large metropolitan areas. In 2008, NIS-Teen is collecting state and local data that will provide a larger sample size adequate for examining vaccination coverage by race/ethnicity, socioeconomic status, and geographic area.

Long-term Objective 1.2, Performance Measure 1

The Advisory Committee on Immunization Practices (ACIP) Recommended Childhood and Adolescent Immunization Schedule advises routine vaccination of children for the above diseases. As childhood immunization coverage rates increase, cases of vaccine-preventable diseases decline significantly.

The nation's childhood immunization coverage rates are at record high levels for most vaccines.

- In 2007, the 90 percent coverage target has been exceeded for five of the seven routinely recommended childhood vaccines (Hib, MMR, hepatitis B and polio, and varicella). Coverage with at least one dose of varicella vaccine reached 90 percent for the first time; rates have risen from 43 percent in FY 1998 to 90 percent in FY 2007. CDC/HHS and the ACIP recently made policy changes for the use of varicella (chickenpox) vaccine to include a recommendation for routine two-dose varicella vaccination of children over 12 months of age. This new recommendation is expected to further reduce the number of cases and outbreaks of varicella in the U.S.
- Vaccination coverage rates for existing vaccines are high, but each year a new cohort of children are born and the program must make the same efforts to assure the vaccination of these children as was needed with the preceding cohorts. The 90 percent coverage goal is ambitious because as new vaccines are added to the childhood immunization schedule sustaining 90 percent vaccination coverage with vaccines recommended for some time while trying to achieving 90 percent coverage with vaccines recently recommended becomes increasingly difficult.
- Nearly one million two-year olds in the U.S. have not received one or more of the recommended vaccines. Even though coverage levels for immunized children by age two are high nationally, and in many states, pockets of need, or areas within each state

and major city where substantial numbers of under-immunized children reside, continue to exist.

The target of 90 percent coverage was met in FY 2007 for all routinely recommended pediatric vaccines with the exception of pneumococcal conjugate vaccine (PCV7), and the fourth dose of Diphtheria-Tetanus-acellular Pertussis (DTaP).

- The prevention of pneumococcal infections with PCV7 is becoming more important because of problems with treatment due to antibiotic resistance. Coverage with (4) doses of PCV7 increased significantly from 68 percent in 2006 to 75 percent in 2007, a substantial increase since PCV7 was first recommended in 2000. Please refer to the detailed discussion of PCV7 in the narrative for Long Term Objective 1.4, Performance Measure 1, regarding reduction of pneumococcal disease rates in children and older adults.
- Coverage with (4) doses of DTaP has not changed during the past five years. In FY 2007, the coverage rate for (4) doses of DTaP vaccine continues to be 85 percent. This goal continues to be difficult to achieve because it requires that the fourth dose be given to the child between 15 and 18 months of age. The administration of DTaP tends to coincide with regular well-baby visits through the third dose; however, the fourth dose does not, requiring a visit specifically for this purpose. Coverage rates are 96 percent for the first three DTaP doses, but there is a drop-off for the fourth dose.

To sustain current high coverage rates and increase coverage rates for vaccines that have not yet reached the 90 percent target, CDC provides funding, guidance, and technical assistance to state and local immunization programs so that they may conduct provider assessments, develop and utilize immunization information systems, utilize coverage assessment information from the National Immunization Survey, and provide education and training to both public and private immunization providers. Vaccination coverage rates for children are assessed annually by the National Immunization Survey and results are released to the public. http://www.cdc.gov/media/pressrel/208/r080904.htm

Long-term Objective 1.2, Performance Measure 2

New vaccine recommendations warrant the addition of an adolescent component to the longstanding childhood immunization goal as fully vaccinating a child now extends to the adolescent years. Beginning in 2005 and 2006, 11 and 12 year olds are recommended to receive three vaccines (tetanus, diphtheria, acellular pertussis [Tdap], meningococcal conjugate [MCV], and human papillomavirus [HPV] vaccines). Initially, the program is only reporting performance for Td containing vaccine; however, performance for MCV and HPV will be reported in the near future. Td-containing vaccines have been recommended for routine use among adolescents for well over five years. This newly formulated booster vaccine Tdap is a replacement vaccine rather than a newly recommended vaccine.

Consistent with the corresponding childhood measure in this goal, performance for newly recommended adolescent vaccines will be reported in GPRA five years after ACIP recommends the vaccine and data becomes available. The performance reporting delay occurs because it takes time for the public and private sector immunization infrastructure to adjust to ensure program components are in place to implement the recommendation and assess vaccination coverage. Also, new vaccine implementation is dependent upon state-level policy decisions that impact which vaccines will be available through the Section 317 immunization program at public health clinics.

In 2007, vaccination coverage for adolescents aged 13 15 years increased significantly from 57 percent in 2006 (baseline year) to 69 percent for at least one dose of Td containing vaccine.

Measure	FY	Target	Result
Long Term Objective1.3: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.			
1.3.1a: Increase the rate of influenza and pneumococcal vaccination in persons 65 years of age and older to 90% by 2010: Influenza. *(Output)*	*2010*	90%	Jan 31, 2012
	2009	85%	Jan 31, 2011
	2008	85%	Jan 31, 2010
	2007	74%	67% (Target Not Met but Improved)
	2006	74%	64% (Target Not Met but Improved)
	2005	74%	59.7% (Target Not Met)
1.3.1b: Increase the rate of influenza and pneumococcal vaccination in persons 65 years of age and older to 90% by 2010: Pneumococcal. *(Output)*	*2010*	90%	Jan 31, 2012
	2009	80%	Jan 31, 2011
	2008	80%	Jan 31, 2010
	2007	69%	58% (Target Not Met)
	2006	69%	57% (Target Not Met)
	2005	69%	56.3% (Target Not Met)
1.3.2a: Increase the rate of vaccination among non-institutionalized high-risk adults aged 18 to 64 years to 60% by 2010 for: Influenza. *(Output)*	*2010*	60%	Jan 31, 2012
	2009	40%	Jan 31, 2011
	2008	40%	Jan 31, 2010
	2007	32%	36% (Target Exceeded)
	2006	32%	34% (Target Exceeded)
	2005	32%	25.3% (Target Not Met)
1.3.2b: Increase the rate of vaccination among non-institutionalized high-risk adults aged 18 to 64 years to 60% by 2010 for: Pneumococcal.	*2010*	60%	Jan 31, 2012
	2009	35%	Jan 31, 2011
	2008	35%	Jan 31, 2010
	2007	22%	24% (Target Exceeded)

Measure	FY	Target	Result
(Output)	*2006*	22%	23% (Target Exceeded)
	2005	22%	22.6% (Target Exceeded)

Measure	Data Source	Data Validation
1.3.1 - 1.3.2	National Health Interview Survey (NHIS)	NHIS is a cross-sectional household interview survey. Households chosen for interviews are a probability sample representative of the target population. The annual response rate is more than 90 percent of eligible households in the sample. NHIS has three modules: 1) The basic module remains largely unchanged from year to year and allows for trend analysis. Data from more than one year can also be pooled to increase the sample size for analytic purposes. The basic module contains a family core, a sample adult core, and a child core through which data are collected on the family unit and from one randomly selected adult and child. 2) Periodic modules collect more detailed information on some of the topics included in the basic module. 3) Topical modules respond to new data needs as they arise. Data are collected through a personal household interview conducted by staff employed and trained by the U.S. Census according to procedures delineated by CDC. Data are reviewed and analyzed extensively to ensure their validity and reliability. The survey sample is designed to yield estimates that are representative and that have acceptably small variations. Before the actual survey, cognitive testing is performed by CDC's Questionnaire Design Research laboratory, and pretests are conducted in the field. Once collected, data are carefully edited, checked, and compared to data from earlier surveys and/or independent sources. Staff members calculate descriptive statistics and perform in-depth analyses, which result in feedback on the analytic usefulness of the data.

Long-term Objective 1.3, Performance Measure 1

During the past decade, vaccination coverage levels among older adults increased slightly as CDC implemented national strategies and promoted adult and adolescent immunization among healthcare providers and state and local governments. Influenza vaccination coverage levels among the elderly have been stable with a slight increase from 64 percent in 1998 to 66 percent in the 2006-2007 influenza season. Despite recent vaccine availability issues, the increase in vaccination coverage began to slow before 2000. The plateau is not fully understood. Because large gaps remain between existing coverage levels and some of the targets for subsequent years, CDC decided to maintain an influenza vaccination target of 74 percent for FY 2005 to FY 2007. The FY 2008 Presidents Budget request included additional funds to increase demand for influenza vaccine. Therefore, CDC increased the target in FY 2008 to 85 percent coverage for influenza vaccination, which will continue into FY 2009. The FY 2010 target of 90 percent is consistent with the Healthy People (HP) 2010 target set prior to 2000.

As anticipated influenza vaccine supply has increased; as many as 146 million doses of vaccine were produced for use in the United States during the 2008-09 influenza season. This is an all-time high supply of vaccine making it possible for more people than ever to seek protection from

the flu. CDC and partners such as the National Influenza Vaccine Summit will continue to aggressively promote vaccination. Healthcare provider recommendations for vaccination are very influential in an adult's decision to receive influenza vaccine. CDC, along with the National Influenza Vaccine Summit, will target educational and communication efforts to healthcare providers. These efforts will include encouraging healthcare providers to recommend influenza vaccine to their patients and encouraging vaccination of healthcare providers, a recommended group with consistently low vaccine coverage. Efforts will also be focused on eliminating disparities in coverage.

The percentage of adults aged 65 years and over who had ever received a pneumococcal vaccination increased from 50 percent in 1999 to 58percent in 2007 (coverage was 57 percent in 2006) CDC has worked with the Centers for Medicaid and Medicare Services to raise the reimbursement rate for influenza and pneumococcal vaccines. Similar challenges apply to pneumococcal vaccination in adults as for influenza vaccination. Because large gaps remain between existing coverage levels and some of the targets for subsequent years, CDC decided to maintain the same targets for FY 2005, 2006 and 2007 for pneumococcal vaccination in this age group. However, due to an anticipated increase in aggressive vaccine promotion efforts, CDC raised the FY 2008 goal to 80 percent, which will continue into FY 2009. The FY 2010 target of 90 percent is consistent with the HP 2010 target set prior to 2000.

During the reporting of FY 2007 data for this measure it was determined that prior performance reports for 2003, 2005 and 2006, in the performance appendix about the vaccination of older adults age 65 and older were based on National Immunization Survey data rather than the National Health Interview Survey. The previously reported data has been adjusted because the National Health Interview Survey is, and has been for some time, the approved data source for this performance measure. Prior reporting was corrected to ensure that the adult immunization performance narrative about data analysis and trends is consistent and accurate.

Long-term Objective 1.3, Performance Measure 2

The Advisory Committee on Immunization Practices (ACIP) Recommended Adult Immunization Schedule advises vaccination for influenza for adults at high risk of complications each year and pneumococcal vaccination for those persons at high risk. Current levels of coverage among adults vary widely among different age, risk, and racial and ethnic groups. High-risk adults aged 18 to 64 years may not have insurance coverage for influenza and pneumococcal vaccines, may make fewer visits for preventive care, and may not recognize influenza and pneumococcal vaccination recommendations. Persons with high-risk conditions, such as heart disease and diabetes, remain at increased risk from these diseases.

The estimated influenza vaccination coverage for non-institutionalized persons 18-64 years with high-risk conditions increased from 34 percent in 2006 to 36 percent in 2007 and, the estimated pneumococcal vaccinations coverage increased from 23 percent in 2006 to 24 percent in 2007. CDC has been working with partner groups to increase awareness of influenza and pneumococcal vaccination recommendations among healthcare providers and the public.

The Centers for Disease Control and Prevention (CDC) sponsored National Influenza Vaccination Week December 8-14, 2008. This event is designed to highlight the importance of continuing influenza (flu) vaccination, as well as foster greater use of flu vaccine through the months of November, December and beyond. Extending the influenza vaccination season beyond November is one strategy for increasing the number of vaccinated adults.

Measure	FY	Target	Result
Long Term Objective 1.4: Protect Americans from infectious disease – pneumococcal.			
1.4.1a: By 2010, reduce the rates of invasive pneumococcal disease in children under 5 years of age to 46 per 100,000 and in adults 65 years and older to 42 per 100,000: Children under 5 years of age. *(Outcome)*	*2010*	46.0	Dec 31, 2011
	2009	46.0	Dec 31, 2010
	2008	46.0	Dec 31, 2009
	2007	47.0	21.9 (Target Exceeded)
	2006	47.0	20.8 (Target Exceeded)
	2005	Baseline	21.3
1.4.1b: By 2010, reduce the rates of invasive pneumococcal disease in children under 5 years of age to 46 per 100,000 and in adults 65 years and older to 42 per 100,000: Adults 65 years and older. *(Outcome)*	*2010*	42.0	Dec 31, 2011
	2009	42.0	Dec 31, 2010
	2008	42.0	Dec 31, 2009
	2007	45.0	39.2 (Target Exceeded)
	2006	47.0	40.5 (Target Exceeded)
	2005	Baseline	38.8

Measure	Data Source	Data Validation
1.4.1	The Active Bacterial Core surveillance (ABCs)/Emerging Infections Program Network	The data are collected by 10 states through active contact with all clinical laboratories in population catchment areas; the data are sent to CDC monthly for review, editing and cleaning. States conduct regular audits for missed cases either monthly or in some cases bi-yearly. Pneumococcal isolates are collected and serotyped validated at three quality-controlled reference laboratories.

Long-term Objective 1.4, Performance Measure 1

This data indicate that CDC currently is reaching disease reduction targets. In 2000, the first pneumococcal conjugate vaccine (PCV7) that was licensed and introduced for use in children in the U.S. In the years since licensure, the incidence of invasive pneumococcal disease in children under 5 years dropped dramatically from the prelicensure rates of ~87/100,000 in 1998

and 1999. Active surveillance for invasive pneumococcal disease, carried out by the CDC's Active Bacterial Core surveillance (ABCs) of the Emerging Infections Program Network, demonstrated dramatic declines in disease starting almost immediately after PCV7 was introduced. In addition, because of reduced pneumococcal transmission, marked decreases in invasive pneumococcal disease have been demonstrated among all adult age groups, including those 65 years of age and older. For every case of invasive pneumococcal disease prevented through direct vaccination, an additional case was prevented among unvaccinated persons.

Monitoring the effects of vaccination after licensure addresses large populations and high risk groups that are often excluded from clinical trials, and reflects the practical realities of immunization delivery. ABCs monitoring demonstrated that PCV7 reduced racial disparities in invasive pneumococcal disease and decreased the incidence and prevalence of drug resistant pneumococcal infections in the general population. Studies now demonstrate that the full benefits and cost-effectiveness of PCV-7 greatly exceed those estimated at the time national recommendations for childhood vaccination were made in 2000. Before it was licensed, PCV7 was known to be highly efficacious among fully vaccinated infants, protecting against invasive pneumococcal disease caused by vaccine-types. At the same time, the immunization program faced early challenges for the implementation of this vaccine.

- The vaccine was considered expensive at the time of introduction; incorporating PCV7 into the childhood schedule effectively doubled the cost of routine infant and childhood immunization.
- Soon after routine recommendations were issued, the supply of PCV7 was inadequate to meet demands. Interim recommendations for use of the vaccine according to partial schedules were issued. CDC worked with the vaccine manufacturer, Advisory Committee on Immunization Practices (ACIP), and professional organizations to promote optimal and equitable use of vaccine during those times of shortage. It should be emphasized that the disease reductions experienced in the U.S. occurred despite these vaccine shortages.

Vaccine supply is now adequate. However, challenges remain. A small increase in disease caused by strains not covered by the pneumococcal conjugate vaccine has been detected in the U.S., and CDC is monitoring trends in these strains. Pneumococcal conjugate vaccines that include additional pneumococcal strains not covered by PCV7 are being developed and once they progress to licensure, should they be recommended for widespread use, the program would reset the disease reduction targets for this goal. Monitoring invasive pneumococcal disease and antimicrobial resistance trends before, during, and after introduction new vaccines remains critical.

Measure	FY	Target	Result
Long Term Objective 1.5: Improve vaccine safety surveillance.			
1.5.1: Improve capacity to conduct immunization safety studies by increasing the total population of managed care organization members	*2010*	10,000,000	Jun 30, 2011
	2009	10,000,000	Jun 30, 2010
	2008	10,000,000	Jun 30, 2009
	2007	10,000,000	9,000,000 (Target Not Met)

Measure	FY	Target	Result
from which the Vaccine Safety Datalink (VSD) data are derived annually to 13 million by 2010. *(Output)*	*2006*	10,000,000	9,000,000 (Target Not Met)
	2005	10,000,000	9,000,000 (Target Not Met but Improved)

Measure	Data Source	Data Validation
1.5.1	Vaccine Safety Datalink (VSD)	Annual reports and other published information from the VSD-participating managed care organizations. Vaccine Safety Datalink (VSD) is a collaboration between CDC and eight managed care organizations (MCOs): Group Health Cooperative Center (Seattle, Washington), Harvard Pilgrim Health Care (Boston, Massachusetts), Health Partners Research Foundation (Minneapolis, Minnesota), Kaiser Permanente Colorado (Denver, Colorado), Kaiser Permanente Northwest (Portland, Oregon), Marshfield Clinic Research Foundation (Marshfield, Wisconsin), Northern California Kaiser Permanente (Oakland, California), and Southern California Kaiser Permanente Health Care Plan (Los Angeles, California). The VSD was established in 1990 to improve the evaluation of vaccine safety through the use of active surveillance and epidemiological studies. Annual reports and other published information from the VSD

Long-term Objective 1.5, Performance Measure 1

Vaccine Safety Datalinks (VSD) is a collaboration between CDC and eight managed care organizations (MCOs): Group Health Cooperative Center (Seattle, Washington), Harvard Pilgrim Health Care (Boston, Massachusetts), Healthpartners Research Foundation (Minneapolis, Minnesota), Kaiser Permanente Colorado (Denver, Colorado), Kaiser Permanente Northwest (Portland, Oregon), Marshfield Clinic Research Foundation (Marshfield, Wisconsin), Northern California Kaiser Permanente (Oakland, California), and Southern California Kaiser Permanente Health Care Plan (Los Angeles, California). The VSD was established in 1990 to improve the evaluation of vaccine safety through the use of active surveillance and epidemiological studies. The VSD provides comprehensive medical and immunization histories for more than 9.1 million people annually, which is three percent of the U.S. population.

The VSD has been used to demonstrate associations between intussusception following Rotasheild vaccination and the risk of seizures following measles, mumps, rubella (MMR) or whole-cell pertussis vaccine. Another valuable contribution of VSD is that it provides a rapid cycle analysis mechanism that can make preliminary assessments of vaccine safety concerns more rapidly than formal studies. This sequential monitoring method is currently being used to study vaccine safety concerns about rotavirus and intussusception, meningococcal conjugate vaccine and Guillain-Barre syndrome, the safety of human papillomavirus vaccine and seasonal influenza virus vaccines. In addition, VSD is also being used to analyze a potential vaccine safety signal of febrile seizures following combination measles-mumps-rubella, and varicella

vaccine (MMRV). In February 2008, VSD released preliminary results of a study on MMRV that found a slightly higher risk for seizures on day 7-10 after MMRV compared to MMR vaccine and varicella vaccine administered separately but at the same visit. CDC continues to investigate this association.

Since 2005 a total population of nine million has been achieved. However, the performance target of 10 million has not yet been met due to challenges with increasing populations in large-linked databases which is contingent on cooperating entities, resources, and technologies. However, in FY 2008, VSD began collecting adult data at seven sites which increased the study population. Expanding the number of participating managed care organizations is another strategy that would enable VSD to increase the percentage of the U.S. population represented in VSD and help to reach the performance target. During the FY 2010 budget and performance processes, this performance target will be re-evaluated and possibly changed.

Pandemic Influenza

Measure	FY	Target	Result
Long Term Objective 1.6: Protect Americans from infectious diseases – Influenza.			
1.6.2: Increase the percentage of Pandemic Influenza Collaborative Agreement grantees (SLTTs) that meet the standard for surveillance and laboratory capability criteria. *(Output)*	*2010*	80%	Dec 31, 2010
	2009	70%	Dec 31, 2009
	2008	50%	65% (Target Exceeded)
	2007	Baseline	32%

Long-term Objective 1.6, Performance Measure 2

The measure demonstrates integrated state and local improvements in preparedness and response planning for an influenza pandemic by identifying the extent to which Public Health Emergency Preparedness (PHEP) Cooperative Agreement grantees meet high priority standards in surveillance and laboratory capability planning. The target for FY 2008 (50 percent) used an improvement of 18 percent from the FY 2007 baseline of 32 percent as a foundation.

CDC is working extensively with grantees to provide and encourage technical assistance and other strategies to help them strengthen preparedness and response to influenza pandemics. Influenza pandemics pose a sustained threat of serious illness and death that can spread rapidly and simultaneously throughout the United States. CDC is responsible for monitoring and assessing public health components of grantee operation plans that help protect communities and minimize the impact of infection as much as possible. The performance measure will directly assess states and local communities in regard to ongoing improvement of their surveillance and laboratory capability.

HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Measure	FY	Target	Result
2.E.1: Increase the efficiency of core HIV/AIDS surveillance as measured by the cost per estimated case of HIV/AIDS diagnosed each year. *(Efficiency)*	*2010*	$650	Dec 31, 2011
	2009	$775	Dec 31, 2011
	2008	$840	Dec 31, 2010
	2007	$870	Dec 31, 2009
	2006	$940	$882 (Target Exceeded)
	2005	Baseline	$887

Measure	Data Source	Data Validation
2.E.1	HIV/AIDS Reporting System (HARS) is used to collect state HIV and AIDS data, financial assistance information is drawn from administrative records.	CDC conducts validation and evaluation studies of data systems which track AIDS deaths and HIV diagnosis to determine the quality of data generated by them.

Efficiency Measure 2.E.1:

CDC provides financial and technical support to all state health departments, which have the legal authority for mandating and defining processes for reporting of medical conditions, to produce HIV and AIDS surveillance data. These data are used by states to guide their prevention programs. At the national level these data are used to guide allocations of funding for HRSA-funded care and treatment programs and the Housing Opportunities for People with AIDS program supported by HUD. CDC uses HIV/AIDS surveillance data to identify populations most at risk and to guide prevention efforts.

However, while national data are available for AIDS cases, national data are not yet available on HIV infections. This is because states have historically used several different methods for collecting data on HIV infection: name-based, code-based, or name-to-code. In 2005, CDC recommended that all states and territories adopt confidential, name-based surveillance systems to report HIV infections. By April 2008, all states have implemented name-based HIV surveillance.

To monitor trends in the epidemic at a national level, CDC analyzes data from states with mature, confidential, name-based HIV surveillance systems. The number of states included in this analysis has risen over the years, as additional states have adopted confidential, name-based HIV surveillance methods, and as those systems are implemented and stabilize.

This measure reflects efficiencies that are being achieved in HIV surveillance nationally. Because CDC historically provided technical and financial support to HIV and AIDS surveillance systems regardless of the type of reporting used, funds allocated to states to conduct core case surveillance are not anticipated to rise dramatically even while more states report data in a format CDC can utilize. Additional efficiencies might also be achieved as surveillance systems

work to accommodate increased reports of HIV resulting from widespread implementation of HIV screening.

In 2003, 32 states had sufficiently mature and stable HIV data to include in CDC's analysis of trends. Approximately 32,000 cases of HIV/AIDS were estimated to have been diagnosed in those states in 2003. The cost per estimated diagnosed case (adjusted to 2005 dollars) was $1,357 that year. By 2005, the addition of New York to the analysis increased the number of estimated cases yearly by almost 5,000, thereby increasing the proportion of the national epidemic represented in the surveillance figures. In 2006, funding for HIV/AIDS case surveillance was increased slightly to help states with the transition to name-based HIV surveillance. Consequently, efficiency gains were less than in previous years. In the coming years, CDC anticipates that additional states will have sufficiently mature systems so that they may be included in the analysis.

Domestic HIV/AIDS Prevention

Measure	FY	Target	Result
Long Term Objective 2.1: Decrease the annual HIV incidence rate.			
2.1.1: Decrease the annual HIV incidence. [1] *(Outcome)*	2010	N/A	N/A
	2006	Baseline	56,300
2.1.2: Decrease the number of pediatric AIDS cases.[2] *(Outcome)*	*2010*	<75	Nov 30, 2011
	2009	<75	Nov 30, 2010
	2008	<75	Nov 30, 2009
	2007	<100	28 (Target Exceeded)
	2006	<100	38 (Target Exceeded)
	2005	N/A	53 (Target Not In Place)
2.1.3: Reduce the black:white rate ratio of HIV/AIDS diagnoses. *(Outcome)*	*2010*	8.2:1	Nov 30, 2011
	2009	8.2:1	Nov 30, 2010
	2008	8.4:1	Nov 30, 2009
	2007	8.4:1	8.51:1 (Target Not Met)
	2006	8.71:1	8.88:1 (Target Not Met)
	2005	N/A	8.71:1
2.1.4: Reduce the Hispanic:white rate ratio of HIV/AIDS diagnoses. *(Outcome)*	*2010*	3.3:1	Nov 30, 2011
	2009	3.3:1	Nov 30, 2010
	2008	3.4:1	Nov 30, 2009
	2007	3.4:1	3.46:1 (Target Not Met)
	2006	3.5:1	3.49:1 (Target Exceeded)
	2005	N/A	3.53:1
2.1.5: Increase the number of states with mature, name-based HIV surveillance systems. *(Output)*	*2010*	46	Nov 30, 2011
	2009	37	Nov 30, 2010
	2008	35	Nov 30, 2009
	2007	34	34 (Target Met)
	2006	33	33 (Target Met)

Measure	FY	Target	Result
	2005	N/A	33
2.1.6: Increase the percentage of HIV prevention program grantees using Program Evaluation and Monitoring System (PEMS) to monitor program implementation. *(Output)*	*Out-Year Target*	90% (2011)	N/A
	2010	90%	Oct 31, 2011
	2009	65%	Nov 30, 2010
	2008	45%	Nov 30, 2009
	2007	20%	67% (Target Exceeded)
	2006	Baseline	0
2.1.7: Increase the number of evidence-based prevention interventions that are packaged and available for use in the field by prevention program grantees. *(Output)*	*2010*	20	Jan 31, 2011
	2009	20	Jan 31, 2010
	2008	18	Nov 30, 2009
	2007	15	16 (Target Exceeded)
	2006	N/A	14
	2005	N/A	14
2.1.8: Increase the number of agencies trained each year to implement Diffusion of Effective Behavior Interventions (DEBIs). *(Output)*	*2010*	1,500	Nov 30, 2011
	2009	1,100	Feb 28, 2010
	2008	1,100	980 (Target Not Met)
	2007	1,100	1,147 (Target Exceeded)
	2006	N/A	987 (Target Not In Place)
	2005	N/A	1,114 (Target Not In Place)

[1] Measure 2.1.1 is a long-term outcome measure for which targets can be set only after three years of trend data are established; therefore, the first year for which a target will be set is FY 2011.
[2] Measure 2.1.2 Original baseline is 241 cases in 1998.

Measure	Data Source	Data Validation
2.1.1	HIV/AIDS Incidence Surveillance in 25 states	CDC conducts validation and evaluation studies of the data systems which monitor HIV incidence to determine the quality of data generated by them. The first national estimates will be generated from those areas with fully operational data collection systems. These areas are: Alabama, Arizona, California (3 sites), Colorado, Connecticut, DC, Florida, Illinois, Indiana, Louisiana, Massachusetts, Michigan, Mississippi, North Carolina, New Jersey,

Measure	Data Source	Data Validation
		New York City, New York State, Pennsylvania, South Carolina, Texas (2 sites), Virginia and Washington. Additional states will be included as their data collection systems become fully operational.
2.1.2 – 2.1.5	HIV/AIDS Reporting System (eHARS)	CDC conducts validation and evaluation studies of the data systems which monitor HIV/AIDS to determine the quality of data generated by them. As of December 2005, 33 states have mature, stable HIV surveillance systems to allow for trend analysis. These states are: Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Iowa, Indiana, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming. The period of time between a diagnosis of HIV or AIDS and the arrival of a case report at CDC is called the "reporting delay". In order to provide the best estimates of recent trends, HIV and AIDS surveillance data are analyzed by date of diagnosis and are statistically adjusted for reporting delays and incomplete information on some cases. CDC requires a minimum of 12 months after the end of a calendar year to provide accurate trend data.
2.1.6	Program Evaluation and Monitoring System (PEMS)	CDC evaluates the data systems used to report prevention program activity and develops guidelines for implementation, data entry and program monitoring to determine the quality of data generated by them.
2.1.7	Replicating Effective Programs (REP) Project data.	Internal program data are routinely monitored and cross-checked to ensure rapid movement of newly identified evidence-based prevention intervention onto field practice.
2.1.8	Diffusion of Effective Behavioral Interventions (DEBI) Tracking Database.	Internal program data are routinely monitored and cross-checked to ensure rapid deployment of DEBI trainings.

Long-term Objective 2.1, Performance Measure 1

Important note: CDC has updated all estimates for performance measures based on HIV/AIDS surveillance data, based on the most recently available data (through 2006). This update corrects errors that occurred in the AIDS estimations in the 2005 data set and provides CDC's most up to date and accurate estimates of HIV/AIDS cases.

The long-term measure addresses adults and adolescents (more than 13 years of age). The ability to monitor trends in new HIV infections (i.e., HIV incidence) is a fundamental indicator of

the impact of HIV prevention activities in the U.S. However, until this time, CDC has not had the ability to monitor trends in HIV incidence.

CDC previously used several proxies to monitor trends in the epidemic. AIDS case surveillance was used until the late 1990s to monitor trends in the epidemic; however, the advent of effective, life-prolonging treatments has rendered AIDS surveillance less useful in monitoring trends in HIV infection. More recently, CDC has used HIV transmission among persons less than 25 years old as a proxy for HIV incidence, since most HIV infections among persons less than 25 years old are recent. However, since an estimated one quarter of HIV infections are currently undiagnosed, this measure is subject to confounding with changes in HIV testing behaviors. Initiatives to increase HIV testing are designed to increase the proportion of HIV infections that are diagnosed. If incidence remains stable, increasing the proportion of infections that are diagnosed will result in increases in total diagnoses. Because such testing initiatives are currently being funded by CDC, new diagnoses are no longer adequate proxies for HIV incidence.

CDC provides funding and technical assistance to selected state and local health departments to conduct HIV incidence surveillance using newly available laboratory methods. This complex surveillance system uses the Serologic Testing Algorithm for Recent HIV Seroconversion (STARHS) methodology, a testing algorithm developed by CDC staff to assess HIV incidence. Using residual serum specimens from standard HIV antibody testing, STARHS uses a less sensitive Enzyme-Linked Immunoassay (EIA) to determine whether the person has been infected with HIV for less than six months (recent infection) or longer than six months (long-standing infection). Ongoing population-based data from the funded areas are adjusted to impute annual national HIV incidence estimates. CDC's first estimates from this system indicate that approximately 56,300 new HIV infections occurred in the United States in 2006. Targets for FY 2011 will be set in August 2010.

Long-term Objective 2.1, Performance Measure 2

This measure addresses children less than 13 years of age who have developed AIDS. Among this population, AIDS has declined from nearly 1,000 cases per year in the early 1990s to 38 in 2006. This decline was strongly associated with increased HIV testing and treatment of infected pregnant women. Effective treatments for pregnant women have been shown to greatly reduce, but not eliminate, perinatal transmission (transmission can be reduced from an estimated 25 percent to less than two percent among HIV-infected women in the U.S.). More recently, some decline is likely associated with improved treatments which delay the onset of AIDS for HIV-infected children.

Prevention programs for this age group have been extraordinarily successful and further declines are contingent upon continued delay of development of AIDS among those children under 13 who are already infected; reductions in the perinatal transmission rate among pregnant women; and reductions in the prevalence of HIV infection among women. Given the small number of cases, the growing population of women living with HIV and the existing number of children who are already infected, large decreases in the number of children developing AIDS are unlikely. CDC provides funding and technical assistance to 65 state and local health departments to conduct HIV/AIDS prevention programs, including perinatal transmission prevention. CDC also provides guidelines, technical assistance, and provider education to reduce perinatal HIV.

Long-term Objective 2.1, Performance Measure 3

African Americans are disproportionately affected by the HIV/AIDS epidemic. This measure compares the HIV/AIDS rates per 100,000 population between African Americans and whites in

the 33 states with mature, confidential, name-based HIV reporting. The rate ratio between African Americans and whites has declined from 10.3:1 in 2002 to 8.51:1 in 2007. While the target for FY 2007 was not met, CDC has made consistent progress on this measure and is undertaking a number of initiatives to further reduce the black:white ratio of HIV/AIDS diagnoses. CDC provides funding and technical assistance to 65 state and local health departments to conduct HIV/AIDS prevention programs, including evidence-based prevention interventions for African American communities. At the national level, CDC has initiated community mobilization efforts to engage leaders in the African American community in the fight against AIDS. CDC also provides guidelines, technical assistance, and provider education to reduce racial and ethnic disparities in HIV/AIDS rates. With this continued emphasis, CDC expects to continue to make steady progress in reducing this disparity.

Long-term Objective 2.1, Performance Measure 4

Hispanics are disproportionately affected by the HIV/AIDS epidemic. This measure compares the HIV/AIDS rates per 100,000 population between Hispanics and whites. The rate ratio between Hispanics and whites has declined from 4.1:1 in FY 2002 to 3.46:1 in FY 2007. While the target for FY 2007 was not met, CDC has made consistent progress on this measure and is undertaking a number of initiatives to further reduce the Hispanic:white ratio of HIV/AIDS diagnoses. CDC has sponsored research to adopt evidence-based interventions in order to meet the needs of the Hispanic community. CDC provides funding and technical assistance to 65 state and local health departments to conduct HIV/AIDS prevention programs, including evidence-based prevention interventions for Hispanic communities. CDC also produces guidelines, provides technical assistance, and provider education to reduce racial and ethnic disparities in HIV/AIDS rates.

Long-term Objective 2.1, Performance Measure 5

This measure addresses the HIV surveillance systems in the 50 states. Since 1985, all states and territories have conducted AIDS surveillance using the same standardized name-based methods as all other infectious diseases. Implementation of HIV surveillance has been less consistently implemented, and some states have used code-based methods of HIV surveillance.

Based on CDC recommendations and requirements in the Ryan White Treatment Modernization Act of 2006, all states have adopted name-based HIV surveillance systems. However, after a state implements name-based HIV surveillance, it takes time and effort for the system to mature (establish statewide surveillance standards, train reporting entities, eliminate backlogs of prevalent cases, eliminate interstate and intrastate duplicates, etc.). For purposes of conducting statistical analyses of trends, etc., CDC does not include data from states until the HIV surveillance system is identified as being mature. In CY 2007, 34 states had mature, confidential, name-based HIV reporting and were included in the 2006 surveillance report. CDC expects this number to increase slowly in the coming years.

Long-term Objective 2.1, Performance Measure 6

This measure addresses all CDC-funded prevention program grantees. CDC developed a Program Evaluation and Monitoring System (PEMS) to strengthen monitoring and evaluation of HIV prevention programs nationwide. PEMS is a secure Internet browser-based software program for data entry and reporting. PEMS is to be used by health departments and Community Based Organizations (CBOs) funded through CDC HIV prevention cooperative agreements. Data for this measure come from PEMS. Currently, more than 1,250 agencies, including health departments and (CBOs) across the country have access to PEMS. When fully implemented, PEMS will be used by all health departments and CBOs funded through CDC HIV prevention cooperative agreements and will provide quantitative data to show program progress

toward meeting implementation goals and program effectiveness.

In October 2007, CDC hosted a meeting of approximately 30 health departments and 15 CBOs to review technical issues of PEMS implementation and collection of data for monitoring and evaluation. CDC will continue to provide grantees with training necessary to implement PEMS and anticipates completion of training by August 2008. With this assistance CDC expects to gradually increase the percentage of grantees that use PEMS to monitor their programs. Data on PEMS usage in 2007 will be available in January 2009.

Long-term Objective 2.1, Performance Measure 7

This measure addresses the number of evidence-based prevention interventions that are packaged and available for use in the field by prevention program grantees. CDC conducts systematic reviews to identify efficacious HIV prevention behavioral interventions based on rigorous efficacy criteria. After an intervention has been identified as effective, CDC packages the intervention through the Replicating Effective Programs (REP) Project. CDC then provides technical assistance and training to move effective HIV interventions into program practice. CDC exceeded its target in FY 2007, with 16 evidence-based interventions, and plans to increase the number of interventions that are packaged and available for use in the field to 20 in FY 2009. CDC is requesting an increase in FY 2010 for HIV/AIDS prevention activities, and a portion of these funds would be used to provide training and support to health departments and CBOs to deliver existing evidence-based HIV prevention interventions. Priority will be given to interventions that address the populations at highest risk for HIV transmission. With this increase, CDC would evaluate the delivery and effectiveness of interventions currently in the field.

Long-term Objective 2.1, Performance Measure 8

This measure addresses the number of agencies trained each year to implement evidence-based behavioral HIV prevention interventions. The Diffusion of Effective Behavioral Interventions (DEBI) project was designed to bring evidence-based, community-and group-level HIV prevention interventions to community-based service providers and state and local health departments. The goal is to enhance the capacity to implement effective interventions at the state and local levels, to reduce the spread of HIV and STDs, and to promote healthy behaviors. CDC supports training for community-based organization (CBO) staff nationwide to help CBOs implement effective prevention interventions for their local populations. By FY 2006, most CBOs funded by CDC had been trained on one or more DEBIs, and in FY 2007, CDC exceeded its target by training 1147 agencies. Efforts are now focused on training replacement staff, newly funded CBOs, and newly available DEBIs. CDC expects to maintain its current level of training activities in FY 2010.

Measure	FY	Target	Result
Long Term Objective 2.2: Decrease the rate of HIV transmission by HIV-infected persons.			
2.2.1: Decrease the rate of HIV transmission by HIV-infected persons. *(Outcome)*	*2006*	Baseline	5%
2.2.2: Decrease risky sexual and drug using behaviors among persons at risk for transmitting HIV. *(Outcome)*	*2008*	Baseline	Nov 30, 2009

Measure	Data Source	Data Validation
2.2.1	Calculations of HIV incidence and prevalence, utilizing HIV/AIDS Incidence Surveillance System and special prevalence studies	CDC will conduct validation and evaluation studies of the methodology and data systems used to calculate HIV transmission rates. Population data come from the Bureau of Census and will be updated annually.
2.2.2	Medical Monitoring Project (MMP)	CDC will conduct validation and evaluation studies of the implementation of data systems that monitor medical care among persons diagnosed with HIV.

Long-term Objective 2.2, Performance Measure 1

This measure will serve as both a long-term and annual measure. The target population for this measure is adults and adolescents (over 13 years of age). The ability to monitor the national HIV transmission rate is a fundamental indicator of the impact of HIV prevention activities in the U.S. Until recently, CDC was not able to monitor transmission rates because means were not available to accurately monitor trends in new HIV infections. However, new laboratory methods now enable CDC to conduct HIV incidence surveillance. Today, CDC provides funding and technical assistance to selected state and local health departments to conduct HIV incidence surveillance. This surveillance system uses the STARHS methodology, (serologic testing algorithm for recent HIV seroconversion) a methodology developed by CDC staff to measure HIV incidence. Using residual serum specimens from standard HIV antibody testing, STARHS uses a less sensitive EIA to determine whether the person has been infected with HIV for less than six months (recent infection) or longer than six months (long-standing infection). Ongoing population-based data from funded areas are adjusted to impute annual national HIV incidence estimates. The first estimates from this new surveillance system were generated in 2008 for CY 2006.

In the era of more effective therapies for HIV, Americans with HIV are living longer and the total number of Americans living with HIV is increasing. CDC's analysis reveals that there were more

than a million people an estimated 1,106,400 adults and adolescents living with HIV infection in the United States at the end of 2006. This measure takes into account the increasing number of persons who are living with HIV, and therefore at risk of transmitting the virus as a result of the new, life-prolonging treatments. CDC is working to decrease transmission rates by increasing the number of people who know they are infected and providing prevention services to those living with HIV.

Long-term Objective 2.2, Performance Measure 2

CDC provides a variety of evidence-based prevention services for persons who are HIV-infected to help reduce their risk of transmitting the virus to their partners. CDC will be able to monitor changes in risk behaviors among persons living with HIV through the Medical Monitoring Project (MPP), a second generation surveillance system which has been developed and piloted and will be implemented in the field in FY 2007. When fully implemented, MMP will be a nationally representative, population-based surveillance system assessing clinical outcomes, behaviors, and quality of care among HIV-infected persons who are in medical care. HIV-infected persons are interviewed about sexual and drug-using behaviors that may put them at risk for transmitting HIV. MMP replaces CDC's Supplemental HIV/AIDS Surveillance (SHAS), a convenience sample surveillance system which had provided data on HIV-infected persons in care in 16 areas. It is likely that baseline reporting using MMP may be delayed due to delayed implementation of MMP in the field.

MMP is being conducted in 19 states, one U.S. territory, and six cities. MMP uses a three-stage sampling design which will result in annual cross-sectional probability samples of adults in medical care for HIV infection in the U.S.

Measure	FY	Target	Result
Long Term Objective 2.3: Decrease risky sexual and drug using behaviors among persons at risk for acquiring HIV.			
2.3.1a: Decrease risky sexual and drug-using behaviors among persons at risk for acquiring HIV: MSM *(Outcome)*	*2008*	47%	Jun 30, 2010
	2004	N/A	47%
2.3.1b: Decrease risky sexual and drug-using behaviors among persons at risk for acquiring HIV: HRH *(Outcome)*	*2010*	Dec 31, 2009	Jun 30, 2012
	2007	Baseline	Dec 31, 2009
2.3.1c: Decrease risky sexual and drug-using behaviors among persons at risk for acquiring HIV: IDU *(Outcome)*	*2009*	Jun 30, 2009	Jun 30, 2011
	2005	N/A	72%
2.3.2a: Increase the	*2008*	20%	Jun 30, 2010

Measure	FY	Target	Result
proportion of persons at risk for HIV who received HIV prevention interventions: MSM *(Outcome)*	*2004*	N/A	18.9%
2.3.2b: Increase the proportion of persons at risk for HIV who received HIV prevention interventions: HRH *(Outcome)*	*2010*	Dec 31, 2009	N/A
	2007	Baseline	Dec 31, 2009
2.3.2c: Increase the proportion of persons at risk for HIV who received HIV prevention interventions: IDU *(Outcome)*	*2010*	Jun 30, 2009	N/A
	2005	N/A	27.4%

Measure	Data Source	Data Validation
2.3.1 - 2.3.2	National HIV Behavior Surveillance (NHBS) System	NHBS is a new surveillance system monitor for monitoring HIV risk behaviors among persons at-risk for HIV infection. NHBS surveillance methodology is being evaluated and fine-tuned throughout its first 6-year cycle.

Long-term Objective 2.3, Performance Measure 1

This long-term and annual measure addresses persons who are at increased risk of acquiring HIV due to risky sexual or drug-using behaviors. CDC supports prevention activities for persons who are uninfected and at behavioral risk of infection. National HIV Behavioral Surveillance (NHBS) is a nationally representative behavioral surveillance system that collects risk behavior data from three populations at risk for acquiring HIV: men who have sex with men (MSM), injection drug users (IDU), and high risk heterosexuals in areas where HIV is prevalent (HRH). It utilizes survey sampling techniques developed in the past few years to reach representative samples of at-risk populations. NHBS was initiated in 2004, is conducted on an annual basis, and is limited during each cycle to one of these three study groups. Because of delays in implementing the IDU and HRH modules of NHBS, data reporting has been delayed for all three populations. The baseline for MSM was established at 47 percent for FY 2004, targets were set, and data for this submeasure will next be reported for FY 2008 in June of 2010. The baseline for IDU was established in 2009 at 72 percent for FY 2005, but targets have not yet been set. This submeasure will next be reported for FY 2009 and targets will be set in mid-2009. The baseline and targets for HRH will be established in December 2009 for FY 2007. New, effective treatments for HIV have resulted in increased risk taking behavior among MSM. This is reflected in increased self-reported risk behavior, STD infections, and increased HIV diagnoses. Other factors have also combined to increase risk among MSM, such as methamphetamine

use, use of the Internet to meet new sexual partners, and beliefs regarding the severity of HIV disease.

Long-term Objective 2.3, Performance Measure 2

This measure addresses the extent to which at-risk individuals have received HIV prevention interventions (participation in an individual or small group prevention intervention). A number of interventions, conducted at both the individual and group levels, have been shown to be effective in reducing risk behaviors. CDC supports such interventions for persons who are at risk of infection. This measure addresses persons who had recently (within the past 12 months) received an intervention and does not measure the cumulative effect of evidence-based HIV prevention efforts. The National HIV Behavior Surveillance system (NHBS) also serves as the data source for this measure. This is a national representative that collects risk behavior data from three populations at- risk for acquiring HIV infection (MSM, IDU and HRH). It utilizes survey sampling techniques developed in the past few years to reach representative samples of at-risk populations. NHBS was initiated in 2004, is conducted on an annual basis, and is limited during each cycle to one of these three study groups. Because of the survey cycle, different targets are set for the respective populations surveyed for the different years. Baseline MSM data and targets have been established. Data and targets for the other two populations will be established in 2008.

Baseline data for MSM were established in FY 2004. Baseline data for IDU were established in FY 2005 and targets will be set in June 2009. Baseline data for HRH will be established in December 2009.

Measure	FY	Target	Result
Long Term Objective 2.4: Increase the proportion of HIV-infected people in the United States who know they are infected.			
2.4.1: Increase the proportion of HIV-infected people in the United States who know they are infected. *(Outcome)*	*Out-Year Target*	80% (2015)	Nov 30, 2016
	2006	N/A	79%
2.4.2: Increase the proportion of persons with HIV-positive test results from publicly funded counseling and testing sites who receive their test results. *(Outcome)*	*2010*	90%	Oct 31, 2012
	2009	90%	Oct 31, 2011
	2008	88%	Oct 31, 2010
	2007	87%	Oct 31, 2009
	2006	86%	83% (Target Not Met)
	2005	85%	85% (Target Met)
2.4.3: Increase the proportion of people with HIV diagnosed before progression to AIDS. *(Outcome)*	*2010*	80%	Nov 30, 2011
	2009	80%	Nov 30, 2010
	2008	79%	Nov 30, 2009
	2007	79%	82.2%

Measure	FY	Target	Result
	2006	78%	79.7% (Target Exceeded)
	2005	N/A	78.8%

Measure	Data Source	Data Validation
2.4.1	Special studies using eHARS	CDC conducts validation and evaluation studies of the data systems which monitor HIV/AIDS to determine the quality of data generated by them. The methodology for assessing this measure has been vetted at professional conferences and will be published in a peer-reviewed journal.
2.4.2	Counseling, Testing, and Referral System (CTR) -> Program Evaluation and Monitoring System (PEMS)	CDC evaluates the data systems used to report prevention program activity and develops guidelines for implementation, data entry and program monitoring to determine the quality of data generated by the systems.
2.4.3	eHARS	CDC conducts validation and evaluation studies of the data systems which monitor HIV/AIDS to determine the quality of data generated by them. As of December 2005, 33 states have mature, stable HIV surveillance systems to allow for trend analysis. These states are: Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Iowa, Indiana, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming. The period of time between a diagnosis of HIV or AIDS and

Measure	Data Source	Data Validation
		the arrival of a case report at CDC is called the "reporting delay". In order to provide the best estimates of recent trends, HIV and AIDS surveillance data are analyzed by date of diagnosis and are statistically adjusted for reporting delays and incomplete information on some cases. CDC requires a minimum of 12 months after the end of a calendar year to provide accurate trend data.

Long-term Objective 2.4, Performance Measure 1

Decreasing the prevalence of undiagnosed HIV infection has been a key prevention priority for CDC. CDC has facilitated HIV testing through publicly funded HIV counseling and testing, targeted distribution of rapid HIV tests, social marketing campaigns, and revised recommendations promoting routine HIV screening in medical settings. CDC estimates that approximately 79 percent of the approximately one million persons living with HIV are aware that they are infected. However, increasing the proportion of people who know their HIV status is an ongoing prevention challenge.

Some persons with undiagnosed HIV infection (particularly those with recent infection) may not seek testing because they do not believe that they are at risk for HIV infection. Others are aware that they may be at risk but avoid testing (or being re-tested) because of fear of learning that they are HIV-infected. In September 2006, CDC issued Revised Recommendations for HIV Screening of Adults, Adolescents, and Pregnant Women in Health-Care Settings. CDC is addressing challenges to implementation of HIV screening in health-care settings through a multidisciplinary approach that includes: policy diffusion strategies; partnerships with organizations of healthcare professionals; coordination with other federal agencies; implementation guidance; professional education materials; monitoring and evaluation strategies; social marketing; and strategies to ensure follow up care for HIV-infected persons. To help increase the adoption of the recommendations, CDC has developed implementation guidance for use in specific settings. In 2007 and 2008, CDC funded a special initiative to increase HIV testing among those most affected by the disease, particularly African Americans. CDC will assess progress on this measure using special analyses of HIV case surveillance data.

Long-term Objective 2.4, Performance Measure 2

This measure addresses persons tested for HIV in publicly-funded HIV testing and counseling sites. Historically, a large proportion (up to 50 percent in some settings) of persons tested for HIV did not return to the clinic to receive their test results. This represented considerable lost opportunities for HIV prevention. Consequently, emphasis is placed on providing test results to those persons with HIV positive test results. These data were captured by Counseling, Testing, and Referral System (CTR), and are now being incorporated into PEMS. The proportion of HIV-infected persons who received their HIV positive test results increased from 81 percent in 2001 to 85 percent in FY 2005 and declined slightly to 83 percent in 2006. The performance target

for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

CDC developed PEMS in response to the need to strengthen the monitoring and evaluation of HIV prevention programs nationwide. PEMS is a secure, Internet browser-based software program for data entry and reporting. When fully implemented, PEMS will be used by all health departments and CBOs funded through CDC HIV prevention cooperative agreements. PEMS will provide quantitative data to show program progress toward meeting implementation goals and program effectiveness.

Long-term Objective 2.4, Performance Measure 3

Since the mid-1990s, effective medical therapies for HIV infection and associated opportunistic infections have dramatically reduced death rates associated with HIV infection. Age-adjusted mortality due to HIV disease has declined from approximately 17 per 100,000 population in 1995 to less than 4.2 per 100,000 population in 2005. In order to take advantage of more effective therapies and prevent transmission to others, individuals should be aware of their infection early in the course of the disease before progression to AIDS. The proportion of persons with HIV infection diagnosed before progression to AIDS has increased slightly from 77.9 percent in 2002 to 82.2 percent in 2007. CDC aims to increase early diagnosis by promoting HIV testing.

CDC provides funding and technical assistance to 65 state and local health departments to conduct HIV/AIDS prevention programs aimed at increasing HIV testing and works with the private sector and public providers to support routine HIV testing in those settings. Data are from a system which includes both the HIV diagnosis and` AIDS diagnosis dates. Data are from 33 states with mature, confidential, name-based HIV surveillance.

Measure	FY	Target	Result
Long Term Objective 2.5: Increase the proportion of HIV-infected persons who are linked to prevention and care services.			
2.5.1: Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to Prevention Counseling and Referral Services (PCRS). *(Outcome)*	*2008*	Baseline	Nov 30, 2009
2.5.2: Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to medical care and attended their first appointment. *(Outcome)*	*2008*	Baseline	Nov 30, 2009

Measure	FY	Target	Result
2.5.3: Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to HIV prevention services. *(Outcome)*	*2008*	Baseline	Nov 30, 2009
2.5.4: Increase the percentage of HIV-infected persons in medical care who initiated medical care within three months of diagnosis. *(Outcome)*	*2008*	Baseline	Nov 30, 2009

Measure	Data Source	Data Validation
2.5.1 – 2.5.3	Program Evaluation and Monitoring System (PEMS)	CDC evaluates the data systems used to report prevention program activity and develops guidelines for implementation, data entry and program monitoring to determine the quality of data generated by them.
2.5.4	Medical Monitoring Project (MMP)	CDC will conduct validation and evaluation studies of the implementation of data systems that monitor medical care among persons diagnosed with HIV.

Long-term Objective 2.5, Performance Measure 1

This long-term measure addresses persons tested for HIV in publicly-funded HIV testing and counseling sites. Prevention Counseling and Referral Services (PCRS) is a key component of CDC's HIV prevention activities. Through PCRS, infected persons are counseled about the importance of notifying their partners and provided skills for this notification. Notified partners can choose whether to be tested, and receive relevant counseling and prevention services. Data for this measure will come from PEMS. Currently, more than 1,250 agencies, including health departments and CBOs across the country, have access to PEMS. CDC has considered the needs and capacities of these widely differing organizations in developing and refining PEMS.

Long-term Objective 2.5, Performance Measure 2

This measure addresses persons tested for HIV in publicly-funded HIV testing and counseling sites and found to be HIV-infected. Referral to appropriate medical care is a key HIV prevention activity. Early medical intervention can reduce the likelihood of developing AIDS and offers an important opportunity for HIV prevention. Data for this measure come from PEMS.

Long-term Objective 2.5, Performance Measure 3

This measure addresses persons tested for HIV in publicly-funded HIV testing and counseling sites and who were found to be HIV-infected. CDC supports prevention services among HIV-infected individuals to reduce risk of transmission. These services are not necessarily offered at the testing and counseling facility. Therefore, HIV-infected individuals may need referral to another organization or facility. Data for this measure come from PEMS.

Long-term Objective 2.5, Performance Measure 4

This measure addresses initiation of medical care for those recently diagnosed with HIV. CDC will be able to monitor changes in risk behaviors and provision of care among persons living with HIV through the Medical Monitoring Project (MMP), a second generation surveillance system which has been developed and piloted and will be implemented in the field in 2007. When fully implemented, MMP will be a nationally representative, population-based surveillance system assessing clinical outcomes, behaviors, and quality of care among HIV infected persons who are in medical care. HIV-infected persons are interviewed about sexual and drug-using behaviors that may put them at risk for transmitting HIV. Baseline data for FY 2008 will be available in November 2009.

Viral Hepatitis

Measure	FY	Target	Result
Long Term Objective 2.6: Reduce the rates of viral hepatitis in the United States.			
2.6.1: Reduce the rate of new cases of hepatitis A (per 100,000 population). *(Outcome)*	*Out-Year Target*	2.0 (2015)	Jul 31, 2016
	2010	2.3	Jul 31, 2011
	2009	2.4	Jul 31, 2010
	2008	2.4	Jul 31, 2009
	2007	2.5	1.0 (Target Exceeded)
	2006	2.6	1.2 (Target Exceeded)
	2005	N/A	1.9
2.6.2: Reduce the rate of new cases of hepatitis B (per 100,000 population). *(Outcome)*	*Out-Year Target*	1.5 (2015)	Dec 31, 2016
	2010	1.7	Jul 31, 2011
	2009	1.8	Jul 31, 2010
	2008	1.8	Jul 31, 2009
	2007	1.9	1.5 (Target Exceeded)
	2006	N/A	1.6
	2005	N/A	1.9
2.6.3: Increase the proportion of individuals knowing their hepatitis C virus infection status. *(Outcome)*	*Out-Year Target*	65% (2015)	Dec 31, 2016
	2004	Baseline	50%
2.6.4: Increase the number of areas reporting chronic hepatitis C virus infections to CDC to 50 states and New York City and District of Columbia. *(Output)*	*Out-Year Target*	37 (2015)	Dec 31, 2016
	2010	37	Dec 31, 2011
	2009	35	Dec 31, 2010
	2008	33	Dec 31, 2009
	2007	N/A	33
	2006	N/A	34
	2005	N/A	29

Measure	Data Source	Data Validation
2.6.1 - 2.6.2, 2.6.4	The National Notifiable Diseases Surveillance System (NNDSS)	NNDSS data are received from state health departments weekly and are reviewed. Reports are checked and any pre-specified data are verified by contacting the appropriate state health department. All data are once again checked and verified with state health departments at the end of the year.
2.6.3	The National Health and Nutrition Examination Survey (NHANES)	NHANES relies on both passive and active monitoring systems for operational and content-related quality control. Passive quality control uses automated computer procedures for detecting data anomalies. After careful analysis, appropriate activities can be undertaken to resolve any data collection issues. Active quality control relies on examiner feedback to identify and evaluate problems and select remedies. NHANES primarily relies on physical measurements from well-established biomedical procedures.

Long-term Objective 2.6, Performance Measure 1

HAV is spread by close contact with infected persons or ingestion of contaminated food. Vaccination, outbreak response, and food safety programs are the primary interventions used to prevent HAV.

HAV incidence has decreased by approximately 88 percent nationwide since the mid-1990s, when HAV vaccine became available and the first vaccination recommendations were released. HAV incidence has declined by 99 percent among Alaska Natives and American Indians, populations with the highest disease rates in the pre-vaccine era. This reduction has effectively eliminated this racial disparity in health. The rate of new cases suggests the long term targets will be met, as the 2007 rate is the lowest rate ever recorded. The Advisory Committee for Immunization Practices (ACIP) recommendations for use of hepatitis A vaccine were updated in 2006 to create the foundation for eliminating indigenous transmission of HAV in the U.S. Now, routine vaccination is recommended for all children aged 13-23 months.

In addition, a new strategy for treating individuals once they are exposed to HAV, approved by the ACIP in 2007, involves using hepatitis A vaccine rather than immune globulin in post exposure situations. Post exposure use of hepatitis A vaccine offers several advantages over immune globulin, including long-term protection, ease of administration, and widespread availability. With the number of hepatitis A cases now at a record low, a greater proportion of cases arise from food borne outbreaks. Sometimes these outbreaks involve hundreds or thousands of persons who require post exposure prophylaxis which until recently consisted of administering immune globulin.

As one of the nationally notifiable diseases, it is mandated that any case of diagnosed HAV should be reported to local health authorities. The overall rate of HAV is determined based on reports of acute disease received by state health departments and reported to CDC. Because it incorporates data from all 50 states and the District of Columbia, this measure, which is also included in the Healthy People 2010 initiative, provides a representative method to assess

national trends in this disease. This measure serves as both a long-term and annual measure.

Long-term Objective 2.6, Performance Measure 2

HBV is spread by exposure to infectious blood or body fluids or through sexual contact. HBV infection can become chronic in some persons and lead to death from cirrhosis or liver cancer. Approximately 1 -1.25 million Americans have chronic HBV, and 3,000-5,000 die each year. Key components of CDC efforts to prevent HBV-related morbidity and mortality are 1) vaccination of newborns, infants, and children and of adults at increased risk of infection; and 2) identification and referral of HBV-infected persons for public health management and treatment, with a focus on persons from HBV-endemic countries and others with high prevalence of chronic HBV infection.

Rates of HBV infection have declined consistently over the past decade and are linked to the successful implementation of vaccination strategies as well as progress in screening and awareness. More than 95 percent of pregnant U.S. women are now screened for HBV infection during pregnancy, reducing the risk for perinatal transmission. As a result of the national HBV elimination strategy, the 2007 rate surpasses the Healthy People 2010 goal of 4.5 cases per 100,000 people, and is the lowest rate of new cases recorded to date.

As one of the nationally notifiable diseases, it is mandated that any case of diagnosed hepatitis B be reported to local health authorities. The overall rate of hepatitis B is determined based on reports of acute disease received by state health departments and reported to CDC. Because it incorporates data from all 50 states and the District of Columbia, this measure provides a representative method to assess national trends in this disease and track the progress toward elimination of HBV transmission in the U.S. This measure serves as both a long-term and annual measure.

Hepatitis B is vaccine preventable and routine childhood vaccination is recommended. The Immunization and Respiratory Disease performance narrative offers annual rates of childhood immunization coverage.

Long-term Objective 2.6, Performance Measure 3

HCV is the most common bloodborne viral infection in the U.S. and is a leading cause of death from liver cancer. Approximately three million persons in the U.S. have chronic HCV, many of whom were infected in the past. Most HCV-infected persons are unaware of their infection, increasing the risk that they will transmit the virus to others and suffer poor health outcomes themselves. In the absence of an HCV vaccine, the goals of HCV prevention are early identification of infection, behavior modification to avoid HCV exposure and transmission, and referral for treatment. Prevention also requires the identification and implementation of strategies that prevent transmission in healthcare settings. Knowledge of chronic HCV infection status is a critical determinant of whether patients receive treatment and adopt preventative health behaviors. Data collected from The National Health and Nutrition Examination Survey (NHANES) can be used to estimate the proportion of HCV-infected persons in the U.S. who know their HCV status. Due to the ongoing nature of NHANES, CDC can assess trends in this knowledge over time.

Long-term Objective 2.6, Performance Measure 4

Chronic HCV infection became a nationally notifiable disease in 2003. Surveillance for chronic HCV infection is critical for planning public health prevention activities, determining unmet healthcare needs and evaluating ongoing prevention programs. However, national surveillance for chronic HCV infection remains incomplete in large part due to a high volume of reports and inadequate staff resources at the state and local levels. Efforts to increase jurisdictions that

report cases of chronic HCV infection to CDC will substantially improve our ability accurately to describe the prevalence and epidemiologic characteristics of these cases nationally. CDC has consistently increased the number of jurisdictions reporting cases of chronic HCV infection, and in FY 2007, data were reported by 34 jurisdictions.

Sexually Transmitted Diseases

Measure	FY	Target	Result
Long Term Objective 2.7: Reduce the rates of non-HIV sexually transmitted diseases (STDs) in the United States.			
2.7.1: Reduce pelvic inflammatory disease in the U.S. *(Outcome)*	*Out-Year Target*	<150,000 (2015)	Oct 31, 2016
	2010	168,000	Oct 31, 2011
	2007	N/A	146,000
	2006	N/A	106,000
	2005	N/A	176,000
2.7.2: Reduce the prevalence of chlamydia among high-risk women under age 25. *(Outcome)*	*Out-Year Target*	21.6% (2015)	Oct 31, 2016
	2010	15.1%	Oct 31, 2011
	2009	14.1%	Oct 31, 2010
	2008	9%	Oct 31, 2009
	2007	9.3%	13.2% (Target Not Met)
	2006	9.3%	13.1% (Target Not Met)
	2005	N/A	9.2%
2.7.3: Reduce the prevalence of chlamydia among women under age 25, in publicly funded family planning clinics. *(Outcome)*	*Out-Year Target*	9.4% (2015)	Oct 31, 2016
	2010	7.4%	Oct 31, 2011
	2009	7.0%	Oct 31, 2010
	2008	6.3%	Oct 31, 2009
	2007	6.3%	6.9% (Target Not Met)
	2006	6.3%	6.7% (Target Not Met)
	2005	N/A	6.3%
2.7.4: Reduce the incidence of gonorrhea in women aged 15 to 44 (per 100,000 population). *(Outcome)*	*Out-Year Target*	<311 (2015)	Oct 31, 2016
	2010	296	Oct 31, 2011
	2009	293	Oct 31, 2010
	2008	276	Oct 31, 2009
	2007	278	290 (Target Not Met)
	2006	278	290 (Target Not Met)

Measure	FY	Target	Result
	2005	N/A	276
2.7.5: Eliminate syphilis in the U.S. (per 100,000 population) *(Outcome)*	*Out-Year Target*	<3.2 (2015)	Oct 31, 2016
	2010	2.2	Oct 31, 2011
	2007	N/A	3.8
	2006	N/A	3.3
	2005	N/A	3.0
2.7.6a: Reduce the incidence of P&S syphilis:in men (per 100,000 population).[1] *(Outcome)*	*Out-Year Target*	<13.0 (2015)	N/A
	2010	7.2	Oct 31, 2011
	2009	6.4	Nov 30, 2010
	2008	5.5	Oct 31, 2009
	2007	4.5	6.6 (Target Not Met)
	2006	Baseline	5.6
	2005	N/A	5.1
2.7.6b: Reduce the incidence of P&S syphilis: in women (per 100,000 population). *(Outcome)*	*Out-Year Target*	<1.7 (2015)	Oct 31, 2016
	2010	1.2	Oct 31, 2011
	2009	1.1	Oct 31, 2010
	2008	0.9	Oct 31, 2009
	2007	0.8	1.1 (Target Not Met)
	2006	0.58	1.0 (Target Not Met)
	2005	N/A	0.9
2.7.7: Reduce the incidence of congenital syphilis per 100,000 live births. *(Outcome)*	*Out-Year Target*	11.2 (2015)	Oct 31, 2016
	2010	9.4	Oct 31, 2011
	2009	8.9	Oct 31, 2010
	2008	8.5	Oct 31, 2009
	2007	8.8	10.5 (Target Not Met)
	2006	8.8	9.3 (Target Not Met)
	2005	N/A	8.2

Measure	FY	Target	Result
2.7.8: Reduce the racial disparity of P&S syphilis (reported ratio is black:white). *(Outcome)*	*Out-Year Target*	<9.0:1 (2015)	Oct 31, 2016
	2010	6.7:1	Oct 31, 2011
	2009	6.3:1	Oct 31, 2010
	2008	5.5:1	Oct 31, 2009
	2007	5.6:1	7.1:1 (Target Not Met)
	2006	5.6:1	5.9:1 (Target Not Met)
	2005	N/A	5.4:1

[1] In FY 2002, the incidence of P&S syphilis in men was 3.8 per 100,000 (initial 2002 baseline). However, because an outbreak of syphilis among men who have sex with men that occurred after 2002 has driven up the male syphilis rates, CDC is reporting a new baseline for 2006. The goal for 2015 for P&S syphilis takes into account the outbreak and expectations for control and reversing the trend. The annual targets for 2008 - 2010 also take this outbreak into account.

Measure	Data Source	Data Validation
2.7.1	The National Disease and Therapeutic Index (NDTI) (IMS Health)	Data from STD Morbidity Surveillance System undergo verification and validation procedures including reports back to project areas concerning quarterly and yearly data, trend information, and percentage unknowns for demographic and clinical fields, edit checks and updates, as well as regular communications via fax, phone and e-mail with project staff.
2.7.2	The U.S. Department of Labor, National Job Training Program; CDC, IPP Chlamydia Prevalence Monitoring Project	Data from STD Morbidity Surveillance System undergo verification and validation procedures including reports back to project areas concerning quarterly and yearly data, trend information, and percentage unknowns for demographic and clinical fields, edit checks and updates, as well as regular communications via fax, phone and e-mail with project staff.
2.7.3	CDC, IPP Chlamydia Prevalence Monitoring Project	Data from STD Morbidity Surveillance System undergo verification and validation procedures including reports back to project areas

Measure	Data Source	Data Validation
		concerning quarterly and yearly data, trend information, and percentage unknowns for demographic and clinical fields, edit checks and updates, as well as regular communications via fax, phone and e-mail with project staff.
2.7.4 – 2.7.8	STD Morbidity Surveillance System, CDC	Data from STD Morbidity Surveillance System undergo verification and validation procedures including reports back to project areas concerning quarterly and yearly data, trend information, and percentage unknowns for demographic and clinical fields, edit checks and updates, as well as regular communications via fax, phone and e-mail with project staff.

Long-term Objective 2.7, Performance Measure 1

More than 50 percent of all preventable infertility among women is a result of STDs, primarily chlamydia and gonorrhea. Because most infected women and at least one half of infected men have no symptoms or have such mild symptoms that they do not seek medical care, many infections go undetected and are not reported or counted. Untreated chlamydia and gonorrhea infections can cause severe and costly reproductive and other adverse health consequences, including pelvic inflammatory disease (PID), which can lead to infertility. An estimated 10 to 40 percent of women with untreated chlamydia or gonorrhea will develop PID which can result in ectopic pregnancy, chronic pelvic pain, and infertility.

This is a long-term measure. The actual performance for this measure was 146,000 visits to the physician for PID by women 15-44 years of age compared to the 2015 target of <150,000 visits. Visits to the physician for PID by women 15-44 years of age have increased from 123,000 in 2003 to 146,000 in 2007.

It could appear that the performance target for this measure was not set at an appropriate level because the actual performance exceeded the target; however, it is challenging to monitor trends in the incidence of PID for several reasons. First, diagnosis is based on clinical criteria that are often vague (symptoms of lower abdominal pain and pelvic tenderness), so making a diagnosis is imprecise, with both under- and over-diagnosis possible. Second, given this imprecision, it is not a nationally notifiable condition. Thus, measuring national PID trends has been based on the use of National Disease and Therapeutic Index (NDTI), an administrative dataset that contains information on the number of initial visits to physicians for PID by women 15 to 44 years of age. These data have limitations, including small sample sizes and limited representation; clinical facilities included only serve part of the U.S. population. From a 2002 baseline of 197,000 visits, the number dropped significantly in 2003 to 123,000, then rose

gradually in 2004 to 132,000; rose sharply in 2005 to 176,000; then dropped in 2007 to 146,000. Because national estimates of the prevalence and incidence of gonorrhea and chlamydia have been stable, these significant fluctuations in PID seem unlikely. CDC researchers are investigating potential use of additional national medical care survey data for PID trends to develop more robust and stable measures. And, while the large fluctuations are problematic, the general trend downward from the baseline will be evaluated by CDC with an eye toward re-setting the 2015 target.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 2

For Performance Measure 2, CDC monitors trends in prevalence among women enrolled in the U.S. Department of Labor National Job Training Program (NJTP) for economically disadvantaged women aged 16 to 24. This measure reflects the prevalence of chlamydia infection in a population of high-risk young women who are not seeking health care. They are routinely screened as part of their enrollment in the program.

The actual performance for Measure 2 was 13.1 percent of women entering the National Job Training Program who tested positive for Chlamydia compared to the target of 9.3 percent. The performance target for this measure was set at an approximate target level; however the deviation from that level is significant and material. Chlamydia prevalence in women entering the NJTP has substantially increased from 9.9 percent in 2003 to 13.1 percent in 2006. In 2005, among women entering the program, chlamydia prevalence was 9.2%. Chlamydia prevalence among women entering the program decreased steadily from 2003 (9.9 percent) to 2005 (9.2 percent) until the introduction of a more sensitive test in 2006, at which point Chlamydia prevalence significantly increased to 13.1 percent. Among men entering the program in 2006, chlamydia prevalence was 7.9 percent, which is little changed from the chlamydia prevalence of 8.1 percent in 2005. There was no change in the test types used among men. In 2009, CDC will analyze prevalence data from 2007 and preliminary data to 2008 to determine if the long-term target should be adjusted to reflect the more widespread use of the more sensitive tests within the NJTP.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 3

Performance Measure 3 reflects prevalence of Chlamydia in a population of young sexually active women seeking reproductive health care. CDC's Infertility Prevention Program (IPP) provides funding to Title X Family Planning Clinics to screen women for chlamydia in accordance with CDC's recommendation that all sexually-active women under age 26 be screened annually for chlamydia.

The actual performance for Measure 2 was 6.9 percent of women under age 25 who tested positive for Chlamydia in funded family planning clinics compared to the target of 6.3 percent. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity performance. Chlamydia prevalence in women under age 25 in publicly-funded family planning

clinics has increased from 5.9 percent in 2003 to 6.9 percent in 2007.

In addition to the above data, reported chlamydial infections have increased in the U.S. to over 1 million infections in 2006, reflecting the expansion of screening activities, increased use of the most sensitive diagnostic tests, an emphasis on case reporting from providers and laboratories, and improvements in reporting systems. Increases in reported chlamydial infections are likely to continue as screening expands to more public and private medical settings. In 2000, the Health Plan Employer Data and Information Set (HEDIS) introduced a measure for chlamydia screening of sexually active women, 16 through 25 years of age, who receive their medical care through managed care organizations. The promulgation of and adherence to this measure are also likely to increase screening and reporting practices in the private sector.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 4

It is estimated that more than 50 percent of all preventable infertility among women is a result of STDs, primarily chlamydial infection and gonorrhea. Because most infected women, and at least one half of infected men, have no symptoms or have such mild symptoms that they do not seek medical care, many infections go undetected and are not reported or counted. In fact, it is estimated that 2.8 million new chlamydial infections and 700,000 gonorrheal infections occur each year in the United States. In women, untreated gonorrhea can cause severe and costly reproductive and other adverse health consequences, including pelvic inflammatory disease (PID), which can lead to infertility, ectopic pregnancy, and chronic pelvic pain.

The actual performance for this measure was 290 cases of gonorrhea per 100,000 women aged 15 to 44 compared to the target of 278 per 100,000 women aged 15 to 44. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity performance. This measure provides our best national data on gonorrhea incidence among women of reproductive age. Gonorrhea prevalence in women aged 15 to 44 has increased from 268 per 100,000 in 2003 to 290 per 100,000 in 2007. In 2010, CDC aims to halt these increases and bring rates in women down to below 2005 levels.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 5

Persistence of syphilis is a sentinel public health event with important social and historical significance. Syphilis is preventable and curable. Syphilis increases efficiency of HIV transmission 2 to 5-fold and is associated with serious morbidity on its own (e.g., serious illness in babies, strokes and other neurologic disease). This data provides the best national data on the incidence of the early, symptomatic stages of syphilis (i.e., primary and secondary syphilis). CDC will work to achieve interim indicators progressing toward the long-term goal of elimination.

The actual performance for this measure was 3.8 cases of primary and secondary (P&S) syphilis per 100,000 population compared to the target of less than 3.2 cases per 100,000 population. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity

performance. Primary and secondary syphilis cases increased from 2.5 cases per 100,000 in 2003 to 3.8 cases per 100,000 in 2007. In 2010, CDC aims to reverse these increases by redoubling prevention for MSM while supporting effective interventions to sustain prevention and control among heterosexual men and women. To better ensure that syphilis prevention and control interventions are evidence-based and targeted to populations with greatest needs, CDC, in October 2008, instituted the Syphilis Elimination Evidence-based Action Planning process for all project areas receiving SE funds. This monitoring process is designed to improve program monitoring by promoting better analysis of local surveillance data and program performance indicators. CDC carefully reviews each of the submitted action plans and provides guidance and technical assistance as warranted to ensure the appropriateness and effectiveness of intervention activities.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 6a

Beginning in 2001, syphilis rates among men began to rise, after declining since 1991. Between 2005 through 2007, the national P&S syphilis rate increased from 2.9 to 3.8 cases per 100,000 population. The overall increase in syphilis rates from 2005 to 2007 was driven primarily by increases among males and the rate among females increased for the third year in a row, following a decade of declines.

The actual performance for this measure was 6.6 cases of P&S syphilis per 100,000 population in males. In FY 2002, the incidence of P&S syphilis in men was 3.8 per 100,000 (initial 2002 baseline). However, because an outbreak of syphilis among men who have sex with men that occurred after 2002 has driven up the male syphilis rates, CDC is reporting a new baseline for 2006. The goal for 2015 for P&S syphilis takes into account the outbreak, expectations for control and reversing the trend. The annual targets P&S syphilis in men for 2008 - 2010 also take this outbreak into account. Primary and secondary syphilis cases in men increased from 4.2 cases per 100,000 in 2003 to 6.6 cases per 100,000 in 2007.

Data suggested and additional studies confirmed that the great majority of cases in men were attributable to transmission among men who have sex with men (MSM), many of whom are at high-risk for transmitting or acquiring HIV infection. Traditional approaches to syphilis prevention are less effective in this population, and reducing syphilis among MSM requires different approaches from those used with women. CDC is also ensuring the increased application of evidence-based approaches to this target group through the use of the SE Evidence-based Action Planning process and by facilitating peer-to-peer technology transfer through organized monthly web-based seminars during which lessons learned and emerging best practices are shared and discussed.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 6b

Between 2005 and 2007, the national P&S syphilis rate increased 2.9 to 3.8 cases per 100,000 population. The overall increase in syphilis rates from 2005 to 2007 was driven primarily by increases among males and the rate among females increased for the second year in a row,

following a decade of declines (from 0.9 per 100,000 in 2005 to 1.1 in 2007).

The actual performance for this measure was 1.1 case of P&S syphilis per 100,000 population of females compared to the target of 0.8 cases per 100,000 population. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity performance. Primary and secondary syphilis cases in women increased from 0.8 cases per 100,000 in 2003 to 1.1 case per 100,000 in 2007.

As mentioned above, the prevention approaches used with women are different from those used with MSM and the complications of infection are also different (risk of transmission to babies). With this measure CDC monitors its progress in addressing syphilis among women and continues to substantively support syphilis and STD prevention services to women aimed at reducing adverse outcomes of pregnancy.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 7

When a woman has a syphilis infection during pregnancy, she may transmit the infection to the fetus in utero. This often results in fetal death or an infant born with physical and mental developmental disabilities. Most cases of congenital syphilis are easily preventable if women are screened for syphilis and treated early during prenatal care, as recommended by CDC and other professional health organizations and required in all 50 states. CDC is an actively engaged partner in the WHO initiative to eliminate congenital syphilis.

The actual performance for this measure was 10.5 cases of congenital syphilis per 100,000 live births compared to the target of 8.8 cases per 100,000 live births. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity performance. Congenital syphilis cases decreased from 10.6 cases per 100,000 in 2003 to 10.5 cases per 100,000 in 2006.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Long-term Objective 2.7, Performance Measure 8

Syphilis remains an example of racial disparity in health, with historical and sociological significance that is important to be addressed. In 1997, prior to initiation of the National Plan to Eliminate Syphilis from the United States, the Black:White rate ratio was 43:1 and by 2007 had dropped to 7.1:1. With this measure CDC monitors its progress in reducing this important historic disparity while addressing the new epidemic in syphilis among MSM.

The actual performance for this measure was the Black:White ratio of P&S syphilis of 7.1:1 compared to the target of 5.6 to 1. The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall programs or activity performance.

Annual targets for this measure reflect increasing trends in STDs in the face of declining state resources. Many states have scaled back or eliminated some STD prevention and control activities even as the demand for these services has increased as a result of economic conditions.

Tuberculosis

Measure	FY	Target	Result
Long Term Objective 2.8: Decrease the rate of cases of TB among U.S.-born persons in the United States.			
2.8.1: Decrease the rate of cases of TB among U.S.-born persons (per 100,000 population). *(Outcome)*	*Out-Year Target*	<2.0 (2015)	Sep 30, 2016
	2010	1.9	Sep 30, 2011
	2009	1.8	Sep 30, 2010
	2008	1.9	Sep 30, 2009
	2007	2.1	2.1 (Target Met)
	2006	N/A	2.3
	2005	N/A	2.5
2.8.2: 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). *(Outcome)*	*Out-Year Target*	88.5% (2011)	Sep 30, 2014
	2010	>87.5%	Sep 30, 2013
	2009	>88%	Sep 30, 2012
	2008	>87.5%	Sep 30, 2011
	2007	87.3%	Sep 30, 2010
	2006	86.2%	Sep 30, 2009
	2005	85%	82.7% (Target Not Met)
2.8.3: Increase the percentage of TB patients with initial positive cultures who also have drug susceptibility results. *(Outcome)*	*Out-Year Target*	>95% (2015)	Sep 30, 2016
	2010	>95%	Sep 30, 2011
	2009	>95%	Sep 30, 2010
	2008	95%	Sep 30, 2009
	2007	95%	94.6% (Target Not Met but Improved)
	2006	95.1%	92.2% (Target Not Met)
	2005	N/A	92.4%
2.8.4: Increase the percentage of contacts of infectious (Acid-Fast Bacillus (AFB) smear-positive) cases that are placed on	*Out-Year Target*	43% (2015)	Dec 31, 2018
	2010	43%	Dec 31, 2013
	2009	43%	Dec 31, 2012
	2008	43%	Dec 31, 2011

Measure	FY	Target	Result
treatment for latent TB infection and complete a treatment regimen. *(Outcome)*	*2007*	43%	Dec 31, 2010
	2006	59%	Dec 31, 2009
	2005	61.1%	43.5% (Target Not Met but Improved)

Measure	Data Source	Data Validation
2.8.1 - 2.8.3	The National TB Surveillance System	TB morbidity data and related information submitted via the national TB Surveillance System are entered locally or at the state level into CDC-developed software which contains numerous data validation checks. Data received at CDC are reviewed to confirm their integrity and evaluate completeness. Routine data quality reports are generated to assess data completeness and identify inconsistencies. Data submitted via the national Aggregate Reports for TB Program Evaluation are checked for accuracy and inconsistencies. Problems are resolved by CDC staff working with state and local TB program staff. During regular visits to state, local, and territorial health departments, CDC staff review TB registers and other records and data systems and compare records for verification and accuracy. At the end of each year, data are again reviewed before data and counts are finalized and published.
2.8.4	The National TB Surveillance System and the national Aggregate Reports for TB Program Evaluation	TB morbidity data and related information submitted via the national TB Surveillance System are entered locally or at the state level into CDC-developed software which contains numerous data validation checks. Data received at CDC are reviewed to confirm their integrity and evaluate completeness. Routine data quality reports are generated to assess data completeness and identify inconsistencies. Data submitted via the national Aggregate Reports for TB Program Evaluation are checked for accuracy and inconsistencies. Problems are resolved by CDC staff working with state and local TB program staff. During regular visits to state, local, and territorial health departments, CDC staff review TB registers and other records and data systems and compare records for verification and accuracy. At the end of each year, data are again reviewed before data and counts are finalized and published.

Long-term Objective 2.8, Performance Measure 1

Despite the global epidemic, rates of TB have been declining for 13 years in the U.S. due to successful control measures begun in the early 1990s. Most of this decline is attributable to declines among U.S.-born persons. An estimated 9 to 14 million U.S. citizens have latent TB infection, and about 10 percent of these individuals will develop TB at some point in their lives.

Those who are infected with HIV have a greater chance of developing TB. CDC works with state partners to identify and control TB in the U.S. These efforts have resulted in a consistent decline in the rate of TB among U.S.-born persons to its lowest rate ever in FY 2007.

Persons born outside the U.S. account for 55 percent of all U.S. TB cases, constituting a majority of cases for the third year in a row. Ensuring future declines in TB in the U.S. is dependent upon reducing TB among foreign-born persons that enter the U.S. This measure serves as both a long-term and annual measure.

The target for FY 2010 has been set accordingly because the average annual rate of decline in TB has slowed since 2000 and the proportion of cases among foreign-born persons continues to increase annually.

Long-term Objective 2.8, Performance Measure 2

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 reduce TB cases and eventually to eliminate TB. Patients who do not complete therapy within 12 months are often difficult to treat and require numerous interventions. 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 incentives and other adherence strategies. CDC and the CDC-funded Regional Training and Medical Consultation Centers also design and implement training and educational aids for health department and healthcare providers to improve the skills needed to help achieve this objective. Progress has been made in achieving this measure and in 2005 82.7 percent of patients received a curative course of treatment. The performance target for the following measures was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance. CDC will continue to work with its partners to increase performance in this area.

The target for FY 2010 is set accordingly because the average annual rate of decline in TB has slowed since 2000 and the proportion of cases among foreign-born persons continues to increase annually.

Long-term Objective 2.8, Performance Measure 3

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 unknown, patients may receive inadequate treatment leading to the spread of drug-resistant organisms, additional morbidity, and mortality. In 2007, drug susceptibility results were documented for over 94 percent of TB patients with initial positive cultures. Progress toward this measure is attributable to increased efforts of state and local health departments and hospital infection-control practitioners to address the resurgence of TB, as well as 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 multi-drug resistant TB. The performance target for the following measures was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance. CDC will continue to work with state partners to improve performance in this area.

Long-term Objective 2.8, Performance Measure 4

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, second only to ensuring that those with active TB complete treatment with appropriate drugs. Contacts of smear-positive TB

patients are at high risk of developing TB and therefore must be screened for infection. If infected, these contacts should be offered complete treatment for latent infection. CDC supports identifying and examining contacts of persons with active TB, as well as completing treatment for contacts who have latent TB infection, through cooperative agreements with state and local health departments.

Zoonotic, Vectorborne, and Enteric Diseases

Measure	FY	Target	Result
3.E.1: Enhance detection and control of foodborne outbreaks by increasing the number of foodborne isolates identified, fingerprinted, and electronically submitted to CDC's computerized national database networks with annual level funding. *(Efficiency)*	*2010*	35,276	Dec 31, 2010
	2009	35,276	Dec 31, 2009
	2008	32,069	39,888 (Target Exceeded)
	2007	28,633	32,665 (Target Exceeded)
	2006	24,866	27,618 (Target Exceeded)
	2005	21,472	22,684 (Target Exceeded)

Measure	Data Source	Data Validation
3.E.1	PulseNet USA national databases established and maintained at CDC	Pattern submissions to PulseNet national databases are assessed and reviewed on a daily basis at CDC. Submitters to PulseNet databases are certified for competency before they are given access to the national databases. They are required to complete proficiency testing on an annual basis. Pattern and serotype statistics for all of the PulseNet databases are compiled, verified and reported on a quarterly and annual basis.

Efficiency Measure 3.E.1:

PulseNet, an early warning system for outbreaks of foodborne disease, is a national network of public health laboratories that performs DNA fingerprinting on bacteria that may be foodborne. In FY 2008, PulseNet exceeded its target of 32,069 isolates identified, fingerprinted and electronically submitted to CDC's computerized national databases with annual level funding, by submitting 39,888 isolates total. The increase in submission enables PulseNet to detect more and smaller clusters of foodborne infections than ever before. Exceeding this target is related to ongoing CDC support for capacity building activities in state and local public health laboratories and increased coordination, education, and submissions from state and local partner laboratories as well as a very busy year with increased submissions from large multi-state outbreaks of *E. coli* O157 from ground beef and pepperoni pizza; salmonella infections from fresh tomatoes, peanut butter, vegan snacks, dried dog food, and chicken pot pies; and botulism from canned chili sauce. In FY 2004 to FY 2007, CDC exceeded its target for this measure by five to eleven percent, indicating the enthusiasm and commitment of the participants in the network. The target was exceeded in FY 2008 by more than 24 percent due to increased participation as well as an increased general volume of submissions. CDC will continue to increase the number of online submissions in FY 2009 by increasing the number of individuals at the participating laboratories who are certified to electronically submit pulsed-field

gel electrophoresis (PFGE) patterns directly to the database, in order to reach its overall target of 35,276 isolates annually submitted. CDC also provides funds to state and local laboratories to upgrade the instruments and equipment needed to conduct PFGE.

The targets for this measure were initially developed in 2004. Ambitious targets were set to more than double the number of annual isolates identified, fingerprinted, and electronically submitted from the baseline of 14,864 to 35,726. Although great progress has been made in meeting the annual targets, the overall target has not yet been exceeded and therefore has not raised its annual targets. This year's substantial submission above the target is related to ongoing capacity building efforts, increased collaboration and a general increase in the volume of foodborne isolates due to several multi-state, high profile outbreaks. Once the FY 2009 target of isolates is met, CDC is planning on retiring this measure, as it may no longer be the most appropriate measure for improving the food safety system. The PulseNet system may have reached a maximum annual capacity of isolates submitted and attention will be focused on gaining efficiencies and improving other aspects of the food safety program. The increased number of isolates annually submitted enables PulseNet to detect more and smaller outbreaks of foodborne infections, and once identified, concerted state and local control measures in concert with the Food and Drug Administration (FDA) and the US Department of Agricultures Food Safety Inspection Service (USDA/FSIS) have avoided potential illness.

Measure	FY	Target	Result
Long Term Objective 3.1: Protect Americans from infectious diseases – foodborne illnesses.			
3.1.1a: By 2010, reduce the incidence of infection with four key foodborne pathogens by 50%: Campylobacter. *(Outcome)*	*2010*	12.30	May 31, 2011
	2009	13.25	May 31, 2010
	2008	14.20	May 31, 2009
	2007	15.14	12.79 (Exceeded)
	2006	16.10	12.71 (Exceeded)
	2005	N/A	12.72
3.1.1b: By 2010, reduce the incidence of infection with four key foodborne pathogens by 50%: *Escherichia coli* O157:H7 *(Outcome)*	*2010*	1.00	May 31, 2011
	2009	1.08	May 31, 2010
	2008	1.15	May 31, 2009
	2007	1.22	1.20 (Target Exceeded)
	2006	1.30	1.31 (Target Not Met)
	2005	N/A	1.06
3.1.1c: By 2010, reduce the incidence of infection with four key foodborne pathogens by 50%: Listeria monocytogenes.	*2010*	0.25	May 31, 2011
	2009	0.27	May 31, 2010
	2008	0.29	May 31, 2009
	2007	0.31	0.27 (Target Exceeded)

Measure	FY	Target	Result
(Outcome)	*2006*	0.33	0.31 (Target Exceeded)
	2005	N/A	0.30
3.1.1d: By 2010, reduce the incidence of infection with four key foodborne pathogens by 50%: Salmonella species. *(Outcome)*	*2010*	6.80	May 31, 2011
	2009	7.31	May 31, 2010
	2008	7.84	May 31, 2009
	2007	8.39	14.92 (Target Not Met)
	2006	8.90	14.81 (Target Not Met)
	2005	N/A	14.55

Measure	Data Source	Data Validation
3.1.1	FoodNet (The Foodborne Diseases Active Surveillance Network) Data	FoodNet data are transmitted, updated, and reviewed monthly. Incomplete data are reviewed with sites on a monthly basis, as are cross checks comparing local data with national data for data validity. Data are closed out and summarized on an annual cycle to produce preliminary reports, published in MMWR in spring of the following year, and a final report, later that year, once the updated population denominator data are available from the US Bureau of Census.

Long-term Objective 3.1, Performance Measure 1

Foodborne illness is recognized as a significant public health problem in the U.S. A 1999 estimate from CDC attributes 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths annually to foodborne pathogens. This measure supports tracking new and total cases of the most common foodborne diseases in order to focus activities of relevant food safety regulatory agencies on the most common, or most difficult pathogens and to reduce the overall burden of foodborne diseases. This goal was established as part of the Healthy People 2010 (HP2010) process. Although CDC tracks progress towards these goals, this measure is assigned to the Food and Drug Administration (FDA) as part of the HP 2010 process. Regulation of the food supply is the responsibility of the FDA and the U.S. Department of Agriculture (USDA). CDC monitors and investigates human illness resulting from contaminated food and provides independent information on these illnesses and outbreaks to the regulatory agencies so they can develop and implement effective control measures.

Campylobacter

From FY 2005 - FY 2007, target for Campylobacter has been exceeded, although it has not yet reached the FY 2010 target. Targets were set based upon historical baselines as part of the HP 2010 process. Preventive measures implemented by the FDA, and the USDAs Food Safety and Inspection Service (USDA/FSIS), and others achieved significant public health outcomes in the effort to reduce the incidence of foodborne illness though with little progress in the last 4 years. CDC, FDA, USDA/FSIS and other partners are still working on reaching the HP 2010 goal, and have begun discussions about setting ambitious goals as part of the Healthy People 2020 (HP 2020) Process. USDA has conducted in the past year a baseline study of levels of contamination of poultry. The results of this study will be the basis for development of additional measures for internal validation and assessment by industry and FSIS. FDA is actively promoting pasteurization of milk. The renewed interest among some members of the public for raw milk consumption is a serious problem. CDC is reviewing and summarizing raw milk outbreak data to highlight the hazards of raw milk consumption.

E. coli

The target for E.coli was exceeded for FY 2007. After the incidence of E.coli O157 infections declined to a low in 2004, actually exceeding the 2010 target, it increased again in the next two years, returning to previous levels and declined again slightly in 2007. This recent increase is unlikely to be related to contamination of ground beef alone, and may be related to contamination of fresh produce and other foods. Interagency dialogue is underway with our regulatory partners and with industry to increase the development and application of effective prevention strategies for *E. coli* O157 in meats, produce, and other foods to decrease these rates in the future.

Listeria

The target for Listeria was exceeded from FY 2005 through FY 2007, although it has not yet reached the FY 2010 target. The FY 2010 target was moved up to 2005 by the Healthy People Goals Committee (a committee which is external to CDC). Currently, CDC is not yet meeting the 2010 target that has now become the 2005 target. The progress that has been made thus far has been the result of major efforts in the processed meat/hot dog industry to reduce contamination. In collaboration with FDA and USDA/FSIS, CDC continues broad implementation of a national Listeria Action Plan to further reduce Listeria cases through efficient risk management, empowering consumers, and improving consumer safety to achieve future targets.

Salmonella

The targets for Salmonella have not been met FY 2005 through FY 2007. Rates of infection with Salmonella have decreased only moderately since 1996. This may reflect continuing salmonella contamination of poultry, meat, and the environment in which produce is grown and processed. New interagency efforts in research and interventions to improve the effectiveness of food safety measures for Salmonella are now underway. Additionally USDA/FSIS has announced a major salmonella initiative in February 2006 that included several components including focusing testing on the establishments having the most difficulty in controlling salmonella. FDA, USDA/FSIS, and CDC will be looking at revising these targets as plans are initiated for Healthy People 2020.

Preparedness, Detection, and Control of Infectious Diseases

Measure	FY	Target	Result
Long Term Objective 4.1: Reduce the spread of antimicrobial resistance.			
4.1.1: Decrease the number of antibiotic courses prescribed for ear infections in children under 5 years of age per 100 children. *(Outcome)*	*2010*	50	Dec 31, 2012
	2009	55	Dec 31, 2011
	2008	57	Feb 28, 2010
	2007	60	May 31, 2009
	2006	60	51 (Target Not Met but Improved)
	2005	N/A	50

Measure	Data Source	Data Validation
4.1.1	National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; and National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS	A 10% quality control sample of survey records was independently keyed and coded.

Long-term Objective 4.1, Performance Measure 1

CDC's public health campaign Get Smart: Know When Antibiotics Work is the focus of this measure. The campaign involves an alliance of partners working to reduce inappropriate antibiotic use and reduce the spread of resistance to antibiotics. Today, more than 85 campaign partners and 16 funded state-based programs collaborate with the "Get Smart" campaign on projects, such as developing educational curricula for medical students, multicultural outreach, developing guidelines for appropriate antibiotic use, widely disseminating educational materials and media campaign resources and implementing innovative community initiatives. The Get Smart program also provides funding to states to develop, implement, and evaluate local campaigns. In addition, the National Committee for Quality Assurance's Health Plan Employer Data and Information Set (HEDIS) now includes four performance measures on appropriate antibiotic use, developed and promoted through the campaign.

The benefit of antibiotics for acute otitis media (ear infection) is small and there are potential adverse events associated with antibiotic therapy. About 15 percent of children who take antibiotics suffer from diarrhea or vomiting and up to five percent have allergic reactions, which can be serious or life threatening. In addition, each unnecessary course of antibiotic given to a child can make future infections more difficult to treat. Greater resistance among many of the pathogens that cause ear infections has fueled an increase in the use of broader-spectrum and generally more expensive antibacterial agents. By reducing the number of courses of antibiotics for ear infections for children less than five years, there will be a reduction in unnecessary antibiotic use leading to improved healthcare quality, cost savings and reduction in the development of antibiotic resistance.

This measure is based on a Healthy People (HP 2010) goal for which targets were established in 2000 based on a baseline rate of 108 antibiotic courses for otitis media per 100 children less

than 5 years prescribed during 1996-1997, and a target of 88 prescribed courses for otitis media by 2010. Because performance in reducing antibiotic prescriptions for otitis media exceeded the previous 2010 target of 57 courses, the targeted number of antibiotic courses for otitis media has been revised more than once; most recently, the target was revised to 50 courses. Introduction of pneumococcal conjugate vaccine for children which also reduced pneumococcal otitis media has contributed to these successes.

A concerning increase in strains of bacteria not covered by the currently licensed pneumococcal conjugate vaccine has been detected, and one strain shows high levels of antimicrobial resistance which will present new challenges. Antimicrobial resistance was previously represented by three performance measures but now is covered by this one measure of prescriptions for otitis media in young children. Although the measure was reworded, the targets were not reset significantly. As the program sets forth goals for the next decade through the Healthy People 2020 process, the performance measure for reducing antibiotic resistance will be revisited to ensure that is it appropriately representative for the full scope of efforts to reduce antimicrobial resistance and targets are appropriately ambitious.

The Get Smart program is also forming new partnerships to address changing trends in healthcare (such as retail clinics, free and low-cost antibiotic program at chain pharmacies, employer-based health clinics). In 2008 CDC and its partners (including programs funded through the Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement) hosted the first annual Get Smart about Antibiotics week which was designed and implemented raise awareness about antibiotic resistance and appropriate antibiotics use in the community.

Reporting on this measure was delayed due to data delays and NCHS. Data is anticipated to be available in May of 2009. The reporting date has been changed to May of 2009 due to delays in data results from NCHS.

Measure	FY	Target	Result
Long Term Objective 4.2: Protect Americans from death and serious harm caused by medical errors and preventable complications of healthcare.			
4.2.1: Reduce the rate of central line associated bloodstream infections in medical/surgical ICU patients.[1] *(Outcome)*	*2010*	0.5	May 31, 2011
	2009	1.0	May 31, 2010
	2008	3.19	May 31, 2009
	2007	3.54	1.80 (Target Exceeded)
	2006	3.58	2.20 (Target Exceeded)
	2005	3.62	Data Not Reported
4.2.2: The estimated number of cases of invasive MRSA infection. *(Outcome)*	*Out-Year Target*	89,504 cases (2011)	Sep 30, 2013
	2010	92,272 cases	Sep 30, 2012
	2009	95,126 cases	Sep 30, 2011
	2008	98,068 cases	Sep 30, 2010
	2007	101,101 cases	Sep 30, 2009

Measure	FY	Target	Result
	2006	N/A	104,228 cases
	2005	Baseline	108,281 cases

[1]FY 2009 and FY 2010 targets have been adjusted to reflect ARRA funds.

Measure	Data Source	Data Validation
4.2.1	National Healthcare Safety Network (NHSN)	Extensive cross-field edit checks are used for validation and incomplete records cannot be reported. Detailed instructions for completion of report forms ensure consistency across sites. Process and quality improvements occur through email updates and annual meetings.
4.2.2	Emerging Infections Program / Active Bacterial Core Surveillance/Emerging Infections Program Surveillance for Invasive MRSA Infections	Surveillance Site personnel trained in methodology, updates annually; laboratory audits performed by Site staff

Long-term Objective 4.2, Performance Measure 1

CDC's efforts to reduce and eliminate healthcare-associated infections are the focus of this measure. CDC has provided leadership in preventing central-line bloodstream infections by developing guidelines for the prevention of these infections, through technical assistance to organizations and state health agencies to implement these guidelines, and in working with CMS to implement Hospital Acquired Conditions rules related to bloodstream infections. CDC oversees the National Healthcare Safety Network (NHSN), the source of the data provided and a surveillance system currently being collecting data from approximately 2,200 hospitals and other healthcare facilities across 50 states.

Of those, 19 states are using or planning to use NHSN for mandatory reporting of healthcare-associated infections (HAIs) data from all hospitals. Additional states have legislation pending regarding public reporting, including several that are considering using NHSN specifically for public reporting of HAIs. Through this network, CDC is monitoring infections (including central-line associated bloodstream infections), antimicrobial resistance, and other adverse events in hospitals around the country.

Results for FY 2006 and FY 2007 show that CDC exceeded its target significantly. CDC believes that the reason it has exceeded its targets for this measure is the increased focus on preventing HAIs for NHSN users. There is now substantial evidence identifying effective methods to prevent central line-associated blood stream infections, and there have been successful efforts in increasing adherence to recommendations. Between April 2007 and October 2008, NHSN expanded from 491 to 1953 sites and is expected to reach 2000 sites by the end of 2008.

CDC's FY 2008 target of 3.19 infections per 1,000 central line days is consistent with previous plans to decrease the target by 10 percent (or 0.35) each year. However, CDC has undertaken efforts to more accurately and quantitatively determine appropriate targets. In January 2008, CDC implemented use of a new definition for CLABSI in NHSN, which modified the criteria for reporting of central line-associated bloodstream infections (CLABSIs) to the National Healthcare

Safety Network (NHSN). The revision was implemented to reduce variability and subjectivity that previously existed due to variations in medical treatment practices. By removing the inclusion of subjective practice decisions, and narrowing the criteria to focus on laboratory verified data, the scientific rigor of data submitted has improved, resulting in a more accurate reporting of CLABSIs. Based on a recalculation of historical data using the new criteria, it is anticipated that actual reports of CLABSIs will drop by approximately 19 percent beginning in 2008 due to the new criteria.

For FY 2009, CDC significantly reduced the target to 1.0 to reflect additional investments in NHSN and HAIs through FY 2009 base appropriations and American Reinvestment and Recovery Act HAI funding for state health departments. These investments will continue to reduce HAIs due to CLABSIs in FY 2010 and, as a result, CDC's target for FY 2010 is 0.5. While CDC anticipates substantial reductions in CLABSIs and other HAIs to result from the increased investments over the next few years, several challenges to identifying an appropriate target remain. CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC) is currently working to develop scientific assessments of the preventability of various HAIs, which will allow for better assessment of reasonable targets. Additionally, although it was originally a voluntary system, NHSN is increasingly being required for use at the state level for mandatory reporting of HAIs, and many new healthcare facilities will soon be added as members due to these legislative mandates. Because the effectiveness of these facilities in reducing HAIs is unknown, it will create additional challenges for NHSN in the rapid expansion of the program.

Long-term Objective 4.2, Performance Measure 2

Methicillin-resistant *Staphylococcus aureus* (MRSA) is an antibiotic resistant bacterium that causes emerging infections of national and international importance. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) and are known as healthcare-associated MRSA. MRSA infections that are acquired by persons who have not been recently hospitalized (within the past year) or have had a medical procedure not requiring hospitalization (such as dialysis, surgery, catheter insertion or removal) are known as community-associated MRSA infections. Staph or MRSA infections in the community are usually manifested as skin infections, such as pimples and boils, and occur in otherwise healthy people.

The estimated number of people developing their first serious MRSA infection (i.e., invasive) in 2005 was approximately 94,360 persons; approximately 18,650 of those persons died during the hospital stay for these serious MRSA infections. About 85 percent of all invasive MRSA infections were associated with healthcare, and of those, about two-thirds occurred outside of the hospital, while about one third occurred during hospitalization. About 14 percent of all the infections occurred in persons without obvious exposures to healthcare.

This measure will assist in evaluating the impact of CDC's programs to prevent MRSA infections, both in healthcare and community settings. The measure is aligned with the Healthy Healthcare Settings Goal Action Plan for both Objective 2 and Objective 3 and with the Strategic Plan for the Division of Healthcare Quality Promotion (DHQP). The measure is also aligned with the aims of the HHS Steering Committee on Healthcare Associated Infections, a new effort in the Office of the Secretary, HHS.

Active Bacterial Core surveillance (ABCs) is a core component of CDC's Emerging Infections Programs Network (EIP), and is a collaborative program involving CDC, state health departments, and universities. ABCs is an active laboratory- and population-based surveillance system for invasive bacterial pathogens of public health importance. For each case of invasive disease in the surveillance population, a case report with basic demographic information is

completed and bacterial isolates are sent to CDC and other reference laboratories for additional laboratory evaluation. ABCs also provides an infrastructure for further public health research, including special studies aiming at identifying risk factors for disease, post-licensure evaluation of vaccine efficacy and monitoring effectiveness of prevention policies.

ABCs surveillance for MRSA was initially established in nine states in 2005 representing a population of over almost 15 million persons. This program operates out of DHQP, in conjunction with CDC's national Center for Immunizations and Respiratory Diseases, Division of Bacterial Diseases, the Division responsible for operations of ABCs overall.

Both hospital and community data for invasive MRSA infections are included in the ABC data set. The ABC's data has been collected by health departments for over a decade for a variety of infectious pathogens, most recently including MRSA. We believe it is very reliable for the most serious invasive MRSA infections, in both healthcare and community settings. Additional measures to capture community MRSA infections more broadly are being developed. For now, measures that combine information from both hospital and community data will be used, and will be useful for determining overall progress in MRSA prevention, while targeted interventions will be applied.

By December 2008. a multidrug-resistant organism module will be added to the National Healthcare Safety Network (NHSN). This module will provide surveillance data from participating facilities on multidrug-resistant organisms, including MRSA and simplified measures to assess the impact of MRSA prevention in healthcare settings. In the future, data from this source has the potential for use for estimating invasive MRSA cases.

This is a new measure and consequently past performance related to this measure is not available. However, CDC currently has a number of activities underway or planned that will impact on the measure, going forward. CDC provides direct support and assistance to external partners involved in MRSA prevention initiatives including: Department of Veterans Health Affairs, State and Regional initiatives, Institute for Healthcare Improvement, and other multi-center prevention collaborative efforts. CDC works in collaboration with the Healthcare Infection Control Practices Advisory Committee (HICPAC) to develop and promote evidence-based infection control strategies to reduce transmission of MRSA and other pathogens in healthcare facilities. Through the Prevention Epicenter Program, CDC provides funding and works directly with academic partners to address important scientific questions regarding the prevention of MRSA and other resistant organisms. CDC launched a national evidence-based educational Campaign to Prevent Antimicrobial Resistance in Healthcare Settings that targets healthcare providers. The Campaign focuses on preventing antimicrobial resistance in healthcare settings by promoting four strategies targeting various patient populations including: hospitalized adults, dialysis patients, surgical patients, hospitalized children, and long-term care residents. CDC has developed and published guidance for the management and prevention of MRSA in the community based on review of available information and input from clinical and public health experts (CA-MRSA Clinical Management). In the fall of 2008, CDC launched a National MRSA Education Initiative to improve knowledge about MRSA in community settings, including recognition of the signs and symptoms, diagnosis and treatment, and prevention and control measures among both the general public and clinical audiences, particularly among at-risk or high-risk groups identified through recent surveillance and research studies.

CDC collaborates with state and local health departments to develop physician and patient guidance and education materials for MRSA (MRSA education materials). CDC performs needs and knowledge assessments with public health partners, at-risk groups, and the general public to target the development of guidance and education.

The targets are ambitious because they:

- require identification of effective prevention strategies for the community settings and outpatient settings that can be incorporated into the prevention programs outlined above.
- include both community and healthcare onset MRSA. While prevention measures for healthcare onset MRSA are well established, measures for community onset MRSA are still being developed.
- are dependent on application of prevention recommendations that require behavior change interventions (e.g. hand hygiene compliance).
- focus on MRSA which is a dynamic pathogen both in terms of biological characteristics and response to antibiotic treatment.

The key strategies to achieve future targets, as articulated in the CDC's Division of Healthcare Quality Promotion (DHQP) strategic plan, are to: expand capacity to detect and monitor antimicrobial resistance, maintain and improve capacity to respond and assess new and emerging problems associated with antimicrobial resistance, improve strategies for prevention of antimicrobial-resistant infections, improve antimicrobial use in healthcare settings, and increase involvement of the public and private sectors and healthcare researchers.

HEALTH PROMOTION

Chronic Disease Prevention, Health Promotion, and Genomics

Measure	FY	Target	Result
5.E.1: Number of financial actions (such as project carryover funds requests from grantees and grantee project re-budgetings) that delay the implementation of grantee and partners' activities. *(Efficiency)*	*2010*	394	Jun 30, 2011
	2009	406	Jun 30, 2010
	2008	419	424 (Target Not Met)
	2007	443	393 (Target Exceeded)
	2005	Baseline	466

Measure	Data Source	Data Validation
5.E.1	The Extramural Programs Management Information System (EPMIS), which is an internal system for tracking and managing all types of budget actions.	EPMIS report is run periodically and results authenticated by Division budget leads at monthly meetings with Center budget execution staff.

Efficiency Measure 5.E.1:

In FY 2008, 424 financial actions delayed the implementation of grantee and partners activities. This number was a decrease from the FY 2005 baseline but did not meet the target for FY 2008.

This improvement was due to efforts made to reduce the number of post-award actions that do not require approval from the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). NCCDPHP and CDC's Procurement and Grants Office have worked with project officers to identify what constitutes a post-award approval, and have implemented streamlined processes that provide guidance to the partners on when to request specific actions that require post-award approval. Project officers have worked with the cooperative agreement partners educating them on regulations that allow them latitude to make revisions without approval from NCCDPHP.

In FY 2008, an increase in these types of financial actions was due to an increase in the number of Funding Opportunity Announcements (FOA). In FY 2008, NCCDPHP published and awarded 20 new FOAs to multiple organizations. Also, NCCDPHP received 68 Congressional project applications that were processed and required additional post-award actions to be revised before programs could operate. Due to the high volume of projects ending, grantees requested carryover funding to complete activities under their current announcements in order to do orderly close-out.

Efforts continue to be made to reduce the number of post-award actions that do not require approval from the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). NCCDPHP and CDC's Procurement and Grants Office have continued to work

with project officers to identify what constitutes a post-award approval, and have implemented streamlined processes that provide guidance to the partners on when to request specific actions that require post-award approval. Project officers have worked with the cooperative agreement partners educating them on regulations that allow them latitude to make revisions without approval from NCCDPHP.

In FY 2009, an increase in these types of financial actions is expected due to publication of the Collaborative FOA DP09-901. In FY 2009, NCCDPHP published a FOA that incorporated four divisions and awards were made to all 50 states. This collaborative announcement will generate a significant amount of post-award actions because each program request is treated as an individual request. Also, NCCDPHP is expected to receive 51 Congressional project applications that will be processed and require additional post-award actions to be revised before programs can operate. Efforts continue to be made to reduce the number of post-award actions that do not require approval from the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). NCCDPHP and CDC's Procurement and Grants Office have continued to work with project officers to identify what constitutes a post-award approval, and have implemented streamlined processes that provide guidance to the partners on when to request specific actions that require post-award approval. Project officers have worked with the cooperative agreement partners educating them on regulations that allow them latitude to make revisions without approval from NCCDPHP.

Based on recent implementation of a Project Officer training course, increased use of Management Information Systems to track these actions, and increased emphasis on technical assistance, the program will take efforts to decrease these budget actions each year.

Approximately 85 percent of CDC's National Center for Chronic Disease Prevention and Health Promotions (NCCDPHP) budget is spent on extramural funding of grantees and cooperative agreement partners, especially state health departments. These grantees and partners utilize funding to conduct interventions that directly impact the health of the nation. Any delay in receipt of funding results in reduction of the number or duration of the interventions, which, in turn, affects the health impact of our grantees activities. Therefore, improving this measure positively impacts the implementation of public health interventions which lead to positive health outcomes.

Cancer Prevention and Control

Measure	FY	Target	Result
Long Term Objective 5.1: Reduce death and disability due to cancer.			
5.1.1: Reduce the age-adjusted annual rate of breast cancer mortality per 100,000 female population. *(Outcome)*	*Out-Year Target*	21.3 (2015)	Feb 28, 2017
	1999	Baseline	26.6%
5.1.2: Increase the percentage of women age 40+ who have had a mammogram within the previous two years. *(Outcome)*	*2010*	78%	Feb 28, 2012
	2008	77%	Feb 28, 2010
	2006	N/A	76.6%
5.1.3: Percent of women 40 years of age and older diagnosed with breast cancer whose cancer was diagnosed at in situ or localized stage. *(Output)*	*Out-Year Target*	69% (2015)	Jun 30, 2018
	2010	68%	Feb 28, 2013
	2009	68%	Jun 30, 2012
	2005	N/A	67%
5.1.4: Decrease the age-adjusted rate of invasive cervical cancer per 100,000 women ages 20+ screened through the NBCCEDP (excludes invasive cervical cancer diagnosed on the initial program screen). *(Outcome)*	*Out-Year Target*	12 (2013)	Feb 28, 2015
	2010	13	Feb 28, 2012
	2009	14	Feb 28, 2011
	2008	14	Feb 28, 2010
	2007	14	14 (Met)
	2006	N/A	15
	2005	N/A	15

Measure	Data Source	Data Validation
5.1.1	National Vital Statistics System, NCHS	Data from the NCHS, a nationally recognized public health information source, undergo statistical computation by the Data Analysis Support Team within CDC's Division of Cancer Prevention and Control to prepare measures based on

Measure	Data Source	Data Validation
		definitions used within the cancer community.
5.1.2	Behavioral Risk Factor Surveillance System (BRFSS)	BRFSS is a state-based health survey system. Data are submitted to CDC on a monthly basis, where the data undergo rigorous quality checks. CDC also verifies performance through quarterly state reports and periodic site visits.
5.1.3	Data are from the CDC's National Program of Cancer Registries (NPCR) and the NCI's Surveillance, Epidemiology, and End Results (SEER) cancer registries that met data-quality criteria for all invasive cancer sites combined according the United States Cancer Statistics. States not meeting these criteria were excluded.	Central cancer registries submit electronicaly to a data management contractor on an annual basis. The data management contractor compiles the data, performs rigorous quality checks, and generates data evaluation reports for the central cancer registries. All data have indicators to assess data quality.
5.1.4	National Breast and Cervical Cancer Early Detection Program (NBCCEDP) Minimum Data Elements (MDE)	Grantees submit MDEs electronically to a data management contractor, who analyzes data and submits it to CDC. All data have indicators to assess completeness. Data are also assessed against established clinical standards.

Long-term Objective 5.1, Performance Measure 1

This is a long term measure for CDC. Data from 2005 shows an age-adjusted rate of 24.1 breast cancer deaths per 100,000 female population, an improvement from the 2004 rate of 24.4 per 100,000, and a 9 percent relative improvement from the 1999 baseline rate of 26.2 breast cancer deaths per 100,000 women.

CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) has contributed to the notable decline, in recent years, in breast and cervical cancer deaths by providing access to screening services, increasing breast and cervical cancer awareness and education, and inherently changing health-seeking behaviors in women for whom screening services are not otherwise available or accessible.

The NBCCEDP works with national organizations, state health agencies, and other key groups to develop, implement, and promote effective cancer prevention and control practices. Currently, the NBCCEDP provides support to all 50 states, the District of Columbia, 5 US territories, and 12 American Indian/Alaska Native tribes or tribal organizations to help low-income, uninsured and underinsured women gain access to breast and cervical cancer

screening and diagnostic services. Timely mammography screening among women aged 40 years or older is the best available method to detect breast cancer in its earliest, most treatable stage, and could reduce breast cancer mortality by approximately 16 percent to 30 percent compared to women who are not screened.

Long-term Objective 5.1, Performance Measure 2

In FY 2006, the percentage of women age 40+ who received a mammogram within the previous two years was increased from the 2004 baseline of 74.6 percent to 76.6 percent, demonstrating considerable progress toward achieving the FY 2008 target of 77 percent. CDC is aiming to increase the percentage of women age 40+ having mammograms within the past two years to 78 percent in FY 2010.

Based on annual rates of increase in the 1990s, and the recent leveling-off of the increase in mammography use since the late 1990s, continuing these projected increases will be challenging in future years.

CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) focuses its efforts on reaching those women who are most likely to need assistance with gaining access to, and affording screening services. In FY 2007, the most recent data reported, the NBCCEDP screened 295,338 women for breast cancers, and detected 3,962 breast cancers.

The national screening program has contributed to the notable decline, in recent years, in breast and cervical cancer deaths by providing access to screening services, increasing breast and cervical cancer awareness and education, and inherently changing health-seeking behaviors in women for whom screening services are not otherwise available or accessible.

Timely mammography screening among women aged 40 years or older is the best available method to detect breast cancer in its earliest, most treatable stage, and could reduce breast cancer mortality by approximately 16 percent to 30 percent compared with women who are not screened.

Long-term Objective 5.1, Performance Measure 3

Breast cancer is the most commonly diagnosed cancer and second leading cause of cancer death among women in the United States. Morbidity and mortality from breast cancer are reduced when women are diagnosed at in situ or localized stages. Breast cancer diagnosed at an early stage requires less aggressive treatment and the survival rates are significantly higher than for women diagnosed at later stages of the disease. Between 1996 and 2004, 5-year survival for women diagnosed with in situ breast cancer was estimated to be 100 percent, and survival for women with localized disease was 98 percent. In contrast, 5-year survival for women diagnosed with regional disease was approximately 84 percent and survival for women with distant disease was 27%. The regular use of mammography improves the chances of a woman being diagnosed at an earlier stage of disease. Early diagnosis and the chance for longer survival are clearly aligned with the adult and older adult goals related to helping women live longer, high-quality, productive, and independent lives.

Stage at diagnosis strongly influences survival and reflects the use of mammography. By assessing the percent of women diagnosed at an in situ or localized stage, we can measure the effect of mammography use. The numerator is the number of women diagnosed with breast cancer at an in situ or localized stage. The denominator is the total number of women diagnosed with breast cancer at any stage. These percentages are not age adjusted.

In the baseline year for this measure, 2002, 68 percent of new breast cancer cases were diagnosed as in situ or localized; this rate remained relatively stable through 2005. The desired

trend is an increase in situ or localized breast cancers. This stability most likely reflects the saturation of mammography use among the majority of the population. The harder to reach women and women not previously regular users of mammography must be reached to increase the percent of women diagnosed with breast cancer at an early stage. Over this same period, researchers at the National Cancer Institute and CDC have been monitoring an apparent reduction in the proportion of women 40 years and older who have had a mammogram within the last two years. While this may be a coincidence, it underscores the need assertively encourage participation in breast cancer screening through patient and provider education and through programs which support breast cancer screening for women who do not have insurance, such as the National Breast and Cervical Cancer Early Detection Program.

Two strategies that we believe are critical to making progress on this measure are increasing the proportion of women in the United States who regularly participate in breast cancer screening and improving the quality and accuracy of cancer staging data collected in the United States. The Comprehensive Cancer Control Program (CCCP) and the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) both support program activities through our State program partners which will encourage women to begin and maintain regular breast cancer screening. Both programs place particular emphasis on trying to identify women who are "hard to reach" or who have never yet participated in breast cancer screening. CDC, as part of the consultation to state programs, strongly encourages the establishment of strong, active case management programs and conducts at least annual training for outreach and recruitment coordinators from each of the state programs. In addition, the National Program of Cancer Registries (which, in combination with NCI's SEER program provides cancer surveillance data for virtually 100 percent of the United States) has data quality assurance as one of the principal objectives for their program consultation activities (see milestone 2). Similarly, CDC maintains a record of the results of each cancer screening provided with program funds.

Long-term Objective 5.1, Performance Measure 4

Cervical cancer is highly preventable if precancerous changes are identified and it is highly treatable if cancer is detected early. One way to prevent cervical cancer is screening to find precancers before they turn into invasive cancer. The Pap test is the most common way to do this. Regular Pap tests decreases a woman's risk of cervical cancer by detecting precancerous cervical lesions, which can be treated effectively. If a precancer is found and treated, it can stop cervical cancer before it starts. Most invasive cervical cancers are found in women who have not had regular Pap tests.

This measure continues to improve from the FY 2004 baseline and meets the FY 2007 target of 14 per 100,000. This measure applies only to women screened through CDC’s National Breast and Cervical Cancer Early Detection Program (NBCCEDP). The NBCCEDP currently screens an estimated 7.5 percent of all American women age 18-64 eligible to participate in the NBCCEDP for cervical cancer.

In the past 12 months, the NBCCEDP screened 321,296 women for cervical cancer using the Pap test, and found 5,201 high-grade and invasive cervical lesions.

According to the *Annual Report to the Nation on the State of Cancer in the US*, incidence rates of invasive cervical cancer have declined since 1975, with an average 3.7percent decline each year since 1996. This decline has occurred in all racial and ethnic groups, including white, black, Asian and Pacific Islander, and Hispanic women.

Tobacco

Measure	FY	Target	Result
Long Term Objective 5.2: Reduce death and disability among adults due to tobacco use.			
5.2.1: Reduce the age-adjusted annual rate of trachea, bronchus, and lung cancer mortality per 100,000 population. *(Outcome)*	*Out-Year Target*	43.3 (2013)	Jun 30, 2015
	2005	Baseline	52.6
5.2.2: Reduce per capita cigarette consumption in the U.S. per adult age 18+.[1] *(Outcome)*	*2010*	1,511	N/A
	2009	1,558	N/A
	2008	1,606	N/A
	2007	1,656	N/A
	2005	N/A	1,716

[1]The data source for this measure was discontinued and the program is exploring methodologies for generating data to satisfy reporting for this measure.

Measure	Data Source	Data Validation
5.2.1	National Vital Statistics System, NCHS	Data are validated by NCHS. NCHS has not yet released final 2006 mortality data.
5.2.2	USDA, Economic Research Service, Tobacco Outlook Reports (TBS-263 Oct 2007, Table 2)	The USDA Economic Research Service discontinued its twice annual data updates as of October 2007. The last USDA data are preliminary 2006. CDC is currently conducting a feasibility study to replace the per capita consumption data source; the tobacco community is reviewing the results and considering possibilities for a new data source study.

Long-term Objective 5.2, Performance Measure 1

This is a long term measure for CDC. The age-adjusted trachea, bronchus, and lung cancer mortality rate per 100,000 people dropped from 54.1 in 2003 to 53.2 in 2004 and 52.6in 2005. Prior to the baseline year of FY 2003, mortality rates from lung cancer were decreasing steadily.

A substantial body of research demonstrates that comprehensive state tobacco control programs reduce smoking-attributable mortality, smoking prevalence, smoking initiation, and cigarette consumption. Recent research shows that the more states spend on comprehensive tobacco control programs, the greater the reductions in smoking, and that the longer states

invest in such programs, the greater and faster the impact.

CDC directs and manages the National Tobacco Control Program and other extramural activities to address tobacco use. CDC also provides and supports training and technical assistance to all 50 states, the District of Columbia, territories, national networks, and tribal support centers. CDC will continue to link science and practice and provide leadership to build and sustain tobacco control capacity.

To this end, CDC prepared Best Practices for Comprehensive Tobacco Control Programs 2007. This guidance document, which updates the 1999 original, describes an integrated state budget structure for implementing interventions proven to be effective. CDC continues to support Best Practices for Comprehensive Tobacco Control Programs 2007, reflecting additional state experiences in implementing comprehensive programs and new scientific literature since its original release in 1999.

CDC will continue to advance the science base of tobacco control by conducting and coordinating research, surveillance, and evaluation activities related to tobacco and its impact on health. CDC synthesizes and translates research into practice; disseminates scientific findings; and provides technical assistance to states, territories, national networks, tribal support centers, and the general public.

Long-term Objective 5.2, Performance Measure 2

Per capita cigarette consumption for adults age18+ has fallen from the baseline 1,814 in 2004 to 1,716 in 2005 (the last year in which data is available). The original baseline for this measure was 1,770. In a subsequent Tobacco Outlook Report, the U.S. Department of Agriculture revised the data for 2004 because of Census adjustments. Therefore, CDC's tobacco program revised its baseline and targets accordingly.

CDC supports the National Tobacco Prevention and Control (NTCP) program in 50 states and the District of Columbia. NTCP grants support state, local and territorial health department efforts to prevent initiation of tobacco use among youth and young adults, promote tobacco use cessation among adults and youth, eliminate exposure to secondhand smoke, and identify and eliminate tobacco-related disparities.

CDC supports the National Network of Tobacco Use Cessation Quitlines, a collaborative effort between CDC, the National Cancer Institutes (NCI) Cancer Information Service (CIS), the North American Quitline Consortium (NAQC), and state tobacco control programs through 1-800-QUIT-NOW.

CDC provides technical assistance and training to help states plan, establish, and evaluate their own tobacco control programs.

CDC responds to approximately 50,000 scientific, technical and public inquiries on tobacco use each year. The program also provides advertising materials to states through the Media Campaign Resource Center.

Since 1964, the U.S. Surgeon General's reports on smoking and health have concluded that smoking is a primary cause of lung cancer. Achieving the targets of this measure therefore supports the goal of reducing death and disability due to lung cancer.

Diabetes

Measure	FY	Target	Result
Long Term Objective 5.3: Prevent diabetes and its complications.			
5.3.1: Maintain the age-adjusted rate of incidence of End-Stage Renal Disease (ESRD) per 100,000 diabetic population at no higher than its current rate. *(Outcome)*	*Out-Year Target*	231.7 (2013)	Dec. 31, 2014
	2002	Baseline	231.7
5.3.2: Increase the age-adjusted percentage of persons with diabetes age 18+ who receive an A1C test at least two times per year. *(Outcome)*	*2010*	75%	Dec 31, 2011
	2009	74%	Dec 31, 2010
	2008	73%	Dec 31, 2009
	2007	72%	69.6% (Target Not Met but Improved)
	2006	N/A	68.0%
	2005	N/A	64.3%

Measure	Data Source	Data Validation
5.3.1	US Renal Data System	The USRDS is under the administrative oversight of the National Institutes of Health and the Centers for Medicare and Medicaid Services, whose Steering Committee's responsibilities include data validation.
5.3.2	Behavioral Risk Factor Surveillance System (BRFSS)	BRFSS is a state-based health survey system. Data are submitted to CDC on a monthly basis, where the data undergo rigorous quality checks. CDC also verifies performance through quarterly state reports and periodic site visits.

Long-term Objective 5.3, Performance Measure 1

This is a long term measure for CDC.

End Stage Renal Disease (ESRD) is a complicated and disabling condition and one of the most expensive conditions for which the federal government provides financial coverage. Diabetes

mellitus is presently the most common cause of ESRD in the U.S., accounting for approximately 44 percent of all new cases of ESRD.

For decades, ESRD incidence was increasing. However, since the late 1990s, the rates have declined. The 2002 baseline rate is 231.7 per 100,000 people with diabetes. As those with diabetes live longer, the incidence of ESRD is likely to increase. Therefore, CDC aims to maintain the current baseline rate.

In 2006, the age-adjusted incidence of ESRD was 205.7 per 100,000 diabetic population. This is based on 3-year averages of the diabetic population, a continued improvement.

CDC's diabetes program works to eliminate the preventable burden of diabetes through leadership, research, programs, and policies that translate science into practice. CDC's diabetes activities are based on the prevailing science for diabetes prevention and control which demonstrates that many of the serious diabetes-related complications, including ESRD, may be prevented.

Long-term Objective 5.3, Performance Measure 2

Since the baseline year 2004, the percentage of receiving two or more A1C tests in this population has fluctuated from 68.8 percent to 64.3 percent in 2005, and back up to 69.6 percent in 2007.

For FY 2007, the actual rate of 69.6 percent is below the 72 percent target. Overall the rates for two or more A1c tests continue to exceed the HP2010 target of 65 percent and demonstrated a modest increase compared to the FY 2006 rate of 68.2 percent. As the number of people with diabetes continues to increase, and as those with diabetes live longer, the targets for this measure will be increasingly challenging to meet.

Glucose control is one important pathophysiologic factor in the genesis of End Stage Renal Disease (ESRD) and other complications from diabetes. As A1C measurement is the best indicator of glucose control, the annual measure of A1C relates closely to the likelihood of achieving the long term measure of controlling the rate of ESRD and other complications among persons with diabetes.

CDC aims to increase the age-adjusted proportion of persons with diabetes who receive two or more A1C tests by one percentage point every year.

CDC's Diabetes program works to eliminate the preventable burden of diabetes through leadership, research, programs, and policies that translate science into practice. CDC's diabetes activities are based on the prevailing science for diabetes prevention and control which demonstrates that many of the serious diabetes-related complications, including ESRD, may be prevented.

Heart Disease and Stroke

Measure	FY	Target	Result
Long Term Objective 5.4: Reduce death and disability due to heart disease and stroke.			
5.4.1a: Reduce the age-adjusted annual rate per 100,000 population of: Coronary heart disease deaths. *(Outcome)*	*Out-Year Target*	166 (2015)	Dec 31, 2017
	2004	Baseline	187
5.4.1b: Reduce the age-adjusted annual rate per 100,000 population of: Stoke-related deaths. *(Outcome)*	*Out-Year Target*	50 (2015)	Dec 31, 2017
	2004	Baseline	61
5.4.2: Increase the age-adjusted proportion of persons age 18+ with high blood pressure who have it controlled (<140/90). *(Outcome)*	*2010*	59%	Dec 31, 2012
	2008	50%	Dec 31, 2010
	2006	41%	44% (Target Exceeded)
5.4.3: Maintain the age-adjusted proportion of persons age 20+ with high total cholesterol (>=240mg/dL) at no higher than its current rate. *(Outcome)*	*2010*	17%	Dec 31, 2012
	2008	17%	Dec 31, 2010
	2006	17%	16% (Target Exceeded)

Measure	Data Source	Data Validation
5.4.1	National Vital Statistics System, NCHS	Data are validated by NCHS.
5.4.2 – 5.4.3	National Health and Nutrition Examination Survey (NHANES)	Data are validated by NCHS.

Long-term Objective 5.4, Performance Measure 1

This is a long term measure for CDC. Rates for 2005 were 150 per 100,000 population for heart disease deaths, and 48 per 100,000 population for stroke-related deaths. This is an improvement from the 2000 baseline of 187 and 61, and shows the out-year target exceeded for coronary heart disease deaths and met for stroke-related deaths.

Coronary heart disease (CHD) death rates have been decreasing steadily since 1995.

CDC provides states with financial and programmatic assistance to develop, implement, and evaluate cardiovascular disease prevention and control programs. CDC supports achievement

of the target for heart disease and stroke prevention in its four distinct but complementary parts: 1) prevention of risk factors; 2) detection and treatment of risk factors; 3) early identification and treatment of heart attacks and strokes; and 4) prevention of recurrent cardiovascular events. To reach this goal, CDC's heart disease and stroke prevention efforts include the implementation of science-based public health programs, research and surveillance activities, the development and application of evaluation procedures, the development of tools to be used by states and communities, expanding partnership initiatives, and addressing health disparities.

Heart disease and stroke prevention activities focus on adults and older adults, with special attention given to higher-risk populations. The program also carries out the Mississippi Delta Health Initiative, partners with the National Forum for Heart Disease and Stroke Prevention, and addresses salt/sodium due to its significant impact on blood pressure.

Heart disease and stroke prevention activities include:

1. State Heart Disease and Stroke Prevention Programs, funded since 1998 through cooperative agreements awarded competitively.

- In FY 2009 fourteen states will receive funding for Basic Implementation programs. Activities for these programs include implementing population-based interventions that address priority populations and settings.
- In FY 2009 twenty-seven states and the District of Columbia will receive funding for Capacity Building programs, which prepares these states for program implementation through such activities as identifying priority populations and developing a comprehensive State Plan. Capacity Building funding helps state health departments develop the human and technical capacity to properly address heart disease and stroke.
- The Heart Disease and Stroke Prevention Program has identified high-impact points of intervention to stem the tide of cardiovascular disease. Because of continuing public health and clinical efforts, age-adjusted death rates continue to drop for both ischemic heart disease and stroke.

2. The Paul Coverdell National Acute Stroke Registry, funded since 2001, competitively funds states through cooperative agreements to measure, track, and improve the quality and delivery of stroke care. Six states are currently funded.

- All states funded by the Coverdell Registry during FY 2003-2006 have initiated or adopted statewide stroke care legislation to reduce mortality and otherwise improve patient outcomes.

3. There are many other CDC heart disease and stroke prevention-related activities, including surveillance and epidemiologic studies, applied research, and evaluation projects:

- Monitoring and Surveillance -- CDC helps states and communities track trends in heart disease and stroke and their risk factors. By analyzing and publicizing this data, public health strategies can be better developed and implemented according to recognized health needs. For the first time ever, in 2007 CDC was able to report the state-by-state prevalence rates of both heart disease and stroke.
- Translating the science into practice -- CDC engages in applied research and research translation to support sound, evidence-based practice in heart disease and stroke prevention. From its research, CDC develops and disseminates many products and tools that cardiovascular disease prevention programs can use and apply in various public health settings. Many tools and resources are available on the web.

- Evaluation -- CDC not only provides technical assistance to help states evaluate their programs, it also works at the cutting edge of evaluation research in heart disease and stroke prevention.

Long-term Objective 5.4, Performance Measure 2

In 2006, 44 percent of adults age 18+ with high blood pressure had it controlled. Prior to 2000, data for this measure was collected sporadically. Since this became a performance measure for CDC, rates increased from the baseline of 32 percent in 2002 to 44 percent in 2006. Continuing emphasis on this measure should improve performance even further.

The relationship between blood pressure and the risk of Cardiovascular Disease (CVD) events is consistent and independent of other factors. The higher the blood pressure, the greater is the chance of heart attack, heart failure, stroke, and kidney disease. About 69 percent of people who have a first heart attack, 77 percent who have a first stroke, and 74 percent who have congestive heart failure also have hypertension.

In FY 2009, CDC will fund forty-one states and the District of Columbia to conduct heart disease and stroke prevention programs. CDC's Heart Disease and Stroke Prevention Program has identified high-impact points of intervention to stem the tide of cardiovascular disease. Controlling high blood pressure is a priority. Almost 90 percent of middle-age Americans will develop high blood pressure in their lifetime. Controlling high blood pressure is very important, as a 12 to 13 point drop in high blood pressure can reduce cardiovascular disease deaths by 25 percent. Control of high blood pressure appears to be improving, with 44 percent of all hypertensive American adults controlling their blood pressure in 2005-2006, up from 32 percent at the turn of the century. However, this indicates that in the most recent comprehensive figures, nearly 56 percent of those with high blood pressure still did not have it under control.

Long-term Objective 5.4, Performance Measure 3

Since the baseline for the measure was established at 17 percent (actually 17.3 percent) for the period 1999 to 2002, the rate for 2004 rose slightly to 17.6 percent, rounded to 18 percent and dropped to 16 percent in 2005 to 2006. In the last several years, the prevalence of high cholesterol among U.S. adults has remained at approximately 17 to 18 percent; however, an NHANES data brief reported that the 2005 to 2006 rate dropped two points for a net reduction at 16% of adults with serum total cholesterol levels of 240 mg/dl or greater.

Approximately 38 million American adults have blood cholesterol levels of 240 mg/dL or higher, which is considered high risk. Lowering cholesterol can reduce the risk for developing heart disease, including heart attacks, and, among those with heart disease, the need for heart bypass surgery or angioplasty. Recent studies show that high levels of LDL (bad cholesterol) and triglycerides increase the risk of stroke in people with previous coronary heart disease, ischemic stroke or transient ischemic attacks. Low levels of HDL (good cholesterol) may also raise stroke risk.

In FY 2009, CDC will fund 41 states and the District of Columbia to conduct heart disease and stroke prevention programs. CDC's Heart Disease and Stroke Prevention Program has identified high-impact points of intervention to stem the tide of cardiovascular disease. Addressing high cholesterol is a priority.

While encouraged by the recent slight decline, the estimate for this measure is expected to increase with the emerging epidemic of obesity. Therefore, it will be challenging for CDC to maintain this rate.

Nutrition and Physical Activity

Measure	FY	Target	Result
Long Term Objective 5.5: Reduce the rate of growth of obesity through nutrition and physical activity interventions.			
5.5.1: Reduce the age-adjusted percentage of adults age 18+ who engage in no leisure-time physical activity. *(Outcome)*	*Out-Year Target*	21.5% (2014)	Jun 30, 2016
	2004	Baseline	24.36%
5.5.2: Slow the estimated average age-adjusted annual rate of increase in obesity rates among adults age 18+. *(Outcome)*	*Out-Year Target*	+0.16 average increase per year (2014)	Dec 31, 2016
	2004	Baseline	+ 0.64 average increase per year

Measure	Data Source	Data Validation
5.5.1 – 5.5.2	Behavioral Risk Factor Surveillance System (BRFSS)	BRFSS is a state-based health survey system. Data are submitted to CDC on a monthly basis, where the data undergo rigorous data quality checks. CDC also verifies performance through quarterly state reports and periodic site visits.

Long-term Objective 5.5, Performance Measure 1

This is a long term measure for CDC. In FY 2004, the baseline year, CDC reported that 24.36 percent of adults age 18 or older engage in no leisure-time physical activity. In the ten years prior to the baseline, there was an absolute decline from 29 to 24 percent. The rate of decrease is expected to lessen over the next ten years. In FY 2007, the rate declined only slightly, to 24.06 percent.

There are challenges in accomplishing this goal, such as the complexity of issues related to physical activity practices at the individual level without substantial environmental and policy supports. Furthermore, CDC's ability to influence the desired changes is in competition with factors from other sectors of society.

The national Nutrition, Physical Activity and Obesity Program (NPAO) supports state efforts to work with communities to develop, implement, and evaluate strategies that address behaviors related to the following six principal target areas:

- Increase physical activity
- Increase consumption of fruits and vegetables

- Decrease the consumption of sugar-sweetened beverages
- Reduce the consumption of high-energy-dense foods
- Increase breastfeeding initiation and duration
- Decrease television viewing

The program objectives will be accomplished by promoting and assisting states with the following strategies to address the target area of increased physical activity:

- Community-wide campaigns
- Point-of-decision prompts for stairwells
- Individually adapted health behavior change programs
- Enhanced physical education in schools
- Social support in community settings
- Create or enhance access to places for physical activity combined with information outreach activities
- Street-scale urban design and land-use policies and practices
- Community-scale urban design and land-use policies and practices
- Safe routes to school

The program will accomplish its impact objectives through increases in the number of strategies implemented and evaluated in funded states. Policy promotion and environmental changes are of strategic importance because of the power that these approaches have not only in changing individual health behaviors, but also in creating healthy environments and norms that can support these behaviors.

Major causes of morbidity and mortality in the U.S. are related to physical inactivity and poor diet. In particular, CVD, type two diabetes, hypertension, and certain cancers are linked to poor diet and a sedentary lifestyle.

Long-term Objective 5.5, Performance Measure 2

This is a long term measure for CDC. The average annual increase in the prevalence of obesity from 2001-2003 was 0.87 percent. From 2002 to 2004, the baseline period, the average annual increase was 0.64 percent. Though obesity rates have been increasing, the rate of increase has been slowing since the 2001-2003 time frame. CDC plans to slow the rate of increase from 0.64 percent per year to 0.16 percent per year in the 2010 to 2014 time frame.

There are challenges in accomplishing this goal, such as the complexity of issues related to food consumption patterns and physical activity practices at the individual level without substantial environmental and policy supports. Furthermore, CDC's ability to influence the desired changes are in competition with factors from other sectors of society.

CDC intends to reduce the rate of growth of obesity through nutrition and physical activity interventions. CDC's national Nutrition, Physical Activity and Obesity Program (NPAO) supports state efforts to work with communities to develop, implement, and evaluate strategies that address behaviors related to the following six principal target areas:

- Increase physical activity

- Increase consumption of fruits and vegetables
- Decrease the consumption of sugar-sweetened beverages
- Reduce the consumption of high-energy-dense foods
- Increase breastfeeding initiation and duration
- Decrease television viewing

The program objectives will be accomplished by assisting states and communities with implementing environmental and policy strategies to address the six target areas and partnering with other national funders of similar community efforts.

The program will accomplish its impact objectives through increases in the number of strategies implemented and evaluated in funded states. Policy promotion and environmental changes are of strategic importance because of the power that these approaches have not only in changing individual health behaviors, but also in creating healthy environments and norms that can support these behaviors.

About 60 million adults, or 30 percent of the adult population, are now obese. Obesity is related to two-thirds of diabetes cases and heart disease cases, 20 percent of cancers in women and 15 percent of cancers in men. Additionally, it causes or exacerbates many other serious chronic diseases and conditions, including hypertension and stroke.

School Health

Measure	FY	Target	Result
Long Term Objective 5.6: Improve youth and adolescent health by helping communities create and environment that fosters a culture of wellness and encourages healthy choices.			
5.6.1: Achieve and maintain the percentage of high school students who are taught about HIV/AIDS prevention in school at 90% or greater. *(Outcome)*	*2009*	90%	Jun 30, 2010
	2007	90%	89.5% (Target Not Met)
	2005	Baseline	87.9%
5.6.2: Increase the proportion of adolescents (grades 9-12) who abstain from sexual intercourse or use condoms if currently sexually active. *(Outcome)*	*2009*	89%	Jun 30, 2010
	2007	89%	86.7% (Target Not Met)
	2005	Baseline	87.5%
5.6.3: Reduce the proportion of children aged 3 to 11 who are exposed to second-hand smoke. *(Outcome)*	*2010*	45.0%	Dec 31, 2011
	2008	45.0%	Dec 31, 2009
	2006	Baseline	50.8%
5.6.4: Percentage of youth (grades 9-12) who were active for at least 60 minutes per day for at least five of the preceding seven days. *(Outcome)*	*2009*	35.8%	Jun 30, 2010
	2007	35.8%	34.7% (Target Not Met)
	2005	Baseline	35.8%

Measure	Data Source	Data Validation
5.6.1-5.6.2, 5.6.4	Youth Risk Behavior Surveillance System (YBRSS)	Validity and reliability studies of YRBSS attest to the quality of the data. CDC conducts quality control checks and logical edit checks on each record.
5.6.3	National Health and Nutrition Examination Survey (NHANES)	Data are validated by NCHS.

Long-term Objective 5.6, Performance Measure 1

In FY 2007, 89.5 percent of high school students were taught about HIV/AIDS prevention in school. The performance target was set at an approximate target level of 90 percent, and deviation from that level was not statistically significant. Performance in FY 2007 was a great improvement over the previous performance, which was 87.9 percent in both FY 2003 and FY 2005.Targets for future years remain at 90 percent due to the constantly changing population of high school students.

CDC strategies to improve performance for this measure focus on school health programs which play a unique and important role in the lives of young people by improving their health knowledge, attitudes and skills, health behaviors and outcomes, educational outcomes, and social outcomes. CDC emphasizes a coordinated, comprehensive, and collaborative approach to school health. It focuses on strengthening the health infrastructure of state and local education agencies and schools to address critical health issues including HIV/AIDS, STDs, and teen pregnancy prevention, and obesity prevention and asthma control by building the capacity of funded partners to support science-based, cost-effective health programming. In the long term, the program aims to increase the number of high school students who are taught HIV/AIDS prevention in at school by:

- Funding education agencies in 49 states and the District of Columbia, 1 tribal government, 16 large urban school districts, and 6 territorial education agencies to implement school-based HIV prevention activities;
- Funding more than 25 National Nongovernmental Organizations to assist national, state, and local efforts to prevent HIV infection and other priority health problems among large populations of youth in schools, youth in high-risk situations and postsecondary students. These NGOs work with CDC's adolescent and school health programs to develop model policies, guidelines, and training to assist schools and other youth serving agencies implement high quality programming;
- Monitoring priority health risk behaviors and school health programs and policies through systems such as the Youth Risk Behavior Surveillance System, the School Health Policies and Programs Study, and School Health Profiles; and
- Developing guidelines and tools for schools to address priority health risk behaviors, such as the School Health Index: A Self-Assessment and Planning Guide, to help schools implement these guidelines;
- A cost effectiveness study revealed that for every dollar invested in school HIV, STD, and pregnancy prevention efforts, $1.33 in medical costs were saved.

Long-term Objective 5.6, Performance Measure 2

In FY 2007, 86.7 percent of adolescents in grades 9 to 12 abstained from sexual intercourse or used condoms if currently sexually active. This performance did not meet the target. Performance in the past has been fairly stable at 86 percent in FY 2001, and 87.5 percent in both FY 2003 and FY 2005.Because of the constantly changing population of high school students, and because of the limited reach of CDC activities outside the school infrastructure, meeting this target every period is challenging.

CDC strategies to improve performance for this measure focus on school health programs, which play a unique and important role in the lives of young people by improving their health knowledge, attitudes and skills, health behaviors and outcomes, educational outcomes, and

social outcomes. CDC emphasizes a coordinated, comprehensive, and collaborative approach to school health. It focuses on strengthening the health infrastructure of state and local education agencies and schools to address critical health issues including HIV/AIDS, STDs, and teen pregnancy prevention, as well as obesity prevention and asthma control by building the capacity of funded partners to support science-based, cost-effective health programming. In the long term, the program aims to increase the proportion of adolescents in grades 9 to 12 who abstain from sexual intercourse or use condoms if sexually active by:

- Funding education agencies in 49 states and the District of Columbia, 1 tribal government, 16 large urban school districts, and 6 territorial education agencies to implement school-based HIV prevention activities;
- Funding more than 25 National Nongovernmental Organizations to assist national, state, and local efforts to prevent HIV infection and other priority health problems among large populations of youth in schools, youth in high-risk situations and postsecondary students. These NGOs work with CDC's adolescent and school health programs to develop model policies, guidelines, and training to assist schools and other youth serving agencies implement high quality programming;
- Monitoring priority health risk behaviors and school health programs and policies through systems such as the Youth Risk Behavior Surveillance System, the School Health Policies and Programs Study, and School Health Profiles; and
- Developing guidelines and tools for schools to address priority health risk behaviors, such as the School Health Index: A Self-Assessment and Planning Guide, to help schools implement these guidelines;
- A cost effectiveness study revealed that for every dollar invested in school HIV, STD, and pregnancy prevention efforts, $1.33 in medical costs were saved.

Long-term Objective 5.6, Performance Measure 3

In 2006, 50.8 percent of children aged three to 11 years were exposed to secondhand smoke, compared to the baseline figure of 55 percent in 2002 after an increase in 2004.

Through the National Tobacco Control Program (NTCP), CDC provides national leadership for a comprehensive, broad-based approach to reducing tobacco use which involves: preventing young people from starting to smoke; eliminating exposure to secondhand smoke; promoting quitting; and, identifying and eliminating disparities in tobacco use among population groups. It also develops health communication campaigns aimed at informing the public about the health risks associated with ETS and reducing disparities in these exposures.

On September 18, 2007, CDC, working closely with the Office of the Surgeon General, launched two major collaborative national initiatives to protect children from exposure to secondhand smoke. During the event, Acting Surgeon General Kenneth Moritsugu released an excerpt summarizing key scientific evidence on the serious health risks that secondhand smoke poses to children.

The publication, Children and Secondhand Smoke Exposure, is excerpted from the 2006 Surgeon Generals Report, The Health Consequences of Involuntary Exposure to Tobacco Smoke. In addition, the Acting Surgeon General announced a new partnership with the American Academy of Pediatrics that will mobilize pediatricians and other primary care clinicians to help parents reduce their children’s exposure to secondhand smoke.

That same day, CDC staffed a meeting of the Interagency Committee on Smoking and Health, an advisory committee chaired by the Surgeon General and intended to foster greater

collaboration among federal government agencies on tobacco control initiatives. The meeting identified several areas of future collaboration including the development and dissemination of targeted materials for pediatricians as well as outreach to other primary care organizations.

CDC is working closely with EPA and ACFs Office of Head Start to support the implementation of the Care for Their Air initiative.

Secondhand smoke, also known as environmental tobacco smoke (ETS), has been determined to be a known human carcinogen. Persistent exposure to secondhand smoke is associated with an increased risk for lung cancer. Since 1986, U.S. Surgeon Generals reports have concluded that exposure to secondhand smoke causes lung cancer in nonsmokers.

The 2006 Surgeon General's Report on The Health Consequences of Involuntary Exposure to Tobacco Smoke concluded that secondhand smoke exposure causes heart disease and lung cancer in nonsmoking adults and a number of health conditions in children, including sudden infant death syndrome, acute respiratory infections, middle ear disease, more severe asthma, respiratory symptoms, and slowed lung growth. The Report also concluded that secondhand smoke contains more than 50 carcinogens, and that there is no risk-free level of secondhand smoke exposure.

CDC continues to extend and maximize the impact of the 2006 Surgeon Generals Report on The Health Consequences of Involuntary Exposure to Tobacco Smoke by collaborating with its partners to publish and present studies expanding the science base on secondhand smoke, to work with the news media to keep secondhand smoke in the news, to provide technical assistance to states as they implement and evaluate smoke-free laws, and to disseminate information on the report and ancillary materials to a wide range of partners and stakeholders.

Long-term Objective 5.6, Performance Measure 4

In FY 2007, 34.7 percent of youth (grades 9-12) were active for at least 60 minutes per day for at least five of the preceding seven days. The performance target was set at an approximate target level of 35.8 percent, and deviation from that level was not statistically significant. Prior to 2005, this data was not collected by the Youth Risk Behavior Surveillance System (YRBSS) for this measure. Because of this, the program had no history upon which to base its targets. The program will conduct further analysis of this measure to determine whether the targets are reasonable and achievable, and may reset targets based upon that analysis.

Many high schools do not offer daily physical activity opportunities. A substantial percentage of a student's (grades 9-12) recommended amount of physical activity could be provided through a comprehensive school-based activity program. Comprehensive school-based physical activity programs consist of physical education and other physical activity opportunities including physical activity breaks, intramurals, interscholastic sports, and bike to school initiatives. According to CDC's School Health Policies and Programs Study, many changes have occurred between 2000 and 2006 in state-and district-level policies and practices related to physical education and physical activity. While progress is being made, schools need to provide daily physical education and physical activity before, during and after school and to establish health-promoting environments that support physical activity.

CDC strategies to improve performance for this measure focus on school health programs, which play a unique and important role in the lives of young people by improving their health knowledge, attitude and skills, health behaviors and outcomes, educational outcomes, and social outcomes. CDC emphasizes a coordinated approach to school health, which focuses on strengthening the health infrastructure of state education agencies to address physical activity, nutrition, obesity, asthma, HIV/AIDS, STDs, and teen pregnancy prevention by building the

capacity of funded partners to support science-based, cost-effective health programming. In the long term, the program aims to increase the percentage of youth (grades 9-12) who were active for at least 60 minutes per day for at least five of the preceding seven days, by:

- Funding education agencies in 22 states and 1 tribal government to establish a partnership with their state health agencies to focus on reducing chronic disease risk factors such as physical inactivity, poor nutrition, and tobacco use;
- Funding more than 25 National Non-Governmental Organizations (NGOs) to build the capacity of states, territories, tribal governments, and cities to implement effective school health programs;
- Monitoring priority health risk behaviors and school health programs and policies through the following systems: The Youth Risk Behavior Surveillance System (YRBSS) provides national, state, and local level data on the prevalence of six categories of priority health risk behaviors; School Health Profiles helps state and local education and health agencies monitor the current status of school health education and policies; and the School Health Policies and Programs Study (SHPPS) is a national survey conducted every six years to assess school health policies and programs at the state, district, school, and classroom levels; and
- Applying research findings to develop guidelines for addressing priority health risk behaviors among students and developing tools such as the School Health Index: A Self-Assessment and Planning Guide; Fit, Healthy and Ready to Learn: A School Health Policy Guide: and the Physical Education Curriculum Analysis Tool to help schools implement these guidelines.

Regular physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, increases self-esteem, and may improve blood pressure and cholesterol levels. Positive experiences with physical activity at a young age help lay the basis for being regularly active throughout life.

Birth Defects, Developmental Disabilities, Disability and Health

Measure	FY	Target	Result
6.E.2: Increase the percentage of cost savings for CCHP as a result of the Public Health Integrated Business Services HPO. *(Efficiency)*	*Out-Year Target*	39.0% (2011)	Dec 31, 2011
	2010	38.0%	Dec 31, 2010
	2009	36.8%	Dec 31, 2009
	2008	37.7%	39.3% (Target Exceeded)
	2007	37.6%	28.4% (Target Not Met but Improved)
	2006	Baseline	0%

Measure	Data Source	Data Validation
6.E.2	CDC's Management Analysis and Services Office, COMPARE data system	CDC's Financial Management Office validates the data against FTE database information for the Management Analysis and Services Office

Efficiency Measure 6.E.2:

CDC is undergoing an agency-wide process to achieve significant efficiencies through the Public Health Integrated Business Services High Performing Organization (PHIBS HPO). The PHIBS HPO was approved by OMB in March of 2007. The focus of the PHIBS HPO is to systematically improve and modernize 16 different business support services reaching optimal efficiencies in service quality and at the same time reducing staff resource costs that perform the services by 2011. The HPO affects 2,000 FTE's agency-wide, almost 22 percent of CDC's workforce.

The HPO effort is focused moving personnel from 16 different business services and creating or rewriting standard operating procedures. Processing personnel actions challenges the Human Resources system, which is already fully engaged in its routine efforts of hiring, etc. Thus far, CCHP has rewritten or created 77 Standard Operating Procedures (SOPs) for its Business Services Unit (BSU), which have been shared with the greater PHIBS HPO group for use in subsequent phases.

HPO accomplishments to date are:

- Reduced Manpower- the HPO has significantly reduced the amount of labor required to perform our mission support functions.
- Increased workforce skills - through continual learning we have a multi-skilled workforce which has improved organizational flexibility and depth.
- Increased customer service - customer service is the focus of the HPO; the customer satisfaction survey results have improved drastically since the inception of the HPO concept.
- Reduced cycle times and costs - Standard Operating Procedures have been developed

for all functions. This has resulted in reduced cycle time and costs.

In FY 2008, the target of 37.7 percent was exceeded with an actual cost savings of 39.3 percent due to strategic staff reductions and additional efficiencies realized from the implementation of Standard Operating Procedures. Because 2007 was the first year of the HPO, it was spent on achieving reorganization efforts which entailed modifyingication of new administrative codes to personnel and modifying task orders for contractors. Not all reorganization efforts could be achieved in the first year due to the large volume of personnel changes required, therefore the savings did not meet the target set for FY 2007. The FY 2009 – FY 2011 targets the inclusion of two business services that were not included in Phase I of the PHIBS HPO – Secretarial Support Services and Business Information Services.

Birth Defects and Developmental Disabilities

Measure	FY	Target	Result
Long Term Objective 6.1: Prevent birth defects and developmental disabilities.			
6.1.1: Increase the sensitivity of birth defects and developmental disabilities monitoring data. *(Outcome)*	*Out-Year Target*	Birth Defects- 93%/ Developmental Disabilities- Improved from baseline by 2% *(2013)*	Dec 31, 2013
	2010	Birth Defects- 92%/ Developmental Disabilities- Improve from baseline by 1%	Dec 31, 2010
	2009	Birth Defects- 91% /Develop-mental Disabilities- Establish baseline sensitivity percentage	Dec 31, 2009
	2008	Birth Defects- 90% /Developmental Disabilities- Data analyses and preliminary results	Yes (Target Met)
	2007	Birth Defects- Establish Baseline/ Develop-mental Disabilities- Enroll remaining eligible sample	Yes (Target Met)
	2006	Developmental disabilities Enroll 40%-50% of eligible sample.	Yes (Target Met)
	2005	Baseline	Yes
6.1.2: Identify and evaluate the role of at least five new factors for birth defects and developmental disabilities. *(Output)*	*2010*	Establish large statistically powerful sample for developmental disabilities research	Dec 31, 2010
	2009	Publish findings on occupational exposures	Dec 31, 2009
	2008	Publish findings on maternal medications	Yes (Met)
	2007	Publish findings on alcohol, caffeine use, and nutrition	Yes (Target Met)
	2006	Finalize research agenda for birth defects and publish findings on smoking, obesity, and other exposures with high potential impact.	Yes (Target Met)
	2005	Baseline	Yes
6.1.3: Reduce health disparities in the occurrence of folic acid-preventable spina bifida and anencephaly by reducing the birth prevalence of these conditions among	*Out-Year Target*	4.5 (2013)	Dec 31, 2015
	2010	4.6	Feb 28, 2014
	2009	4.7	Mar 31, 2013
	2008	4.8	Feb 28, 2012
	2007	4.9	Feb 28, 2011

Measure	FY	Target	Result
Hispanics. *(Outcome)*	*2006*	5.0	Feb 28, 2010
	2005	5.1	6.1 (Target Not Met)
6.1.4: Increase the percentage of health providers who screen women of childbearing age for risk of an alcohol-exposed pregnancy and provide appropriate, evidence-based interventions for those at risk. *(Outcome)*	*2010*	Increase provider-based screening and intervention by 2% from baseline.	Dec 31, 2010
	2009	Increase provider-based screening and intervention by 1% from baseline.	Dec 31, 2009
	2008	Implement ongoing provider education programs and establish baseline rates of provider-based screening and intervention.	Yes (Met)
	2007	Assess the screening and intervention practices of nationally representative samples of provider groups.	Yes (Met)
	2006	Develop and disseminate screening and intervention tools for health care providers serving women of childbearing age.	Yes (Target Met)
	2005	Complete RCT	Completed RCT (Target Met)

Measure	Data Source	Data Validation
6.1.1	The data for the birth defects measure comes from the Metropolitan Atlanta Congenital Defects Program (MACDP), and the data for the developmental disabilities measure comes from the Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP)	Data from these surveillance system are updated annually.
6.1.2	Data is collected from the National Birth Defects Prevention Study, a collaboration between the Centers for Birth Defects Research and Prevention (including one site in Georgia at CDC).	Publications are made possible by analyses of NBDPS pooled data sets. Each site participating in NBDPS has implemented the uniform study protocol, and data is collected at a coordinating center.
6.1.3	Data is taken from the National Birth Defects Prevention Network (NBDPN), a collaborative effort of state-based birth defects surveillance programs around the United States. These programs, which all meet certain data quality standards, contribute to a pooled data set, which represents the most comprehensive population-based estimate of birth defects in the country.	Data from NBDPN are used to estimate rates of spina bifida and anencephaly among Hispanics.
6.1.4	Data are from Project CHOICES, a CDC-funded	Results of the randomized

Measure	Data Source	Data Validation
	randomized control trial regarding provider-based interventions for women of childbearing age who are at risk for having an alcohol-exposed pregnancy.	control trial from Project CHOICES were published in a peer-reviewed journal.

Long-term Objective 6.1, Performance Measure 1

Accurate monitoring of data is important for several reasons. First, it tells CDC what is going on in the population, and enables research to be focused on important or emerging public health issues. Second, it assists in planning prevention and intervention programs, and evaluates their effectiveness. Third, it helps to project the need for health care services, especially when a condition is potentially disabling or requires special services.

Sensitivity is a measure of accuracy. It represents the percentage of people who have a condition that are captured by the surveillance system. A high sensitivity indicates that a system is capturing good quality data that is representative of what is happening in the population under study. Because surveillance systems are central to CDC's public health mission, ensuring high quality data is a must.

In FY 2007, CDC established a baseline sensitivity measure for the birth defects surveillance system. However, in the past year, concerns have arisen about CDC's ability to replicate the measurement over time in a consistent and timely way. To meet the FY 2008 target of a one percent improvement through the Metropolitan Atlanta Congenital Defects Program, additional data sources, including data from genetic clinics, were used for case ascertainment. The program is in the process of revising the measure in order to allow the quality of surveillance date to be more directly measured.

CDC has completed data verification for a validation study of the autism surveillance methodology. The study was designed to evaluate sensitivity of data captured in the Metropolitan Atlanta Developmental Disabilities Surveillance Program. Enrollment for the study began in FY 2006, and data analysis will be finalized during FY 2009, meeting the milestones as set for those Fiscal years. The results of this study will provide baseline estimates for the sensitivity of developmental disabilities surveillance data. This validation study was costly and labor intensive, and there are currently no resources to replicate methodology. Going forward, it may be possible to implement some crude analytic strategies to explore sensitivity, although additional investments would be required to replicate the findings of the validation study.

Long-term Objective 6.1, Performance Measure 2

Understanding the role of modifiable risk and preventive factors for birth defects and developmental disabilities provides an important opportunity for prevention. As the research infrastructure for birth defects matures, initial efforts for annual performance measures focus on publication of research findings from this system. Meanwhile, the infrastructure for research on autism and other developmental disabilities has now been established and is beginning to collect data

To date, CDC's birth defects study has collected data on over 30,000 cases and non-cases, in order to examine the association between selected risk factors and birth defects. The project has met its objectives for FY 2008 and is on track to meet both FY 2009and FY 2010 targets.

Notable recent study publications include:

- Smoking and birth defects: Mothers who smoke cigarettes in early pregnancy may be more likely to have an infant with an orofacial cleft and some types of congenital heart defects than mothers who do not smoke.
- Alcohol use and birth defects: Mother's use of alcohol during pregnancy may be associated with other birth outcomes than Fetal Alcohol Syndrome, such as orofacial clefts.
- Caffeine use and birth defects: Mothers who use caffeine do not appear to increase their risk for having a child with cardiovascular malformations. This is important information because caffeine exposure in early pregnancy is very common.
- Maternal nutrition and birth defects: Studies have recently been published that contribute to the limited body of knowledge about the associations between maternal nutrition intake and the risk for certain birth defects including orofacial clefts, diaphragmatic hernia, and biliary atresia.
- The research infrastructure for developmental disabilities is being established. Data collection began in 2007 and follows the same model as the birth defects study. It is anticipated that the FY 2010 target will be met and that initial publication of findings will begin in FY 2012.

Long-term Objective 6.1, Performance Measure 3

Children born with spina bifida and anencephaly have profound effects on families and communities. Since food fortification began in 1998, thousands of babies are born in the U.S. without these serious birth defects. However, analyses show that while fortification lowered rates significantly among all racial and ethnic groups, Hispanics continue to have the highest rates of any racial or ethnic group.

CDC's folic acid program is focused on developing and implementing effective evidence-based strategies to reduce the occurrence of neural tube defects (NTDs) among Hispanics. The program has completed formative research with Hispanic women of childbearing age, in order to develop new folic acid educational materials and radio public service announcement messages that address the unique needs of this audience.

For FY 2001-2005, targets were set assuming a proposed 18 percent decline in rate; targets for the subsequent five years (FY 2006-2010) were set assuming a proposed decline of an additional nine percent from FY 2005, as a leveling off was expected in the rates of folic acid preventable NTDs as fortification was widely implemented. At this time, targeted efforts are needed to reach the last few groups of women primarily Hispanics - that could see a reduction in preventable NTDs by consuming folic acid, either via fortification or by supplementation.

Data for FY 2005 show that the rate of NTDs among the Hispanic population remained similar to that seen in FY 2003. These data points deviate significantly from the target rates, and indicate that there has not been a material change in the rate of NTDs since the establishment of a baseline using FY 2000 data. The reason for this lack of significant decline is unknown, particularly after many of the NTD prevention messages have been disseminated. However, research is planned to examine the uptake of the folic acid messages and any resulting behavior change among Hispanic women of childbearing age.

Long-term Objective 6.1, Performance Measure 4

Despite public health advisories and subsequent outreach efforts, recent data indicate that significant number of women continue to drink during pregnancy. Implementing interventions to reduce alcohol consumption during pregnancy is an important strategy to reducing the occurrence of alcohol-related birth defects and developmental disabilities, including Fetal Alcohol Syndrome (FAS). Research shows that provider-based screenings and interventions for women of childbearing age at risk of having an alcohol-exposed pregnancy are effective ways to reduce alcohol-exposed pregnancies.

These findings have prompted CDC to place an emphasis on developing interventions to be given through health care providers. CDC has developed a quick-reference clinician tool to facilitate screening and interventions among providers. Through education and implementation of this tool, CDC aims to improve the percentage of health care providers who screen women of childbearing age for risk of alcohol-exposed pregnancy, and provide appropriate interventions for those at risk. To date, all benchmarks for dissemination of this tool have been met.

The program is establishing baseline rates of screening from a population-based sample of health care providers. Following this data, the program will be able to better assess the need to adjust improvement measures. In the absence of population-based information on screening practices, an improvement of one percent a year may represent ambitious benchmarks. Once the program establishes a baseline and measures changes over time, it may be appropriate to revisit targets.

Hereditary Blood Disorders/Human Developmental Disabilities

Measure	FY	Target	Result
Long Term Objective 6.2: Improve the health and quality of life of Americans with disabilities.			
6.2.1: Increase the number of people with blood disorders who participate in the monitoring system by 10%. *(Outcome)*	*2010*	22,630	Dec 31, 2010
	2009	22,195	Dec 31, 2009
	2008	18,948	23,347 (Target Exceeded)
	2007	18,590	21,760 (Target Exceeded)
	2006	18,232	19,889 (Target Exceeded)
	2005	Baseline	17,874
6.2.2: Identify an effective public health intervention to ameliorate the effects of poverty on the health and well-being of children. *(Outcome)*	*2010*	Data collection and analysis for age 5 year	Dec 31, 2010
	2009	Data collection and analysis for age 4 year	Dec 31, 2009
	2008	Data collection and analysis for age 3 year	Yes (Target Met)
	2007	Data collection and analysis for age 2 year	Yes (Target Met)
	2006	Data collected and analyzed for age 1 year.	Yes (Target Met)
	2005	N/A	Data collected and analyzed for age 6 months.
6.2.3: Ensure that 95% of all infants are screened for hearing loss by 1 month of age. *(Outcome)*	*2010*	95%	Jan 31, 2013
	2009	94%	Jan 31, 2012
	2008	93%	Jan 31, 2011
	2007	92%	Jan 31, 2010
	2006	91%	92% (Target Exceeded)
	2005	90%	92% (Target Exceeded)
6.2.4: Increase the mean lifespan of patients with Duchenne and Becker Muscular Dystrophy (DBMD) and carriers by 10% as measured by the Muscular	*2010*	Increase the percentage of patients with DBMD who have access to treatments based on national standards of care to 80% as measured by MD STARnet and national or nationally representative data collection methods	Feb 28, 2011

Measure	FY	Target	Result
Dystrophy Surveillance, Tracking and Research Network. *(Outcome)*	*2009*	Identify and report on (1) the trends on incidence and prevalence of secondary complications related to DBMD annually based on MDSTARnet data and (2) the trends of service utilization by people with DBMD and their families based on MD STARnet data.	Feb 28, 2010
	2008	Report on the impact of clinic use on morbidity and mortality in DBMD using MD STARnet data	Yes (Target Met)
	2007	Identify and report on (1) the incidence and prevalence of DBMD in the United States based on MD STARnet data (2) early signs and symptoms of DBMD based on MD STARnet and (3) cost of health care of people with DBMD.	Yes (Target Met)
	2006	Conduct data analysis on MD STARnet data collected in the 4 current sites and include one additional state.	Yes (Target Met)

Measure	Data Source	Data Validation
6.2.1	Data are from the CDC blood safety Universal Data Collection System, which collects data from yearly patient visits conducted through the 135 CDC-HRSA funded Hemophilia Treatment Centers (HTCs).	HTCs can choose to submit their data either electronically or via paper data collection form. For those grantees that participate in electronic form submission, the data are abstracted from a patient's medical record, updated in real time. For all others CDC verifies the data quarterly, by comparing the data inputted with the original data collection forms.
6.2.2	Data are from the CDC's Legacy Study, a longitundinal, randomized multi-site, controlled study, which collects data from birth to age 5 from children and families who are enrolled in the study.	Results of the study will be published in a peer-reviewed journal.
6.2.3	Data for 2004 and prior years are from the Directors of Speech and Hearing Programs for State Health and Welfare Agencies (DSHPSHWA). Data for 2005 and beyond are from CDC's Hearing Screening and Follow-up Survey (HSFS).	The program collaborated with partners to develop a new web-based survey to gather aggregate level data for 2005 and beyond. This voluntary response survey, referred to as the CDC HSFS, is designed to gather standardized data about the screening, diagnostic and intervention

Measure	Data Source	Data Validation
		status of every birth reported on the survey. To date this survey has been used to gather data for years 2005 and 2006 and is now the primary national source of EHDI-related data.
6.2.4	Data are from MD STARnet. 2001-2004 data from the MartketScan Commercial Claims and Encounters Database.	There are several quality control checks in the data collection and analysis process such as ongoing training and testing of abstractors to maintain quality of data entered and independent data analysis by a second site when analyzing data to be used for publication. Other methods include: 1) Abstracted data reviewed in a step-wise manner by a local reviewer, local clinical reviewer, clinical review committee and assigned case status, 2) Abstraction instrument that has built-in checks, and 3) Interviewer training and quality control activities.

Long-term Objective 6.2, Performance Measure 1

CDC monitors blood safety concerns related to bleeding disorders by collecting data from and testing blood samples of individuals seen at a network of 135 Hemophilia Treatment Centers (HTCs) across the country. Patients are monitored for presence of any bloodborne infections, as well as any complications due to the underlying blood disorder, such as joint disease or the development of antibodies against blood transfusions.

The Universal Data Collection System (UDC) also provides information on joint mobility and function, bleeding occurrences, treatment and vaccinations.

Increasing the number of patients enrolled is important to ensure that the majority of patients with bleeding disorders are monitored, so that complications and other risk factors may be assessed on a population level. Over the past few years, patient enrollment has consistently exceeded expectations. Since the baseline was established in FY 2005, almost 3,000 new patients have enrolled in the blood disorder monitoring system. This exceptional enrollment may be for a number of possible reasons, including:

- A lower than anticipated refusal rate (about nine percent) compared to other national studies of this type and size;
- Increased marketing through consumer groups to promote the HTCs;
- Recognition by patients that the coordinated care approach has demonstrated decreased mortality and hospitalizations among patients visiting HTCs; and
- The broad extent of the HTC network, which reaches both urban and rural areas, allows for reaching patients in all areas of the country.

Despite its success, there is still potential for loss during follow up, which would decrease the overall number of enrollees in the system. Data is collected based on yearly visits to HTCs, and patients may either elect not to visit each year or be lost due to geographic relocation. Above, Increased marketing was cited as a reason for high UDC enrollment. However, as hemophilia is a rare blood disorder, the estimated population of people with hemophilia is relatively small. Enrollment is anticipated to level off making it more difficult to capture a significant number of additional new patients. For these reasons, the targets for this measure have been revised for FY 2009 and beyond to ensure that it continues to be ambitious. These new targets represent an increase enrollment of two percent per year over the actual enrollment for FY 2007. Additionally, a new measure is in development, which is anticipated to further demonstrate the success of the HTC model by demonstrating an improvement in health outcomes among patients making yearly visits.

Long-term Objective 6.2, Performance Measure 2

Development plays a critical role in the biological and behavioral processes that impact health and well-being throughout the lifespan, but has increased importance for immediate and long term health outcomes during infancy, early childhood, and adolescence. Children who grow up in environments where developmental needs are not met are at an increased risk for compromised health, safety and learning. Measuring children's outcomes at critical developmental time points will assist CDC in developing an innovative public health intervention to promote protective factors and ameliorate risk factors impacting developmental outcomes.

The targets were based on rigorous research, designed to measure the impact of the intervention on children's outcomes. The program has successfully met milestones to date, including study initiation, establishment of a baseline, and data collection and analysis for children from birth to two years of age. Data collection and analysis for ages three and four are on track to be reported on 2009. Additionally, a publication is planned for mid-year 2009 that will include a preliminary analysis, showing differences in the groups of children who received intervention, compared to those that did not (the control group). This difference was not expected so soon in these enrollees (who are age three currently), so the interventions may prove to have great benefit.

Long-term Objective 6.2, Performance Measure 3

CDC’s activities to support early hearing detection are important for ensuring timely diagnosis and referral to follow-up early intervention services for all infants with hearing loss. CDC supports state-based efforts to promote and ensure that all children receive a hearing screening before one month of age. This is important to ensure that children with a hearing loss develop appropriate communication skills that are commensurate with their cognitive abilities, allowing them to do well both academically and socially.

CDC has surpassed the established targets for the past two reported years (FY 2005 and FY 2006). The performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance. Given the national focus on children’s health and the existence of newborn hearing screening programs in all 50 states, continued success with this measure is an achievable goal. However, this continues to be an ambitious endeavor, because it may be difficult to identify and screen, within a month of birth, those children born outside of a traditional hospital birth. More specific, targeted and often, more time-consuming efforts are needed to ensure all infants are screened.

Long-term Objective 6.2, Performance Measure 4

Treatment for Duchenne and Becker muscular dystrophies (DBMD) is complex and varied. In order to acquire more information on treatment and interventions for these conditions, CDC is engaged in the development of a population-based monitoring system designed to ascertain key health information for people with Muscular Dystrophy (MD). Through this system, MD STARnet, CDC is obtaining population-based data on the medical care and outcomes of persons with DBMD. This data will provide evidence-based information to better understand the natural history of the disorder and current treatment practices. Additionally, CDC is sponsoring the development of care considerations for Duchenne muscular dystrophy (DMD). Upon dissemmination of the data from MD STARnet and from the care considerations, health care providers will have information to make more informed decisions about the medical care for boys with DBMD.

The performance of this system has met all milestones to date. The system was initially established in four states, and preliminary data analysis was completed in FY 2005. An additional site was added in FY 2006. Data analyses completed for FY 2007 include:

Incidence and prevalence: As of May 2008, 544 males have been identified with DBMD in the 5 states in MDSTARnet. Investigators are in the process of developing multiple manuscripts reporting health outcome findings. These manuscripts will cover issues such as the incidence and prevalence of DBMD, delayed diagnosis, steroid use, and genetic testing.

Cost of health care: Analysis of 2001-2004 data from the MarketScan Commercial Claims and Encounters Database showed that individuals with muscular dystrophy had average medical expenditures 10-20 times greater than those without muscular dystrophy.

HEALTH INFORMATION AND SERVICE

Health Statistics

Measure	FY	Target	Result
7.E.1: The number of months for release of data as measured by the time from end of data collection to data release on internet *(Efficiency)*	*2010*	9.6	Jan 31, 2013
	2009	9.7	Jan 31, 2012
	2008	9.8	Jan 31, 2011
	2007	9.9	Jan 31, 2010
	2006	10.0	May 31, 2009
	2005	13.5	8.7 (Target Exceeded)

Measure	Data Source	Data Validation
7.E.1	National Health and Nutrition Examination Survey (NHANES), National Vital Statistics System (NVSS), National Health Interview Survey (NHIS) and the National Health Care Survey (NHCS)	Review internal information on end of data collection and release of data for NHANES, NVSS, NHIS and NHCS.

Efficiency Measure 7.E.1:

This efficiency measure was developed through the program assessment process in 2005 and is also serving as a long term outcome measure. Through this measure, CDC will track improvement in the timeliness of data provided to the nation's health decision makers. In 2003, data was released in 14.5 months and serves as the baseline. The measure will address Health Statistics data in the aggregate; the unit of measurement is months.

Based on a revised methodology for calculating the months from the end of data collection to release of data on the internet, the FY2005 target was exceeded, the result was 8.7 months. Future targets have been adjusted accordingly.

The mission of the Health Statistics program is to provide statistical information that will guide actions and policies to improve the health of the American people. The more timely the data are released, the faster health decision makers, policy makers, researchers, etc. will have to develop new policies or evaluate policies already implemented.

To improve timeliness of data received from the states, CDC:

- Provides on-going training on re-engineering of their systems;
- Initiated a cooperative agreement with the National Association for Public Health Statistics and Information Systems to provide individual technical assistance to states on improving their vital records operations;
- Provides on-going individual feedback to states on the timeliness and quality of their data submission; discusses how they rank compared with other states, and makes recommendations for improvements; and,

- Created a federal/state team to assist states with their systems and to develop recommendations to improve timeliness.

Measure	FY	Target	Result
Long Term Objective 7.1: Monitor trends in the nation's health through high-quality data systems and deliver timely data to the nation's health decision-makers.			
7.1.1a: Percentage of key data users and policy makers, including reimbursable collaborators that are satisfied with data quality and relevance: web survey[2] *(Outcome)*	*2010*	72.2% Satisfied	Dec 31, 2010
	2009	conduct survey/report results 2010	Dec 31, 2009
	2008	Baseline	67.2% Satisfied
7.1.1b: Percentage of key data users and policy makers, including reimbursable collaborators that are satisfied with data quality and relevance: federal power users[1] *(Outcome)*	*2010*	Maintain 100% Satisfaction	Dec 31, 2010
	2009	Conduct survey of federal power users	Dec 31, 2010
	2007	Baseline	100% Good or Excellent
7.1.1c: Percentage of key data users and policy makers, including reimbursable collaborators that are satisfied with data quality and relevance: reimbursable customers *(Outcome)*	*2010*	5% increase in excellent rating	Dec 31, 2010
	2007	Baseline	91% (35% Good, 56% Excellent)
7.1.1d: Percentage of key data users and policy makers, including reimbursable collaborators that are satisfied with data quality and relevance: data users conference attendees *(Outcome)*	*2010*	5% increase in excellent rating	Dec 31, 2010
	2007	Baseline	91% (53% Good, 38% Excellent)
7.1.2: The number of new or revised charts and tables and methodological changes in Health, United States, as a proxy for continuous improvement and innovation in the	*2010*	15	Dec 31, 2010
	2009	15	Dec 31, 2009
	2008	15	4 new detailed trend tables and 26 new charts (Target Exceeded)
	2007	15	5 new detailed trend tables and 21 new charts (Target Exceeded)

Measure	FY	Target	Result
scope and detail of information. *(Output)*	*2006*	15	5 new detailed trend tables and 19 new charts (Target Exceeded)
	2005	N/A	36 (Historical Actual)
7.1.3a: Number of improved user tools and technologies and web visits as a proxy for the use of NCHS data: Number of improved user tools and technologies *(Output)*	*2010*	5	Dec 31, 2010
	2009	5	Dec 31, 2009
	2008	5	6 (Target Exceeded)
	2007	5	5 (Target Met)
	2006	5	5 (Target Met)
	2005	Baseline	5
7.1.3b: Number of improved user tools and technologies and web visits as a proxy for the use of NCHS data: Number of web visits *(Output)*	*2010*	7.5 million	Dec 31, 2010
	2009	7.5 million	Dec 31, 2009
	2008	7.1 million	6.8 million (Target Not Met)
	2007	6.8 million	6.9 million (Target Exceeded)
	2006	6.45 million	6.8 million (Target Exceeded)
	2005	N/A	5.6 million

[1]Due to resource and staffing changes, NCHS did not conduct surveys of federal power users and data user conference attendees (DUC) in FY 2008. NCHS did however conduct a usability study at the DUC and based on results of the survey, NCHS is making recommended changes to the CDC/NCHS webpage.

[2]67.2% satisfied (agree or strongly agree) that information on website is easy to find and interpret, is relevant, timely and accurate.

Measure	Data Source	Data Validation
7.1.1	Health Statistics' Board of Scientific Counselors and other independent groups	Targets are under development. NCHS plans to implement a systematic approach and tool for assessing the satisfaction of key data users and policy makers.
7.1.2	*Health, United States*	Improvement and innovation in Health, United States can be assessed through four components: a) new charts in the Chartbook; b) new trend tables; c) tables substantially revised; and d) major methodological changes. The

Measure	Data Source	Data Validation
		published archived volumes can be inspected yearly and compared to their predecessors to measure the continuous improvement and innovation.
7.1.3	CDC/NCHS Website	Internal checks of data.

Long-term Objective 7.1, Performance Measure 1

This measure addresses the performance element of quality and relevance. CDC will implement a systematic approach and tool for assessing the satisfaction of key data users and policy makers (e.g., reimbursable collaborators, Assistant Secretary for Planning and Evaluation, OMB, Congressional Research Service, and others) relative to data quality and scope. The Health Statistics Board of Scientific Counselors will help identify the list of key data users and policy makers to be surveyed, along with those organizations that directly work with CDC through interagency agreements. Performance results will be used by CDC managers to drive program improvements.

Three of the four survey categories have been completed. The survey results to date are as follows (2006): Reimbursable customers, 91 percent Good or Excellent; Data User Conference members 91 percent Good or Excellent. Power Users and Data User Conference focus group members' results were qualitative and generally positive with suggestions for improvement. NCHS began conducting the final survey, a web-based satisfaction survey, in August 2008 to determine how often users visit the website, what information they were looking for, and any gaps they can identify in the information or data that NCHS provides. The survey will continue through November with results reported in December, 2008.

Due to NCHS staffing changes and shortfalls in resources, NCHS did not conduct a survey of Data User Conference (DUC) attendees and focus group members in 2008. NCHS did, however, conduct a usability study with 88 participants at the DUC to gain knowledge about satisfaction with the web and user access to NCHS information via the web. Based on the results of the survey, NCHS is making recommended changes to the CDC/NCHS webpage. This assessment of user access to NCHS information via the web was done as a substitute for the original plan of a general survey of DUC attendees and interviews with focus group members. This study provides timely, actionable information to improve NCHS services. We plan to conduct interviews with Federal Power Users in FY 2009 with results reported by September 30, 2009; we will interview DUC attendees and focus group members in 2010. NCHS will establish a baseline for future surveys when results are available from the web-based survey in December 2008.

Long-term Objective 7.1, Performance Measure 2

This measure addresses the performance element of scope. Health, United States, the most comprehensive publication produced by CDC, draws information from each data system, as well as data from other federal partners and collaborators. Improvements in the scope and detail of Health, United States are a proxy for the scope of data produced and made available by CDC. Improvement and innovation in Health, United States can be assessed through four components: 1) new charts in the Chartbook; 2) new trend tables; 3) tables substantially revised; and 4) major methodological changes. Published archived volumes can be inspected

yearly and compared to their predecessors to measure the continuous improvement and innovation.

The target of 15 new or revised charts and tables and methodological changes in Health, United States has been exceeded the past two years due to major resources being devoted to the Special Feature, which is the source of the majority of new charts included in the publication. However, it is difficult to predict competing priorities, and methodological modifications that need to be incorporated in any given year, or new data sources that can be tapped to produce new trend tables. New trend tables are much more resource-intensive to produce than are charts, and in future years, it is possible that the Health Statistics program will include more new trend tables and fewer charts. Therefore the target of 15 new charts, trend tables, or major modifications will continue to be ambitious.

Long-term Objective 7.1, Performance Measure 3

A primary objective of CDC is to maximize the use of data collected through investment of public funds. As the use of data increases, so does the return on investment. One way to increase use is to make data available in more easily accessible forms. CDC makes its data available in a variety of forms through the internet and works to improve the speed and efficiency with which people access the data by: 1) development of data input statements/programs that allow people quick access to data files; 2) development of masked variance files that allow researchers to more quickly access data; 3) development of Fast Stats and Quick Stats to quickly access data files; and 4) use of Beyond 20/20 software making it more likely that systems such as the CDC Health Data Interactive, Data Resource Center for Child and Adolescent Health, Vital Stats and Healthy People 2010, will be found and used, thereby increasing the use of data already collected. The FY 2008 target of five new improved user tools has been exceeded; the goal of 7.1 million visits to the site was not met. The performance target for the measure was set at an approximate target level and the deviation from that level is small. There was no effect on overall program or activity performance.

During FY 2008, the following improvements have been made on the CDC website:

- Introduction and access to data from the National Survey of Family Growth.
- Release National Health Interview Survey (NHIS) file of paradata, a technical guide to the survey process.
- Linkage projects to maximize the value of data collected through multiple sources, and to make data available to the public previously only available through the Research Data Center.
- Release of data from the 1966 and 1967 NHIS public use files via the internet for the first time.
- Release of 45 new tables of data on current nursing home residents from the National Nursing Home Survey.
- Web tutorials for National Health and Nutrition Examination Survey (NHANES) I and II complete the supplemental tutorials for the three major historic NHANES data. Continuing Medical Education, Continuing Nurse Education, and Continuing Education Units are available for the following courses: Survey Orientation, Preparing an Analytic Dataset, Survey Design Factors and NHANES Analysis.

NCHS will use the results of the 2008 usability study conducted at the Data Users Conference to make changes to the NCHS homepage to increase user visits and make navigation of the site easier.

Health Marketing

Measure	FY	Target	Result
9.E.1: Provide "just-in-time" scientific information and education via multiple communication channels to thousands of health professionals, thereby reducing the cost and time of distributing the latest science based information. *(Efficiency)*	*2010*	5% increase from previous year in number of subscribers and participants of CDC's professional communications projects and distance learning activities.	Dec 31, 2010
	2009	5% increase from previous year in number of subscribers and participants of CDC's professional communications projects and distance learning activities.	Dec 31, 2009
	2008	5% increase from previous year in number of subscribers and participants of CDC's professional communications projects and distance learning activities.	207,000 (Target Exceeded)
	2007	5% increase from previous year in number of participants registered in distance learning activities.	108,753 (9% increase) (Target Exceeded)
	2006	5% increase from previous year in number of participants registered in distance learning activities.	99,409 (7% increase) (Target Exceeded)
	2005	5% increase in number of participants registered in distance learning activities.	92,790 (9% increase) (Target Exceeded)

Measure	Data Source	Data Validation
9.E.1	Participant and subscriber data from the following CDC products: Morbidity and Mortality Weekly Report, Epi-X, Health Alert Network (HAN), Clinician Registry and the Public Health Training Network.	Data figures are validated though the Division of Health Information Dissemination.

Efficiency Measure 9.E.1:

The most important tool for frontline practitioners is current, "just-in-time" information and knowledge. Public health and healthcare information must be continuously updated, translated, and communicated to meet changing conditions and threats. Further, information must be available in the form most useful and accessible to health professionals. To meet these needs, CDC maintains systems for information and knowledge transfer, and ensuring that scientific and medical information is translated and communicated effectively, and that best practices of public health professionals are shared nationwide. Due to the creation of the National Center for Health Marketing in 2004, this measure has been revised to reflect multiple communication channels that are aligned beyond distance learning alone. The baseline year is 2003 and saw 84,112 participants registered in distance learning activities.

Because the channels vary in their maturity and purpose, CDC anticipates refinement of this measure to reflect the differences between the various communication channels. For example, an increase in participants/membership is an excellent measure for some channels, while improved response time to test messages is a more reflective measure for others. In addition to decreasing response time, increasing the numbers of health professionals who subscribe to CDC channels, and increasing participants in distance learning opportunities, CDC is dedicated to ensuring that the organizations representing the most relevant and impacted health professionals can be reached by CDC channels with actionable information. Although difficult to measure, efforts will be made to identify and enroll those organizations with the widest and deepest reach to health professionals in FY 2008 and FY 2009.

CDC's activities provide leadership in the development of principles, strategies, and practices for effective communication to the public and other key CDC audiences for health promotion and disease prevention. They also function as a CDC-wide forum for development and adoption of emergency health communication policies and procedures. Additionally, they increase access to science-based health messages to increase impacts on the health of our customers. As a result projected targets for FY 2005, FY 2006, FY 2007, FY 2008 have been met and it is anticipated that the targets for the subsequent years will be met as well.

The performance target for this measure was set at an approximate target level, and the deviation from that level is substaintial. The target variance is attributed to additional data sets-number of subscribers and participants of CDC's professional communications projects - in FY 2008 and beyond for this measure. There was no effect on overall program or activity performance.

Measure	FY	Target	Result
Long Term Objective 9.1: CDC will maintain and improve its website and electronic communications to provide science-based health information to health care professionals, CDC partners and the American public.			
9.1.1: Increase access and utilization of CDC.gov by public, partners, and other health care professionals. *(Output)*	*2010*	Baseline + 10%	Dec 31, 2010
	2009	Baseline + 10%	Dec 31, 2009
	2008	Baseline + 5%	490 million (Target Exceeded)
	2007	Baseline	450 million

Measure	Data Source	Data Validation
9.1.1	Web usage statistics, web user performance statistics and user satisfaction statistics.	Staff collect web usage statistics on an on-going basis and monitor improvements over time. User performance and user satisfaction will be measured in user testing and other user research methods (on-line surveys, interviews, etc).

Long-term Objective 9.1, Performance Measure 1

This measure reflects CDC's efforts to increase the use of innovative electronic communications and new and emerging technologies. CDC's Web site, CDC.gov, is CDC's primary online communication channel and leverages the internet to communicate and market CDC's research, science, and health interventions. CDC.gov is developed to be data-driven, user-centric, research-based and collaboration-rich, incorporating innovative uses of new media to reach the broadest range of audiences with CDC's credible health information. CDC.gov is among the top government agency performers, according to the American Customer Satisfaction Index (ACSI), with consistent improvement in ratings over time and a current sustained rating of 82 out of 100. In FY 2007, large-scale usability testing (including in-lab tests; internal surveys; external surveys; and a comprehensive review of data from the past two years of the ACSI reporting) was conducted on the CDC.gov Web site.

The usability testing data was used to create an improved site where users will be able to find the information they are looking for in a faster and more efficient manner. To establish the FY 2007 baseline of 450 million page views, CDC reviewed its own historical metrics, trends in the federal government, and other online health sites.

The target measure was derived by combing historical increases with projected increases based on improvements, innovations, and anticipated marketing activities. In FY 2008 the target was exceeded, achieving actual performance of 490 million page views. New CDC.gov products such as: CDC Features, content syndication of priority topics, Widgets, and Podcasts have assisted in bringing new users to CDC.gov. Marketing and development of new online partnership activities continue to increase users' access and awareness of CDC.gov health and safety resources.

In FY 2009, CDC is continuing these activities at reduced operational and service levels as a result of necessary reductions in contracts and contractor support. CDC is committed to reaching the widest audience possible with existing resources. The FY 2009 measure will target a five percent increase in page views.

Measure	FY	Target	Result
Long Term Objective 9.2: Increase the number of frontline public health workers at the state and local level that are competent and prepared to respond to bioterrorism, 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.			
9.2.1: Increase the usage of CDC's online public health emergency alert systems, training materials, and other electronic resources/tools designed to provide information, educational materials, and real-time alerts as measured by the number of subscribers to Epi *(Output)*	*2010*	Increase by 20% above baseline	Dec 31, 2010
	2009	Increase by 20% above baseline	Dec 31, 2009
	2008	Increase by 15% above baseline	6,527 (Target Exceeded)
	2007	Increase by 5% above baseline	6,170 (Target Exceeded)
	2006	Baseline	4,372

Measure	Data Source	Data Validation
9.2.1	Subscriptions to Epi-X, HAN and partner participation in the National Public Radio Network and other electronic communications systems are monitored and maintained. Downloads and other usage information is captured to assess progress.	Staff uses a variety of automated and manual tracking systems to monitor usage of the various communications systems. Data are reviewed by analysts for accuracy and to determine trends in usage and gaps in services

Long-term Objective 9.2, Performance Measure 1

Improving the usage of CDC's online public health emergency alert systems, training materials, and other electronic resources/tools will have immediate and lasting impact on CDC's ability to protect citizens from natural hazards and terrorism threats. For example, CDC's Epi-X emergency alert system for public health officials nationwide could be expanded to alert other key sectors including government officials, medical officers for businesses, and health care leaders about health emergencies. CDC's online learning tools to train first responders and public health officials involved in preparing for and responding to national emergencies improves CDC's ability to protect the U.S. This will be particularly critical in preparing for a pandemic that may isolate individuals from social gatherings, work, medical facilities, etc.

In FY 2007, efforts were made to ensure that the appropriate individuals were subscribed to the various channels. In doing so, it was realized that the projected increase (target) was not appropriate given the metrics associated with each channel.

The original intent of the measure (as stated above) was to combine the reported outputs for each of the various channels. However after careful review, it was determined that a nonspecified increase in participants/membership was an inappropriate measure for each of the given channels (Epi-X, HAN, etc.). Because the channels vary in their maturity and purpose, CDC anticipates refinement of this performance measure to reflect the differences between the various communication channels. Performance measures for future years (FY 2009 and FY 2010) will be separated out to more accurately capture individual measures and targets for each channel.

For example, the Epi-X system is a secure network restricted to only those with a need to know in local/state public health departments. Ensuring that the right officials can access, open/review reports, and post relevant reports is a more appropriate measure for this channel. Currently, 42/58 states, territories and select cities have at least 80 percent of their key roles subscribing to Epi-X. The projected FY 2009 measure will target a five percent increase in the number states, territories and select cities that have active Epi-X users representing at least 80 percent of their key public health roles.

Measure	FY	Target	Result
Long Term Objective 9.3: CDC will maintain and improve its multi-media broadcast capabilities (e.g. satellite television, webcasts, podcasts, video) to provide science based health information to health care professionals, CDC partners and the American public.			
9.3.1: Increase the	*2010*	Baseline + 10%	Dec 31, 2010

Measure	FY	Target	Result
number of multi-media broadcast outputs to partners and health professionals. *(Output)*	*2009*	Baseline + 10%	Dec 31, 2009
	2008	Baseline + 5%	43 (Target Exceeded)
	2007	Baseline	40

Measure	Data Source	Data Validation
9.3.1	The Division of Creative Services will maintain a database of multimedia broadcasts produced and delivered by the division.	The Performance Management Team will review and pull reports as needed.

Long-term Objective 9.3, Performance Measure 1

The scientific information produced by CDC is only as effective as its translation for and delivery to the many health care, partner and public audiences with which the agency interacts. Satellite distance learning broadcasts for health care professionals have been produced by CDC for many years. In addition, television can be used more broadly with broadcasts to reach the public as well as partners. With the proliferation of new technologies that allow delivery of information to very specific audiences, CDC can now access and use a broad array of multi-media channels to quickly translate science into usable information accessible in many formats (e.g., public cable television, web casts, voice pod casts, etc).

FY 2007 baseline data has been established for this measure at 40. In FY 2008 the target was slightly exceeded with the actual figure being 43. It is anticipated that the baseline figure will increase by ten percent in FY 2009.

Since FY 2007, CDC subject matter experts and professionals worked to produce more than 250 audio and video podcasts which as of September 2007 had been downloaded more than 275,000 times serving to educate, inform and engage the general public regarding vital public health issues. The CDC.gov web site provided download access and tracking of CDC podcasts developed in collaboration with others across CDC. As of September 9, 2007, users downloaded or viewed about 2 million CDC podcasts, with an average of 40,000 per month. CDC podcasts can be downloaded from CDC.gov and from iTunes.

To establish the FY 2007 baseline, CDC employed innovative and rigorous strategies for reaching its customers based on audience and communication research, and provided its customers access to effective, real-time health and safety information, interventions, and programs through communications channels they prefer. These efforts will continue in FY 2008 to achieve the projected target.

These efforts assure CDC content, disseminated through various channels to the public and other targeted audiences is coordinated throughout the agency and is accurate, consistent, accessible, actionable, and evaluated for usability and customer satisfaction.

ENVIRONMENTAL HEALTH AND INJURY PREVENTION

Environmental Health

Measure	FY	Target	Result
10.E.2: Maintain the percentage of cost savings each year for CCEHIP as a result of the Public Health Integrated Business Services HPO. *(Efficiency)*	*Out-Year Target*	30% (2011)	Dec 31, 2011
	2010	29%	Dec 31, 2010
	2009	28%	Dec 31, 2009
	2006	Baseline	0

Measure	Data Source	Data Validation
10.E.2	CDC's Management Analysis and Services Office, COMPARE data system	CDC's Financial Management Office validates the data against FTE database information for the Management Analysis and Services Office

Efficiency Measure 10.E.2:

CDC is undergoing an agency-wide process to achieve significant efficiencies through the Public Health Integrated Business Services High Performing Organization (PHIBS HPO). The PHIBS HPO was approved by OMB in March of 2007. The focus of the PHIBS HPO is to systematically improve and modernize 16 different business support services reaching optimal efficiencies in service quality and at the same time reducing staff resource costs that perform the services by 2011.

Participation in the CDC-wide PHIBS HPO will link virtually all business support services performed in CCEHIP with those performed elsewhere at CDC, allowing the use of best practices, standardized procedures, and comparable measurement of performance across CDC. Reductions in staff and contractor time spent performing business support services will occur initially and be maintained thereafter in the CCEHIP HPO. Targets have been created for staff and contractors and costs associated with these, and for combined costs. These targets form the approximate 30 percent reduction in business support service costs. It is also expected that staff now performing business support services less than 10 percent of their time, will have those business service functions redirected to staff who primarily perform business services. This will decrease the combined grade of staff performing business services in CCEHIP and will allow the work in question to be accomplished more efficiently. Because staff who currently perform business services less than 10 percent of their time are primarily programmatic, this time will be returned to CCEHIP programs.

In addition, the Public Health Integrated Business Services HPO procedures require use of consistent, standardized business processes for all 16 involved business services. Cost and staffing efficiency will be routinely monitored and measured, as will service quality. In addition, 23 performance measures related to service delivery will be monitored and reported. All business support services currently focused at the branch, team, or other level in CCEHIP will be coordinated, standardized, and measured across CCEHIP. CCEHIP will be able to

determine, disseminate and implement best practices in all business support services.

Measure	FY	Target	Result
Long Term Objective 10.1: Determine human health effects associated with environmental exposures.			
10.1.1: Number of environmental chemicals, including nutritional indicators that are assessed for exposure of the U.S. population. *(Output)*	*2010*	323	Oct 31, 2010
	2009	323	Oct 31, 2009
	2008	280	280 (Target Met)
	2007	250	293 (Target Exceeded)
	2006	180	274 (Target Exceeded)
	2005	N/A	230 (Historical Actual)
10.1.2: Complete studies to determine the harmful health effects from environmental hazards. *(Output)*	*2010*	25	Oct 31, 2010
	2009	25	Oct 31, 2009
	2008	12	32 (Target Exceeded)
	2007	25	36 (Target Exceeded)
	2006	25	34 (Target Exceeded)
	2005	N/A	44
10.1.3: Number of laboratory quality standards maintained in certified or participating laboratories for tests such as lipids; newborn screening; those predictive of type 1 diabetes; blood lead, cadmium, and mercury; and nutritional factors. *(Output)*	*2010*	959	Oct 31, 2009
	2009	959	Oct 31, 2009
	2008	967	967 (Target Met)
	2007	1,001	1,001 (Target Met)
	2006	990	987 (Target Not Met but Improved)
	2005	N/A	904 (Historical Actual)

Measure	Data Source	Data Validation
10.1.1 - 10.1.3	Environmental Health Laboratory – data systems	Data systems at Centers for Disease Control and Prevention (CDC)'s Environmental Health Laboratory monitor laboratory performance under Clinical

Measure	Data Source	Data Validation
		Laboratory Improvement Amendments (CLIA). CDC also conducts quality assurance activities internally to confirm results and ensure their validity.

Long-term Objective 10.1, Performance Measure 1

Currently, CDC's Environmental Health Laboratory can measure at least 450 chemicals or their metabolites in human blood or urine. However, not all of these are yet measured in specimens obtained from participants in the National Health and Nutrition Examination Survey (NHANES). In FY 2009, the laboratory continues to measure environmental chemicals in people who participated in NHANES. These data provide unique exposure data to scientists, physicians, and health officials and can be used in multiple ways: 1) to determine which chemicals and indicators are in people's bodies and at what levels; 2)to establish national reference ranges against which physicians and health officials can determine whether a person or group has an unusually high exposure; 3) to track trends in levels of exposure in the population over time; and 4) to assess the effectiveness of public health actions. In FY 2009, the laboratory published data on blood lead levels among U.S. children aged 1 to 5 Years. Results indicate an 84 percent decline in elevated blood lead levels among children from 1988 to 2004. The major risk factors for higher blood lead levels continue to be living in housing built before 1950, poverty, age and being non-Hispanic black. Because children can be exposed to lead from multiple sources, including consumer products and imported toys, efforts to test children at high risk for lead poisoning, and to identify and control all lead sources that can poison children, must continue. Prevention efforts at national, state, and local levels will help maintain progress already made, and continue to help eliminate elevated blood lead levels in children.

For FY 2009, the program has developed a target of measuring 323 environmental chemicals and nutritional indicators in the U.S. population. Achieving this target is dependent on scientific advancements, such as increasing the number of chemicals that can be measured in a single sample and developing sophisticated new methods for analyzing chemicals that will increase the laboratory's exposure-assessment capabilities. While past research and development (R&D) of new methods has progressed well, it is difficult to predict future progress.

Long-term Objective 10.1, Performance Measure 2

This measure reflects the efforts of CDC's Environmental Hazards and Health Effects (EHHE) Program. CDC investigates the human health effects of hazards in the environment, such as water and air pollutants, mold, and radiation as well as hazards related to natural and other disasters. The results of these investigations and studies help CDC develop, implement, and evaluate actions and strategies for preventing or reducing harmful exposures and their health consequences. Since FY 2005, the program exceeded their targets. Most of the studies conducted by EHHE are a result of response activities to clarify emerging environmental threats. Response activities by definition are not planned. We set our target based on experience and available budget.

Long-term Objective 10.1, Performance Measure 3

The program ensures the quality of several different tests in a large number of laboratories that voluntarily participate in quality assurance and standardization programs. In FY 2008, the

program met its target of 967 laboratories. Although CDC makes every effort to encourage participation in these programs, it cannot compel laboratories to participate. The targets for FY 2009 and FY 2010 realistically reflect the fact that participation in these voluntary standardization programs fluctuates from year to year, depending on multiple factors, including CDC laboratory requirements and import restrictions of other nations. One of the standardization programs, the Newborn Screening Quality Assurance Program (NSQAP), celebrated its 30th anniversary in 2008. NSQAP is the only comprehensive program in the world devoted to ensuring the accuracy of newborn screening tests. In many cases, detecting these disorders spells the difference between life and death for newborns; in other instances, identifying babies with a disorder means that they can be treated and thus not face life-long disability or cognitive impairment. Parents and doctors in the United States can trust the results of newborn screening tests because of NSQAPs efforts over the past 30 years.

Measure	FY	Target	Result
Long Term Objective 10.2: Prevent or reduce illnesses, injury, and death related to environmental risk factors.			
10.2.2: Number of children under age 6 with elevated blood lead levels. *(Outcome)*	*2010*	79,000	Jun 30, 2012
	2009	95,000	Jun 30, 2011
	2008	104,000	Jun 30, 2010
	2007	112,000	Jun 30, 2009
	2006	190,829	190,829 (Target Met)
	2005	219,587	216,000 (Target Exceeded)
10.2.4: Increase the proportion of those with current asthma who report they have received self – management training for asthma in populations served by CDC funded state asthma control programs. *(Output)*	*Out-Year Target*	53% (2013)	Dec 31, 2014
	2010	49%	Dec 31, 2011
	2009	48%	Dec 31, 2010
	2006	Baseline	45%

Measure	Data Source	Data Validation
10.2.2	NHANES	Increased reporting from laboratories electronically, resulting in fewer errors introduced in data during data entry.
10.2.4	BRFSS Asthma Call-Back Survey	BRFSS is a state-based health survey system. Data are submitted to CDC, where the

Measure	Data Source	Data Validation
		data undergo rigorous data quality checks.

Long-term Objective 10.2, Performance Measure 2

Authorized in 1998, the Childhood Lead Poisoning Prevention Program uses funds to develop programs and policies to prevent lead poisoning, educate the public and health-care providers about lead poisoning, fund state and local health departments to determine the extent of lead poisoning by screening for elevated blood lead levels, help ensure medical and environmental follow-up for lead poisoning, and develop neighborhood-based efforts to prevent lead poisoning.

The program provides over 80 percent of its budget to fund competitive cooperative agreements in 34 states and six localities for lead poisoning prevention programs. Funding for the current five-year project period began in July 2006 and will continue through June 2010. Additionally, CDC has partnered with the U.S. Department of Housing and Urban Development (HUD) and the EPA since 2004 to ensure safe and healthy communities by identifying housing units in which successive children have been lead poisoned. The partnership was piloted in one community in 2004 and has since expanded to seven by the end of FY 2008.

Significant Accomplishments of this program include:

- Based on the data published in CDC's Third National Report on Human Exposure to Environmental Chemicals the percentage of young children with elevated Blood Lead Levels (BLLs), 10 micrograms per deciliter (µg/dl) or higher, decreased from an estimated 4.4 percent in NHANES III (1991–1994) to.59 percent for 2005-2006. This decline indicates that lead exposure among young children in the general population is continuing to decrease and is reflective of national, state and local efforts to reduce BLLs in children aged one to five years.
- By the end of FY 2008,100 percent of previously CDC funded programs had met the requirement to develop and implement elimination plans that involved stakeholders and local and state decision-makers.

Because of the excellent progress in reducing the number of lead-poisoned children in our nation and the connection to the effort to make housing safer, CDC has transitioned the Childhood Lead Poisoning Prevention program into a Healthy Housing program that will focus on reducing multiple health and safety hazards located in housing, including the hazard of lead. CDC recognizes the synergies that can be gained by a holistic approach to analyzing and addressing health threats in houses.

Long-term Objective 10.2, Performance Measure 4

Clinical guidelines updated by the National Asthma Education and Prevention Program (NAEPP) of the National Heart, Lung , and Blood Institute in 2002 outline four key clinical activities for providing quality care to patients with asthma. One of these four activities is the provision of education to the patient about the steps they can take in managing their disease and what steps to take if symptoms worsen (self-management). The process for creating the NAEPP guidelines is highly formalized, and includes a systematic and thorough review of the peer reviewed literature. Currently, the guidelines are undergoing a third revision. Draft resource documents used for this update have ranked the scientific evidence in support of asthma self-management education as extremely high (i.e. Evidence A) given that multiple,

well-designed randomized controlled trials have consistently documented improved health outcomes.

A recent meta-analysis conducted under the Cochrane Collaboration demonstrated positive associations between the provision of education about self-management in adult populations and subsequent reduction in adverse health outcomes (Gibson et al, 2002). Specifically, this meta-analysis reviewed the results of 36 trials (randomized or quasi-experimental design) designed to examine the impact of asthma self-management education on subsequent health outcomes in adults with asthma. This review showed reductions in asthma exacerbations, emergency room visits, and unscheduled office visits in adult patient populations (16 years of age and older) who received asthma self-management education.

Additionally, the provision of asthma self-management education has also led to reductions in adverse health outcomes for children with asthma. A meta-analysis published in the British Medical Journal in 2003 (Guevara JP, et al) demonstrated improvements in outcomes of children with asthma across 32 studies (randomized controlled trials or controlled clinical trials) in which educational interventions in asthma self-management were included. The authors of this meta-analysis concluded, Educational programs for the self management of asthma in children and adolescents improve lung function and feelings of self control, reduce absenteeism from school, number of days with restricted activity, number of visits to an emergency department, and possibly number of disturbed nights.

All states funded by the NACP to address asthma from a public health perspective work with partners throughout their states to implement educational and training interventions. Results from a systematic review of the most recent semi-annual progress reports provided by states in the implementation phase of their program (30 at time of review) showed that 100 percent of state asthma control programs conduct training based interventions. Twenty-five out of these 30 states (83. percent) noted that they conduct educational activities that are designed to improve medical practitioner adherence to the NAEPP Guidelines, and therefore promote the provision of asthma self-management training (as a result of practitioner actions/behaviors) as part of their overall strategy. Additionally, a variety of other training-based interventions are conducted by the state programs, including those which are designed to directly educate persons with asthma and their families (70 percent of states included in review). These numbers represent the strong emphasis state asthma control programs place on increasing the likelihood that persons with asthma will receive information about asthma self-management either through the activities of their medical providers or through direct contact with the state asthma program.

Strong evidence exists in the peer reviewed literature demonstrating that asthma self-management education activities (such as those performed by the state asthma control programs) leads to subsequent reductions in the occurrence of adverse health outcomes associated with poor asthma management (e.g. asthma hospitalizations, emergency room visits, unscheduled office visits, lung function, school absenteeism, restricted activity). CDC believes this measure provides a more accurate portrait of the performance the program is making towards reducing the burden of asthma within funded states. The NACP has increased national and state asthma surveillance and can provide regular reports beginning in late 2007 about asthma-self management education for individuals who report currently having asthma. The data source CDC will use is the Behavioral Risk Factor Surveillance System (BRFSS) Asthma Call-Back Survey.

The proposed measure is in alignment with existing national performance measures, specifically Healthy People 2010 Objective area 24-6 (i.e. increase the proportion of persons with asthma who receive formal patient education, including information about community and self-help

resources, as an essential part of the management of their condition) and Objective 24-7 (i.e. increase the proportion of persons with asthma who receive appropriate asthma care according to the NAEPP Guidelines). More specifically, Sub-Objective 24-7c is to increase the proportion of persons with asthma who receive education about recognizing early signs and symptoms of asthma episodes and how to respond appropriately, including instruction on peak flow monitoring for those who use daily therapy.

Injury Prevention and Control

Measure	FY	Target	Result
11.E.2: Maintain the percentage of cost savings each year for CCEHIP as a result of the Public Health Integrated Business Services HPO. *(Efficiency)*	*Out-Year Target*	30% (2011)	Dec 31, 2011
	2010	29%	Dec 31, 2010
	2009	28%	Dec 31, 2009
	2006	Baseline	0% savings

Measure	Data Source	Data Validation
11.E.2	CDC's Management Analysis and Services Office, COMPARE data system	CDC's Financial Management Office validates the data against FTE database information for the Management Analysis and Services Office

Efficiency Measure 11.E.2:

CDC is undergoing an agency-wide process to achieve significant efficiencies through the Public Health Integrated Business Services High Performing Organization (PHIBS HPO). The PHIBS HPO was approved by OMB in March of 2007. The focus of the PHIBS HPO is to systematically improve and modernize 16 different business support services reaching optimal efficiencies in service quality and at the same time reducing staff resource costs that perform the services by 2011.

Participation in the CDC-wide PHIBS HPO will link virtually all business support services performed in CCEHIP with those performed elsewhere at CDC, allowing the use of best practices, standardized procedures, and comparable measurement of performance across CDC. Reductions in staff and contractor time spent performing business support services will occur initially and be maintained thereafter in the CCEHIP HPO. Targets have been created for staff and contractors and costs associated with these, and for combined costs. These targets form the approximate 30 percent reduction in business support service costs. It is also expected that staff now performing business support services less than 10 percent of their time, will have those business service functions redirected to staff who primarily perform business services. This will decrease the combined grade of staff performing business services in CCEHIP and will allow the work in question to be accomplished more efficiently. Because staff who currently perform business services less than 10 percent of their time are primarily programmatic, this time will be returned to CCEHIP programs.

In addition, the Public Health Integrated Business Services HPO procedures require use of consistent, standardized business processes for all 16 involved business services. Cost and staffing efficiency will be routinely monitored and measured, as will service quality. In addition, 23 performance measures related to service delivery will be monitored and reported. All business support services currently focused at the branch, team, or other level in CCEHIP will be coordinated, standardized, and measured across CCEHIP. CCEHIP will be able to determine, disseminate and implement best practices in all business support services.

Intentional Injury

Measure	FY	Target	Result
Long Term Objective 11.1: Achieve reductions in the burden of injuries, disability, or death from intentional injuries for people at all life stages.			
11.1.1: Reduce youth homicide rate by 0.1 per 100,000 annually. *(Outcome)*	*2010*	8.7 / 100,000	Aug 31, 2012
	2009	8.8 / 100,000	Aug 31, 2011
	2008	8.8 / 100,000	Aug 31, 2010
	2005	8.9 / 100,000	9.2 / 100,000 (Target Not Met)
11.1.2a: Reduce victimization of youth enrolled in grades 9-12 as measured by: a reduction in the lifetime prevalence of unwanted sexual intercourse. *(Outcome)*	*Out-Year Target*	6.1% (2013)	Dec 31, 2014
	2009	6.7%	Dec 31, 2010
	2007	6.9%	7.8% (Target Not Met)
	2005	7.2%	7.5% (Target Not Met)
11.1.2b: Reduce victimization of youth enrolled in grades 9-12 as measured by: the 12-month incidence of dating violence. *(Outcome)*	*Out-Year Target*	7.3% (2013)	Dec 31, 2014
	2009	8.1%	Dec 31, 2010
	2007	8.4%	9.9% (Target Not Met)
	2005	8.8%	9.2% (Target Not Met)
11.1.2c: Reduce victimization of youth enrolled in grades 9-12 as measured by: the 12-month incidence of physical fighting. *(Outcome)*	*Out-Year Target*	27.4% (2013)	Dec 31, 2014
	2009	29.3%	Dec 31, 2010
	2007	30.3%	35.5% (Target Not Met but Improved)
	2005	31.3%	35.9% (Target Not Met)

Measure	Data Source	Data Validation
11.1.1	National Violent Death Reporting System (NVDRS)	Data verified through CDC's National Center for Injury Prevention and Control, Office of Statistics and Programming Analysis.
11.1.2	Youth Risk Behavior Survey	Data verified through CDC's National Center for Injury Prevention and Control, Office of Statistics and Programming Analysis.

Long-term Objective 11.1, Performance Measure 1

This measure is monitored utilizing data from persons aged 10-24 years among states participating in the National Violent Death Reporting System (NVDRS) in 2003. This measure contributes to CDC's long term goal to reduce homicide rates among youth aged 10-24 by 10 percent in NVDRS states with FY 2003 baseline data.

Homicide is the second leading cause of death for youth ages 10-24 years in the U.S. and the fourth leading cause of death for children ages 1-14 years.

The FY 2005 target of 8.9/100,000 was not met for this measure (actual was 9.2/100,000). There are many factors that contribute to youth violence and homicide rates, including economic conditions, lifestyle behaviors, and social and physical environments. CDC works to prevent this violence by identifying effective strategies that reduce risk factors and increase promotive and protective factors at the individual, family, and community levels. As trends in these risk factors change, such as poorer economic conditions or changes in the prevalence and types of substance abuse, youth violence and youth victimization may increase. CDC will continue to evaluate and modify efforts to achieve its targets in reducing incidences of youth homicide. CDC continues to keep the existing targets in place while trends are still being established in this area.

Long-term Objective 11.1, Performance Measure 2

This measure contributes to CDC's long term goal to impact self-reported victimization of youth as measured by reductions in two of three of the following: unwanted sexual intercourse, dating violence, and physical fighting.

CDC funds numerous programs and activities to address the victimization of youth. The data source of youth victimization is CDC's Youth Risk Behavior Survey (YRBS). In the YRBS, students enrolled in grades nine to twelve are asked these questions:

- During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
- Have you ever been physically forced to have sexual intercourse when you did not want to?
- During the past 12 months, how many times were you in a physical fight?

The FY 2005 and 2007 targets were not met for this measure. There are many factors that contribute to youth violence and victimization, including economic conditions, lifestyle behaviors, and social and physical environments. CDC works to prevent this violence by identifying effective strategies that reduce risk factors and increase promotive and protective factors at the individual, family, and community levels. As trends in these risk factors change, such as poorer economic conditions or changes in the prevalence and types of substance abuse, youth violence and youth victimization may increase. CDC will continue to evaluate and modify efforts to achieve its targets in reducing incidences of unwanted sexual intercourse, dating violence, and physical fighting. CDC continues to keep the existing projection of targets for future years while trends fluctuate and are still being established; however, there is currently not a national program to fund states for youth violence activities. This presents a challenge with impacting national level statistics.

Unintentional Injury

Measure	FY	Target	Result
Long Term Objective 11.2: Achieve reductions in the burden of injuries, disability or death from unintentional injuries for people at all life stages.			
11.2.1: Among the states receiving funding from CDC, reduce deaths from residential fires by 0.01 per 100,000 population. *(Outcome)*	*Out-Year Target*	1.08 / 100,000 (2012)	Oct 31, 2014
	2010	1.1 / 100,000	Oct 31, 2012
	2009	1.11 / 100,000	Oct 31, 2011
	2008	1.12 / 100,000	Oct 31, 2010
	2007	1.13 / 100,000	Oct 31, 2009
	2006	1.27 / 100,000	Jun 30, 2009
	2005	1.28 / 100,000	1.11 / 100,000 (Target Exceeded)
11.2.2: Achieve an age-adjusted fall fatality rate among persons age 65+ of no more than 69.6 per 100,000. *(Outcome)*	*Out-Year Target*	58.7 (2013)	Oct 31, 2015
	2010	52.1	Oct 31, 2012
	2009	50.0	Oct 31, 2011
	2008	47.8	Oct 31, 2010
	2007	45.6	Oct 31, 2009
	2006	43.4	Jun 30, 2009
	2005	41.2	42.4 (Target Not Met)
11.2.3: Decrease the estimated percent increase of age-adjusted fall fatality rates among persons age 65+ years. *(Outcome)*	*Out-Year Target*	9.73% reduction (2012)	Dec 31, 2014
	2010	9.56% reduction	Dec 31, 2012
	2009	9.45% reduction	Dec 31, 2011
	2008	9.3% reduction	Oct 31, 2010
	2007	9.1% reduction	Oct 31, 2009
	2006	8.82% reduction	Jun 30, 2009
	2005	8.39% reduction	4.29% reduction (Target Not Met but Improved)

Measure	Data Source	Data Validation
11.2.1 – 11.2.3	National Vital Statistics System	Data verified by CDC's National Center for Injury Prevention and Control, Office of Statistics and Programming Analysis.

Long-term Objective 11.2, Performance Measure 1

This measure contributes to CDC's long term program assessment goal to reduce deaths from residential fires to 1.02 per 100,000 population among states receiving funding from CDC. CDC anticipates that targets will be met, as the field continues to make strides in residential fire safety and prevention. Policy decisions are being made at state and local levels that contribute to fewer deaths from residential fires, such as requirements for the sale of fire-safe cigarettes. While the field continues to see improvements in deaths from residential fires, achieving success is depending upon a number of factors such as developing new countermeasures and technologies to lower risks for fires; conducting research and surveillance to understand emerging issues as they arise and become a factor in deaths from residential fires; and, conducting research on effective prevention strategies that can be implemented in the home.

CDC faces several challenges in addressing residential fire prevention that make it difficult to set targets, including: a lack of timely and comprehensive fire incident data; scarce resources for conducting fire prevention and evaluation activities on a national level; and few evaluated residential fire prevention programs.

Data for FY 2006 has not been released by the National Center for Health Statistics (NCHS). Therefore, the program is unable to report the actuals at this time. As a result, the reporting date for this program assessment measure has been shifted from 01/2009 to 06/2009 to allow NCHS to release the FY 2006 Vital Statistics Data. Existing targets will remain unchanged until FY 2006 data can be reviewed and trends assessed.

Long-term Objective 11.2, Performance Measure 2

This measure was not met for FY 2005. FY 2004 was the first year of implementation of a process to track the new older adult falls baseline measures. The target of 39.0 per 100,000 population for FY 2004 was based on a best estimation of an achievable result, given trends and existing prevention efforts The reasons CDC is not meeting the targets on falls are unclear, but rates of older adult fall deaths are increasing; falls are the leading cause of death among adults age 65 and older. With the aging society, older adults are the fastest growing segment of our population; this will continue to be a rising public health concern. In addition, the average life expectancy has increased and death rates from cardiovascular and chronic diseases have decreased. Although the fatality rates were adjusted for age, additional age-related factors may explain the increasing rate. Advancing age is associated with physiologic changes, including decreased muscle strength and endurance, delayed reaction times, slowed reflexes, and loss of visual acuity. These changes may interact with use of psychoactive medications and chronic conditions, such as osteoporosis, arthritis, and diabetes, which put older adults at high risk of sustaining fatal fall injuries. There are currently no national state-funded falls prevention activities to reduce the fall fatality rate.

Efforts are underway to decrease deaths from falls among older adults. For example, within HHS, CDC is collaborating with states to provide custom exercise classes designed to improve strength, balance, and mobility; education about how to reduce fall risk factors; assistance to improve the home environment; and medical referrals as appropriate. CDC will seek to revise its measures to reflect milestones and outcomes which may be more practical to achieve given resources, capacity, and trends in this important cause of morbidity and mortality in the U.S.

Vital Statistics data for FY 2006 has not been released by the National Center for Health Statistics (NCHS). Therefore, the program is unable to report the actuals. As a result, the reporting date for this measure has been shifted from 01/2009 to 06/2009 to allow NCHS to

release the FY 2006 Vital Statistics Data.

Long-term Objective 11.2, Performance Measure 3

This measure was not met for FY 2004 or FY 2005. FY 2004 was first year of implementation of a process to track the new older adult falls baseline measures. The target of a 7.67 percent reduction was based on a best estimation of an achievable result, given trends and existing prevention efforts. The reasons CDC is not meeting the targets on falls are unclear, but rates of older adult fall deaths are increasing; falls are the leading cause of death among adults age 65 and older. With the aging society, older adults are the fastest growing segment of our population; this will continue to be a rising public health concern. In addition, the average life expectancy has increased and death rates from cardiovascular and chronic diseases have decreased. In addition, although the fatality rates were adjusted for age, additional age-related factors may explain the increasing rate. Advancing age is associated with physiologic changes, including decreased muscle strength and endurance, delayed reaction times, slowed reflexes, and loss of visual acuity. These changes may interact with use of psychoactive medications and chronic conditions, such as osteoporosis, arthritis, and diabetes, which put older adults at high risk of sustaining fatal fall injuries. There are currently no national state-funded falls prevention activities to reduce the fall fatality rate.

Efforts are underway to decrease deaths from falls among older adults. For example, within HHS, CDC is collaborating with states to provide custom exercise classes designed to improve strength, balance, and mobility; education about how to reduce fall risk factors; assistance to improve the home environment; and medical referrals as appropriate. CDC will seek to revise its measures to reflect milestones and outcomes which may be more practical to achieve given resources, capacity, and trends in this important cause of morbidity and mortality in the U.S.

The data for this measure has been delayed due to a delay with the release of NCHS death data. Data are expected soon but the precise time frame is not known. As a result, the reporting date for this measure has been shifted from 01/2009 to 06/2009 to allow NCHS to release the FY 2006 Vital Statistics Data.

Note: The actuals are negative numbers as the actual rates are not only larger than the target rate, but also the projected rates as well.

OCCUPATIONAL SAFETY AND HEALTH

Measure	FY	Target	Result
12.E.2: Reduce consumption of utilities (e.g., gas, electric, water). *(Efficiency)*	*2010*	$3.16 / sq. ft. (3% reduction)	Dec 31, 2011
	2009	$3.19 / sq. ft. (2% reduction)	Dec 31, 2010
	2008	$3.23 / sq. ft. (1% reduction)	Dec 31, 2009
	2007	Baseline	$3.26 / sq. ft.

Measure	Data Source	Data Validation
12.E.2	Office of Administrative and Management Services Records	NIOSH Operations Officers at each facility (Pittsburgh, Spokane, Morgantown, and Cincinnati) track the annual costs spent on utilities. The expenditures, which are measured in dollars for each tracked utility, are adjusted for rate changes from the utility suppliers. NIOSH energy consumption is tracked monthly and the usages are trended. The usages come from utility bills and are verified against meter readings.

Efficiency Measure 12.E.2:

This measure focuses on the consumption of utilities with NIOSH research facilities. Specifically, the annual costs spent on utilities (water, gas, electric, and coal) at the Morgantown, Cincinnati, Pittsburgh, and Spokane facilities per square feet of used space during the year. Utilities are a significant part of the CDC budget. NIOSH research facilities have specific requirements (e.g., continuous air cooling/heating for animal housing facilities, human sample storage) making efficiency efforts more difficult than they are for other types of government operations. This measure is not a duplication of CDC's Buildings and Facilities program efficiency measures on energy and water reduction. NIOSH unlike other CDC/CIOs is responsible for covering utility expenses out of its total program budget. Therefore, NIOSHs expenses are not captured within the existing measure.

It is expected that utility costs may advance at a faster rate than utility usage efficiencies, possibly leading to an overall increase in utility costs for these facilities. Thus the numerator will be corrected for price increases that NIOSH cannot control. It is proposed that the numerator reflect expenditures (measured in dollars) for each tracked utility adjusted for rate changes from the utility suppliers. Hence, baseline rates were provided the as part of the proposed measure.

Measure	FY	Target	Result
Long Term Objective 12.1: Conduct research to reduce work-related illnesses and injuries.			
12.1.1: Progress in targeting new research to areas of occupational safety	*2009*	Evaluate relevance of final 1/5 of CDC NIOSH program activities according to specifications below.	Dec 31, 2010

Measure	FY	Target	Result
and health (OSH) most relevant to future improvements in workplace protection. *(Output)*	*2008*	Evaluate relevance of fourth 1/5 of CDC NIOSH program activities according to specifications below.	Dec 31, 2009
	2007	Evaluate relevance of third 1/5 of CDC NIOSH program activities according to specifications below.	Yes (Target Met)
	2006	Evaluate relevance of second 1/5 of CDC NIOSH program activities according to specifications below	Yes (Target Met)
12.1.2a: Improve the quality and usefulness of tracking information for safety and health professionals and researchers in targeting research and intervention priorities; measure the success of implemented intervention strategies. *(Output)*	*2010*	A) Evaluate the role that tracking information had in designing research and intervention projects.	Sep 30, 2011
	2009	A) Evaluate the role that tracking information had in designing research and intervention projects.	Jun 30, 2010
	2008	A) Evaluate the role that tracking information had in designing research and intervention projects.	Jun 30, 2009
	2007	A) Evaluate the role that tracking information had in designing research and intervention projects.	A) 211 research and intervention projects were based on tracking information (Target Met);
	2006	A) 155 research and intervention projects were based on tracking information;	A) 155 research and intervention projects were based on tracking information (Target Met);
	2005	A) 150 research and intervention projects were based on tracking information;	A) 150 research and intervention projects were based on tracking information; (Target Met)
12.1.2b: Improve the quality and usefulness of tracking information for safety and health professionals and researchers in targeting research and intervention priorities; measure the success of implemented intervention strategies. *(Output)*	*2010*	B) Identify the role that follow-up tracking information can have in assessing the success of interventions.	Sep 30, 2011
	2009	B) Identify the role that follow-up tracking information can have in assessing the success of interventions.	Jun 30, 2010
	2008	B) Identify the role that follow-up tracking information can have in assessing the success of interventions.	Jun 30, 2009
	2007	B) Identify the role that follow-up tracking information can have in assessing the success of interventions.	B) 34 intervention projects used tracking information to demonstrate the success of the intervention strategy (Target Met)

Measure	FY	Target	Result
	2006	B) 15 intervention programs used tracking information to demonstrate the success of the intervention strategy;	B) 15 intervention programs used tracking information to demonstrate the success of the intervention strategy (Target Met);
	2005	B) 11 intervention programs used tracking information to demonstrate the success of the intervention strategy;	B) 11 intervention programs used tracking information to demonstrate the success of the intervention strategy; (Target Met)
12.1.2c: Improve the quality and usefulness of tracking information for safety and health professionals and researchers in targeting research and intervention priorities; measure the success of implemented intervention strategies. *(Output)*	*2010*	C) Heighten use of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by 3%.	Sep 30, 2011
	2009	C) Heighten use of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by 3%.	Jun 30, 2010
	2008	C) Heighten use of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by 3%.	Jun 30, 2009
	2007	C) Heighten use of tracking data as a way to reduce the prevalence rate of elevated blood lead concentrations in persons due to work exposures by 3%.	C) 7.8 adults per 100,000 with elevated blood lead levels (Target Not Met)
	2006	C) 7.6 adults per 100,000 with elevated blood lead levels	C) 7.6 adults per 100,000 with elevated blood lead levels (Target Met)
	2005	C) 8.0 adults per 100,000 with elevated blood lead levels	C) 8.0 adults per 100,000 with elevated blood lead levels (Target Met)
12.1.3: Percentage of NIOSH programs that will have completed program-specific outcome measures and targets in conjunction with stakeholders and customers. *(Output)*	*2010*	90%	Sep 1, 2010
	2009	80%	Sep 1, 2009
	2008	70%	80% (Target Exceeded)
	2007	60%	61% (Target Exceeded)
	2006	50%	52% (Target Exceeded)
	2005	33%	30% (Target Exceeded)

Measure	Data Source	Data Validation
12.1.1	National Academies (NA) direct report to NIOSH	NIOSH has contracted with the NA to complete reviews of at least two NIOSH sector programs annually. Upon completion of the reviews, the NA submits a formal report to NIOSH, which includes a quantitative rating of the program, summary of findings, refined outcome measures and suggestions for future improvement.
12.1.2	NIOSHTIC II database and NIOSH Project Planning and Management (NPPM) system	a) Annually, the Office of the Director develops a report on the number of publications produced by select projects using the NIOSHTIC II database and NPPM system. This report is sent to the Divisions for review, to ensure the accuracy and completion of the information; b) Internal Projects – Projects competing for new NORA funds undergo a formal external peer-review process. The NPPM system is used to identify new projects and peer review is verified by the NIOSH Associate Director for Science. External Projects - All external projects are reviewed through the NIH peer review system. The date and details of the reviews are recorded and reviewed by the NIOSH Office of Extramural Programs.
12.1.3	National Academies (NA) direct report to NIOSH	NIOSH has contracted with the NA to complete reviews of at least two NIOSH sector programs annually. Upon completion of the reviews, the NA submits a formal report to NIOSH, which includes a quantitative rating of the program, summary of findings, refined outcome measures and suggestions for future improvement.

Long-term Objective 12.1, Performance Measure 1

CDC entered into a contract with the National Academies (NA) to conduct a review of its occupational safety and health (OSH) research program portfolio. In FY 2005, the NA Framework Committee engaged in extensive study of appropriate program evaluation criteria for judging the relevance and impact of CDC research programs. The NA evaluation committees subsequently used the Framework document created by the Framework Committee to guide the reviews of CDC's OSH research programs. Subsequently, the reporting deadlines for all evaluations had to be extended to provide sufficient time to the NA committees to conduct the reviews. As of November 2008, NA evaluation committees have reported favorable scores for program relevance and impact for eight CDC programs: hearing loss, mining, agriculture, respiratory diseases, traumatic injuries, construction, personal protective technology, and health hazard evaluations. The results of these reviews also provided CDC with a number of recommendations that will guide the direction of OSH research and contribute to improved safety and health of the Nation's workers.

Long-term Objective 12.1, Performance Measure 2

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 information, specific research initiatives can be undertaken to understand the relationships between exposures and health outcomes. In turn, intervention strategies are developed and implemented to reduce illness and injury.

CDC continues to meet its performance targets by using surveillance information to develop and evaluate projects. In FY 2007, 211 research and intervention projects were based on tracking information, and 34 intervention programs used tracking information to demonstrate the effectiveness of the programs strategies. From FY 2004 to FY 2007, the number of research and intervention projects using surveillance information has varied due to changes in the total number and types of projects funded each fiscal year. Although not included in the target, many CDC projects such as training initiatives and information projects are also initiated in response to surveillance information. CDC continuing education courses, CDC Alerts and Fact Sheets may be developed for occupational safety and health professionals, employers and employees to renew concern and present prevention strategies for identified workplace hazards. The ABLES program has been successful in improving surveillance of lead exposures among adults in the 37 states which conducted surveillance in 2007. The program's strategy for making progress toward meeting the target includes continuing to focus on providing funding to states for surveillance, and providing funding to states for surveillance of blood lead levels, increase the number of states conducting blood lead surveillance, and providing technical support to states. In addition, CDC continues to improve its capacity to analyze blood lead data among adults and to make it available to researchers and the public. Possible explanations for the rate increase in 2007 include improved surveillance of existing lead exposures, increase in 17 state rates, and fluctuations in data reporting. For 2008 surveillance, we are closely monitoring the states that showed rate increases to better understand the reasons of these changes and to plan strategic interventions.

The continued use of surveillance information in developing and evaluating projects and other OSH activities has been encouraged by the sector-based approach of the second decade of National Occupational Research Agenda (NORA) and the comprehensive NA reviews. Both of these initiatives urge scientists to analyze OSH surveillance data, and conduct projects that are relevant to existing OSH hazards and will result in a reduction in workplace illness and injury.

Long-term Objective 12.1, Performance Measure 3

As part of the National Academies' comprehensive review of research activities (referenced above) and NORA, all programs will develop comprehensive outcome-based measures and targets in conjunction with stakeholders and customers. These two initiatives have assisted CDC in exceeding this performance goal from FY 2005 to present. To date, NIOSH research programs have established Steering Committees and have drafted strategic plans. The plans include goals, measures, and targets. In FY 2008, the Steering Committees completed outcome measures and targets for 80 percent of CDC's programs mining, construction, agriculture, health care, transportation, services, public safety, and wholesale and retail trade. These measures and targets guide the research programs in conducting customer-based, transparent research, and have aided the National Academies' program committees in their evaluation of the relevance and impact of the research programs.

Measure	FY	Target	Result
Long Term Objective 12.2: Promote safe and healthy workplaces through interventions, recommendations and capacity building.			
12.2.1: Increase the percentage of CDC NIOSH-trained professionals who enter the field of occupational safety and health after graduation. *(Output)*	*2010*	80%	Dec 31, 2010
	2009	80%	Dec 31, 2009
	2008	80%	85% (Target Exceeded)
	2007	80%	85% (Target Exceeded)
	2006	80%	80% (Target Met)
	2005	75%	80% (Target Exceeded)
12.2.2a: Reduce the annual incidence of work injuries, illnesses, and fatalities, in targeted sectors: Reduction of non-fatal injuries among youth ages 15–17. *(Outcome)*	*2010*	4.2 / 100 FTE	Dec 31, 2010
	2009	4.4 / 100 FTE	Dec 31, 2009
	2008	4.4 / 100 FTE	4.2 / 100 FTE (Target Exceeded)
	2007	4.4 / 100 FTE	4.4 / 100 FTE (Target Met)
	2006	4.8 / 100 FTE	4.4 / 100 FTE (Target Exceeded)
	2005	N/A	4.1 / 100 FTE (Historical Actual)
12.2.2b: Reduce the annual incidence of work injuries, illnesses, and fatalities, in targeted sectors: Reduction of fatal injuries among youth 15–17. *(Outcome)*	*2010*	3.2 / 100,000 FTE	Dec 31, 2010
	2009	3.0 / 100,000 FTE	Dec 31, 2009
	2008	2.5 / 100,000 FTE	2.0 / 100,000 FTE (Target Exceeded)
	2007	2.5 / 100,000 FTE	2.0 / 100,000 FTE (Target Exceeded)
	2006	3.2 / 100,000 FTE	3.2 / 100,000 FTE (Target Met)

Measure	FY	Target	Result
	2005	N/A	2.7 / 100,000 FTE
12.2.2c: Reduce the annual incidence of work injuries, illnesses, and fatalities, in targeted sectors: Percentage of active underground coal mines in the U.S. that possesses NIOSH-approved plans to perform x-ray surveillance for pneumoconiosis *(Outcome)*	*2010*	90%	Dec 31, 2010
	2009	90%	Dec 31, 2009
	2008	90%	98% (Target Exceeded)
	2007	90%	94% (Target Exceeded)
	2006	90%	92% (Target Exceeded)
	2005	N/A	94% (Historical Actual)
12.2.3a: Reduce occupational illness and injury as measured by: Percent reductions in respirable coal dust overexposure *(Outcome)*	*Out-Year Target*	50% (2014)	N/A
	2003	Baseline	>15%
12.2.3b: Reduce occupational illness and injury as measured by: Percent reduction in fatalities and injuries in roadway construction. *(Outcome)*	*Out-Year Target*	40% (2014)	N/A
	2003	Baseline	154%
12.2.3c: Percent of firefighters and first responders' access to chemical, biological, radiological, and nuclear respirators. *(Outcome)*	*Out-Year Target*	75% (2014)	N/A
	2003	Baseline	>7%
12.2.4a: Percentage of: Companies employing those with NIOSH training that rank the value added to the organization as good or excellent. *(Outcome)*	*2009*	80%	N/A
	2003	Baseline	68%
12.2.4b: Percentage of professionals with academic or continuing education training. *(Outcome)*	*2009*	37,850 (Increase of 15%)	N/A
	2003	Baseline	1,405 full-time academic trainees, 31,508 continuing education trainees

Measure	Data Source	Data Validation
12.2.1	NIOSH Office of Extramural Programs training grantee annual progress reports, which include performance data	OEP staff review and verify data with grantees via phone or email contact, as needed
12.2.2	a) National Electronic Injury Surveillance System (NEISS); b) Census of Fatal Occupational Injuries (CFOI) special research file provided to NIOSH by Bureau of Labor Statistics; c) National Occupational Respiratory Mortality System (NORMS), an interactive query system designed to generate statistics, charts, and maps relating to mortality from occupationally-related lung diseases.	a) The Consumer Product Safety Commission (CPSC) annually visits emergency departments that submit data to NEISS to assess case capture, and review records as they are submitted for completeness and internal consistency. NIOSH receives NEISS data quarterly and reviews the subset of work-related cases that CPSC provides to ensure the cases meet NIOSH definitions of work-relatedness. NIOSH reviews a sample of cases after coding by a contractor to ensure a high level of accuracy for codes that describe source of injury and event/exposure leading to injury; b) NIOSH receives the special CFOI file annually. To avoid duplication of fatalities in the counts, source documents are matched using the decedent's name and other information. To ensure an accurate count of fatal occupational injuries, the census program requires that for each case, the work relationship (that is, whether a fatality is work related) be substantiated by two or more independent source documents or a source document and a follow-up questionnaire; c) NORMS is based on public-use, multiple cause of death data files obtained annually from the National Center for Health Statistics (NCHS). NCHS performs data quality check to remove invalid codes, verify the coding of certain rare causes of death, and ensure age/cause and sex/cause compatibility. To ensure the accuracy of the NORMS results, NIOSH compares the findings to the NCHS control tables.
12.2.3	a) The Mine Safety and Health Administration (MSHA) and NIOSH data sets that are shared between the agencies - MSHA data is routinely collected as part of the enforcement and compliance requirements, and NIOSH data collected during field investigations, in support of current and future research experiments.; b) See Measure 2b	a) The MSHA data is collected according to the agency's standard rigorous sampling and handling protocols. The validation of NIOSH data is ensured by following the protocols developed during the generation of the research proposals. The proposals are peer-reviewed and include calibration requirements for the measurement and handling of the dust samples, as well as procedures for analyzing the results and ensuring the meaningfulness of the data points; b) See Measure 2b.
12.2.4	NIOSH Customer Satisfaction Survey	The survey is conducted by the NIOSH Education and Information Division, in compliance with the standards of the Data Quality Act.

Long-term Objective 12.2, Performance Measure 1

This measure focuses on the effectiveness of CDC training with respect to entry into the field of occupational safety and health. CDC conducts a competitive training grant program aimed at increasing the number of professionals trained to work in the occupational safety and health field. CDC supports a network of Education and Research Centers (ERCs) and Training Project Grants (TPGs) around the country. In FY 2008, 446 professionals graduated from these programs with specialized training in disciplines that include occupational medicine, occupational health nursing, industrial hygiene, occupational safety, and other closely related occupational safety and health fields of study.

CDC estimates that about half of all U.S. occupational safety and health professionals graduate from CDC-supported programs at the masters and doctoral levels. In FY 2008, CDC exceeded its performance goal with 85 percent of the professionals graduating from CDC-funded programs pursuing careers in occupational safety and health. The increase in demand for OSH professionals and the agency's ability to provide needed OSH training opportunities via the ERC/TPG network has enabled CDC to meet and exceed performance targets over the past several years.

Long-term Objective 12.2, Performance Measure 2

CDC translates occupational safety and health surveillance and research findings into technically and economically usable solutions to control workplace hazards and reduce work-related injuries, illnesses, and fatalities.

CDC has a long history of conducting and supporting young worker safety and health research and intervention activities, and working with partners to improve young worker safety and health. The agency has exceeded and met the respective FY 2008 performance targets as rates of fatal and nonfatal injuries among young workers appear to be declining. Contributors to the reductions in young worker injuries include increased awareness of the issue and recent changes in child labor laws. In FY 2007, CDC, CDC grantees and others, finalized and disseminated OSH curricula that will increase young workers basic knowledge of workplace safety and health. The curricula engages students and teachers in the exploration of risks to youth in the workplace, their rights and relevant labor laws, common workplace hazards and controls, communication skills, and young workers role in emergency preparedness and response. CDC has also made valuable contributions in the area of child labor laws. The agriculture sector accounts for more work-related deaths of youth than any other industrial sector. In 2006, CDC produced previously unavailable data to help guide prevention efforts in the agricultural sector and led a federal interagency working group on childhood agricultural injury prevention. CDC also provided input into the revised child labor regulations that became effective February 14, 2005. Further progress was made on April 17, 2007, when the Department of Labor proposed federal child labor laws that will prohibit youth less than 18 years of age from working in poultry slaughtering and packaging plants, riding on a forklift as a passenger, fighting forest fires, and operating certain power-driven hoists and work assist vehicles. These regulatory changes are responsive to specific science-based recommendations made by CDC.

A new indicator regarding pneumoconiosis has been added to this measure. Coal production is increasing in the U.S., as it is an important alternative to foreign energy sources. Based upon Mine Safety and Health Administration (MSHA) data, in 2005 there were 49,395 employees in underground coal mines and 45,270 employees in surface coal mines, for a total of 94,665. This was an increase of 6,432 employees compared to 2004. The Energy Information Administration of the Department of Energy estimated in its Annual Energy Outlook 2006

documents Coal Forecast that employment in coal mining would rise by 27,000 between 2004 and 2030.

Pneumoconiosis and other dust-induced lung diseases, such as Chronic Obstructive Pulmonary Disease, are serious and potentially lethal disorders. According to the National Occupational Respiratory Mortality System, coal workers pneumoconiosis was a causal or contributing factor in 703 deaths in 2004, the most recent year for which mortality data exists. Although there have been marked reductions in disease prevalence since the early 1970s, surveillance studies have demonstrated the existence of geographic hot spots for progressive pneumoconiosis. Furthermore, recent surveys have documented that young miners in their 30s and 40s, who have worked entirely under current dust regulations, continue to be stricken by rapidly progressive and advanced pneumoconiosis. Finally, ongoing radiographic surveillance shows increasing prevalence of disease in recent years. Among those with greater than 25 years of tenure in coal mining, in 1970 - 1974, 31.9 percent of surveilled miners had evidence of pneumoconiosis; in 1995 - 1999, 4.2 percent; and in 2005 - 2006, prevalence increased to 8.9 percent.

CDC has exceeded the 90 percent target level since the FY 2003 baseline year, but 90 percent remains an ambitious target for several reasons. Because pneumoconiosis continues to occur, it will be important to maintain high levels of participation among coal mines in CDC's Coal Workers Surveillance Program because of production demands, it is anticipated that many new coal mines will open that will need to be entered into the program. CDC has exceeded the 90 percent target level since the 2003 baseline year, but 90 percent remains an ambitious target for several reasons. CDC will work to encourage coal mines to participate by establishing surveillance plans in two ways: directly contacting mines without approved programs and assist them in developing approved programs, and partnering with the MSHA by informing them of mines without approved plans. MSHA has the ability to follow up with these mines to encourage participation, and if necessary, is able to issue citations to mines without plans and vacate the citations once plans are established.

Long-term Objective 12.2, Performance Measure 3

For most program activities, reductions in occupational illnesses and injuries are due to multiple factors of which research is one component. However for some sectors and activities, extenuating circumstances are minimal and efforts are at a stage where future decreases in illness and injuries logically can be attributed to the success of programs without requiring the additional level of analysis. This measure targets three such high risk sectors and activities which represent impact in (1) occupational illness (due to coal dust overexposure); (2) occupational injuries (in roadway construction); and (3) preparedness (firefighter access to CBRN respirators). In FY 2003, the baseline for each was established: (1) greater than 15 percent; (2) 154 percent; and (3) greater than seven percent. CDC will report on this long term measure in FY 2014.

Long-term Objective 12.2, Performance Measure 4

The impact of training can be evaluated as a product of two metrics: the number of trained professionals in occupational safety and health positions, and the value of these trainees to their organizations. In addition, a third metric is used to judge the success of training programs based on the satisfaction of trainees. New surveys will be conducted to augment existing data on the impact of training programs. Follow-up surveys with trainees will determine their level of satisfaction with their education, and surveys of companies hiring trainees will judge the impact they are having in the workplace. In addition, efforts will continue to track the number of professionals with occupational safety and health duties that have academic or continuing

education training. In FY 2003 the baseline for this measure was established, with 1,405 full-time academic trainees, 31,508 continuing education trainees and 68 percent of companies employing NIOSH-trained employees reporting favorably regarding value added to their organization. CDC will report progress made on this long term measure in FY 2010.

GLOBAL HEALTH

Global AIDS Program

Measure	FY	Target	Result
Long Term Objective 13.A.1: GAP will help implement PEPFAR in 15 focus countries by partnering with other USG agencies to achieve the goals of treating 2 million HIV-infected people and caring for 10 million people infected with or affected by HIV/AIDS by 2008, and preventing 7 million new HIV infections by 2010.			
13.A.1.1: Number of people receiving HIV/AIDS treatment. *(Output)*	*2010*	3,153,169 people	Mar 31, 2011
	2009	2,568,137 people	Mar 31, 2010
	2008	1,668,800 people	2,007,800 people (Target Exceeded)
	2007	1,200,000 people	1,358,375 people (Target Exceeded)
	2006	741,000 people	822,000 people (Target Exceeded)
	2005	470,000 people	401,233 people (Target Not Met but Improved)
13.A.1.2: Number of individuals provided with general HIV-related palliative care/basic health care and support during the reporting period, including TB. *(Outcome)*	*2010*	8,503,441	Mar 31, 2011
	2009	7,693,971	Mar 1, 2010
	2008	4,970,650	5,734,800 (Target Exceeded)
	2007	3,130,341	3,901,543 (Target Exceeded)
	2006	2,496,157	2,464,063 (Target Not Met but Improved)
	2005	1,662,820	1,397,555 (Target Not Met but Improved)
13.A.1.3: Number of pregnant women receiving PMTCT services, including counseling and testing during the reporting period. *(Output)*	*2010*	9,789,416	Mar 31, 2011
	2009	7,134,086	Mar 31, 2010
	2008	5,406,208	5,850,100 (Target Exceeded)
	2007	3,650,949	4,011,797 (Target Exceeded)
	2006	2,100,292	2,837,409 (Target Exceeded)
	2005	2,372,913	1,957,932 (Target Not Met but Improved)
13.A.1.4: Number of individuals who received counseling and testing during the reporting period (counseling includes the provision of test	*2010*	22,882,305	Mar 31, 2011
	2009	16,527,468	Mar 31, 2010
	2008	12,258,174	17,901,400 (Target Exceeded)
	2007	7,671,789	10,580,699 (Target Exceeded)

Measure	FY	Target	Result
results to clients *(Output)*	*2006*	5,590,762	6,426,120 (Target Exceeded)
	2005	3,982,958	4,653,257 (Target Exceeded)

Measure	Data Source	Data Validation
13.A.1.1-13.A.1.4	Country Operational Plans (COPS) database	All USG data are validated by the OGAC Strategic Information team following internal procedures.

Note: All FY 2008 performance targets for the 15 focus countries have been exceeded. These performance gains can partially be attributed to momentum achieved through the establishment of local program infrastructure and systems in the focus countries to support and sustain greater levels of performance. Many variables impact performance and it should be noted that this accelerated progress is not due to CDC efforts alone but to the combined efforts of all the PEPFAR implementing agencies including the Department of State, USAID, Department of Commerce, Department of Labor, Department of Defense, Peace Corps and the following HHS OPDIVS: CDC, HRSA, NIH, FDA and SAMHSA.

The Office of the Global AIDS Coordinator expects to disseminate new indicators and targets for FY 2010 by May 2009.

Additional information on these measures regarding past performance and trends, current performance, and strategies can be found in the PEPFAR Fourth Annual Report to Congress at http://www.pepfar.gov.

Long-term Objective 13.A.1, Performance Measure 1

With the support of PEPFAR, approximately 50,000 individuals are added each month to the number of people benefiting from life-extending antiretroviral therapy (ART). The number of sites providing treatment increased by 139 percent from FY 2005 to FY 2006, and each month an average of about 93 new ART sites began operations. The baseline 2003 numbers are an aggregate of totals from different population-based studies conducted from 1998-2002 in 14 original countries (a subset of the focus countries).

The number of individuals receiving HIV/AIDS treatment has significantly increased from 66,911 in 2003 to 2,007,800 in FY 2008. The actual performance for Measure 1 was 2.0 million individuals receiving treatment compared to the target of 1.6 million.

Long-term Objective 13.A.1, Performance Measure 2

Palliative care comprises a broad range of services including physical, psychological, spiritual, and social support services. Please note that beginning in FY 2006, both target and actual number include TB (FY 2004 and FY 2005 did not include TB in either target or actuals).

The number of individuals provided with general HIV-related palliative care/basic health care and support has significantly increased from 854,800 in FY 2004 to 5,734,800 in FY 2008. The actual performance for Measure 2 was 5.7 million individuals provided with care compared to the target of 5.0 million individuals.

Long-term Objective 13.A.1, Performance Measure 3

In FY 2004 through FY 2008, PEPFAR: (1) supported prevention of mother-to-child HIV transmission (PMTCT) services for women during more than 16 million pregnancies; (2) supported antiretroviral prophylaxis for nearly 1.2 million HIV-positive pregnant women, averting an estimated 240,000 infant HIV infections; and (3) supported approximately 13,769 service outlets for prevention of mother-to-child HIV transmission. This is a program level indicator that is standardized across the 15 focus countries.

The number of pregnant women receiving PMTCT services has significantly increased from 1,271,300 in FY 2004 to 5,850,100 in FY 2008. The actual performance for Measure 3 was 5,850,100 pregnant women receiving these services compared to the target of 5,406,208.

Long-term Objective 13.A.1, Performance Measure 4

PEPFAR supports efforts of host nations to dramatically expand HIV counseling and testing services. PEPFAR supports HIV counseling and testing, where consent is obtained and testing is performed in accordance with international standards. Within these standards, countries use a range of services to meet their specific needs. Client-initiated or self-referred counseling and testing is requested by an individual. In a medical setting, provider-initiated counseling and testing occurs when health care workers recommend an HIV test and the patient chooses to accept. This is a program level indicator standardized across the 15 focus countries.

The number of individuals receiving counseling and testing (including the provision of test results to clients) has significantly increased from 1,791,900 in 2004 to 17,901,400 in 2008. The actual performance for Measure 4 was 17.9 million individuals compared to the target of 12.3 million individuals.

Measure	FY	Target	Result
Long Term Objective 13.A.2: The Global AIDS Program will help implement the President's Emergency plan for AIDS Relief in the other bilateral countries by partnering with other USG agencies , international and host country organizations to achieve the goals of preventing new HIV infections, treating HIV-infected people, and caring for people infected with or affected by HIV/AIDS.			
13.A.2.1: Number of individuals receiving antiretroviral therapy at the end of the reporting period (includes PMTCT+ sites). *(Output)*	*2010*	133,021 (direct)	Mar 31, 2011
	2009	123,435 (direct)	Mar 31, 2010
	2008	99,706 (direct)	115,000
	2007	306,053	276,965 (Target Not Met but Improved)
	2006	43,859	69,766 (Target Exceeded)
	2005	33,958	69,766 (Target Exceeded)
13.A.2.2: Number of individuals trained to provide laboratory-related activities. *(Output)*	*2010*	3,411 (direct)	Mar 31, 2011
	2009	2,479 (direct)	Mar 31, 2010
	2008	3,951	3,420 (Target Not Met)
	2007	4,652	3,988 (Target Not Met)
	2006	1,770	6,252 (Target Exceeded)

Measure	FY	Target	Result
	2005	1,772	1,772 (Target Met)
13.A.2.3: Number of pregnant women who received HIV counseling and testing for PMTCT and received their test results. *(Output)*	*2010*	759,994 (direct)	Mar 31, 2011
	2009	674,359 (direct)	Mar 31, 2010
	2008	290,768 (direct)	457,509 (direct) (Target Exceeded)
	2007	3,308,371	3,268,602 (Target Not Met but Improved)
	2006	633,185	1,108,500 (Target Exceeded)
	2005	623,787	603,913 (Target Not Met but Improved)
13.A.2.4: Number of individuals who received counseling and testing during the reporting period. *(Output)*	*2010*	2,310,591 (direct)	Mar 31, 2011
	2009	2,022,878 (direct)	Mar 31, 2010
	2008	1,112,592 (direct)	Mar 31, 2009
	2007	4,096,661	5,249,131 (Target Exceeded)
	2006	1,049,628	2,478,262 (Target Exeeded)
	2005	955,492	1,710,048 (Target Exceeded)

Measure	Data Source	Data Validation
13.A.2.1-13.A.2.4	GAP Planning and Reporting System and OGAC	All USG data are validated by the OGAC Strategic Information team following internal procedures.

Note: The targets appear to be reduced in FY 2008-FY 2010 because the Office of Global Aids Coordinator (OGAC) is only reporting direct targets and results. In the past, for other bilaterals, OGAC reported direct and indirect targets and results for our totals. These numbers were a combination of results directly attributed to USG support and results from support for systems strengthening.

Additional information on these measures regarding past performance and trends, current performance, and strategies can be found in the PEPFAR Fourth Annual Report to Congress at http://www.pepfar.gov.

Long-term Objective 13.A.2, Performance Measure 1

In addition to the 15 focus nations, the PEPFAR now partners with 19 host nations to support ART for approximately 277,000 people. USG programs in these nations largely provide critical support through system-strengthening and capacity-building, including technical assistance to international partners that support treatment. This measure represents a program level indicator that is standardized for use across all other bilateral countries receiving $1 million or more in FY 2005 USG HIV/AIDS funding. Data from FY 2004 and FY 2005 are from USAID and

HHS/CDC and were not under the guidance of PEPFAR reporting; therefore, double counting may exist due to overlap between agency programs.

The actual FY 2008 performance for Measure 1 was 115,000 individuals compared to the target of 99,706 individuals. This performance gain can partially be attributed to momentum achieved through the establishment of local program infrastructure and systems in the focus countries to support and sustain greater levels of performance. Many variables impact performance and it should be noted that this accelerated progress is not due to CDC efforts alone but to the combined efforts of all the PEPFAR implementing agencies including the Department of State, USAID, Department of Commerce, Department of Labor, Department of Defense, Peace Corps and the following HHS OPDIVS: CDC, HRSA, NIH, FDA and SAMHSA.

All USG bilateral HIV/AIDS programs are developed and implemented within the context of multi-sectoral national HIV/AIDS strategies, under the host country's national authority. Programming is designed to reflect the comparative advantage of the USG within the national strategy, and it also leverages other resources, including both other international partner and private-sector resources. The number reported for other PEPFAR countries reflects the USG programs outside of the fifteen focus countries that provide direct support at the point of service delivery. Individuals outside of the focus countries receiving treatment as a result of the USG's contribution to systems strengthening beyond those counted as receiving direct USG support are not included in this total.

The Office of the Global AIDS Coordinator expects to disseminate new indicators and targets for FY 2010 by May 2009. The results and targets for FY 2008, and targets for FY 2009 and FY 2010 are for direct support by USG.

Long-term Objective 13.A.2, Performance Measure 2

PEPFAR supports system-strengthening (including laboratories and surveillance and information systems), capitalizing on USG expertise in technical assistance and capacity-building for quality improvement and sustainability of programs. This measure represents a program level indicator that is standardized for use across all other bilateral countries receiving $1 million or more in USG HIV/AIDS funding in FY 2005. Data from FY 2004 and 2005 are from CDC and were not under the guidance of PEPFAR reporting. FY 2006 is the first reporting cycle that PEPFAR guidance is in effect for the countries receiving $1 million or more in USG HIV/AIDS funding.

The number of individuals trained to provide laboratory-related activities increased sharply from 1,488 in FY 2004 to 6,252 in FY 2006 before declining to 3,420 in FY 2008. The actual performance for Measure 2 was 3,420 individuals trained compared to the target of 3,951. The target was not met because Zimbabwe did not meet their targets due to the economic constraints of monetary devaluation and flight of medical personnel in Zimbabwe. Also, the targets appear to be reduced in FY 2008-FY 2010 because the Office of Global Aids Coordinator (OGAC) is only reporting direct targets and results. In the past, for other bilaterals, OGAC reported direct and indirect targets and results for our totals. These numbers were a combination of results directly attributed to USG support and results from support for systems strengthening.

All USG bilateral HIV/AIDS programs are developed and implemented within the context of multi-sectoral national HIV/AIDS strategies, under the host country's national authority. Programming is designed to reflect the comparative advantage of the USG within the national strategy, and it also leverages other resources, including both other international partner and private-sector resources. The number reported for other PEPFAR countries reflects the USG programs outside of the fifteen focus countries that provide direct support at the point of service

delivery. Individuals outside of the focus countries receiving treatment as a result of the USG's contribution to systems strengthening beyond those counted as receiving direct USG support are not included in this total.

The Office of the Global AIDS Coordinator expects to disseminate new indicators and targets for FY 2010 by May 2009.

Long-term Objective 13.A.2, Performance Measure 3

Through PEPFAR, the USG will continue to support counseling and testing for pregnant women, emphasizing the provision of tests results. This measure represents a program level indicator that is standardized for use across all other bilateral countries receiving $1 million or more in USG HIV/AIDS funding in FY 2005. Data from FY 2004 and FY 2005 are from USAID and HHS/CDC and were not under the guidance of PEPFAR reporting. Therefore, double counting may exist due to overlap between agency programs. FY 2006 is the first reporting cycle that PEPFAR guidance was in effect for the countries receiving $1 million or more in USG HIV/AIDS funding.

The number of pregnant women receiving HIV counseling and testing for PMTCT and their test results has significantly increased from 145,133 in 2004 to 457,509 in 2008. The actual performance for Measure 3 was 457,509 pregnant women compared to the target of 290,768.

The performance target for the following measures was set at an appropriate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

The Office of the Global AIDS Coordinator expects to disseminate new indicators and targets for FY 2010 by May 2009.

Long-term Objective 13.A.2, Performance Measure 4

PEPFAR supports programs to care for persons living with HIV/AIDS (PLWHA) and to provide HIV counseling and testing in a growing number of countries. This measure represents a program level indicator that is standardized for use across all other bilateral countries receiving $1 million or more in USG HIV/AIDS funding in FY 2005. Data from FY 2004 and 2005 are from USAID and HHS/CDC and were not under the guidance of PEPFAR reporting. Therefore, double counting may exist due to overlap between agency programs. FY 2006 is the first reporting cycle that PEPFAR guidance was in effect for the countries receiving $1 million or more in USG HIV/AIDS funding.

The number of individuals receiving counseling and testing as a result of bilateral country programs has significantly increased from 773,649 in 2004 to 1,644,600 in 2008. The actual performance for Measure 4 was 1,644,600 individuals compared to the target of 1,112,592.

All USG bilateral HIV/AIDS programs are developed and implemented within the context of multi-sectoral national HIV/AIDS strategies, under the host country's national authority. Programming is designed to reflect the comparative advantage of the USG within the national strategy, and it also leverages other resources, including both other international partner and private-sector resources. The number reported for other PEPFAR countries reflects the USG programs outside of the fifteen focus countries that provide direct support at the point of service delivery. Individuals outside of the focus countries receiving treatment as a result of the USG's contribution to systems strengthening beyond those counted as receiving direct USG support are not included in this total.

The Office of the Global AIDS Coordinator expects to disseminate new indicators and targets for FY 2010 by May 2009.

Global Immunization Program

Measure	FY	Target	Result
13.B.E.1: The portion of the annual budget that directly supports the program purpose in the field. *(Efficiency)*	*2010*	>=90%	Apr 30, 2011
	2009	>= 90%	Apr 30, 2010
	2008	>= 90%	93% (Target Exceeded)
	2007	>= 90%	96% (Target Exceeded)
	2006	>= 90%	91% (Target Exceeded)
	2005	>=90%	93% (Target Exceeded)

Measure	Data Source	Data Validation
13.B.E.1	Data will be are tracked and analyzed through IRIS, GMIS, UFMS, and ICE systems which are financial management systems specific to CDC and or HHS.	The monthly budget update is reviewed for accuracy by the Division's Associate Director for Management and Operations (ADMO). The ADMO monitors appropriate use of funds by category (polio, measles, and global disease detection) and CAN numbers. The ADMO works with the GID Branches to ensure that funds are completely obligated by the end of the fiscal year. The overall budget is reviewed by the Branch Chiefs, Deputy Division Director, and Division Director quarterly.

Efficiency Measure 13.B.E.1:

Developed through the 2005 program assessment process, this measure demonstrates that the majority of the Global Immunization Programs funding is used to support mission-critical activities directly through CDC's global partners, the WHO, UNICEF, PAHO and UNF. Specifically, these funds are used to purchase measles and polio vaccine and/or to provide technical or operational support through these agencies. CDC will maintain this efficiency and support for these activities in order to continue to meet global health goals.

Measure	FY	Target	Result
Long Term Objective 13.B.1: Help domestic and international partners achieve World Health Organization's goal of global polio eradication.			
13.B.1.1: Number of doses of oral polio vaccine (OPO) purchased for use in OPV mass immunization campaigns in Asia,	*2010*	240,000,000	Jun 30, 2011
	2009	240,000,000	Jun 30, 2010
	2008	240,000,000	Jun 30, 2009
	2007	260,000,000	287,000,000 (Target Exceeded)

Measure	FY	Target	Result
Africa, and Europe (1 dose = 1 child reached). *(Output)*	*2006*	500,000,000	341,000,000 (Target Not Met)
	2005	500,000,000	428,000,000 (Target Not Met)
13.B.1.2: Number of children reached with OPV as a result of non-vaccine operational support funding provided to implement OPV mass immunization campaigns in Asia, Africa, and Europe. *(Output)*	*2010*	45,000,000	Jun 30, 2011
	2009	45,000,000	Jun 30, 2010
	2008	60,000,000	Jun 30, 2009
	2007	100,000,000	119,000,000 (Target Exceeded)
	2006	Baseline	37,000,000
13.B.1.3: Number of countries in the world with endemic wild polio virus. *(Outcome)*	*2010*	0	Aug 31, 2011
	2009	0	Aug 31, 2010
	2008	0	Aug 31, 2009
	2007	3	4 (Target Not Met)
	2006	4	4 (Target Met)
	2005	5	4 (Target Not Met)

Measure	Data Source	Data Validation
13.B.1.1	UNICEF provides the number of doses of polio purchased with CDC funding in an annual report that is part of the CDC/UNICEF cooperative agreement.	Case count and surveillance indicators provided weekly by WHO are reviewed and analyzed by the Global Immunization Division.
13.B.1.2	GID tracks SIA operations funds provided by country through WHO and UNICEF. WHO provides a 'cost per child' figure for SIA operational costs for each country. GID uses this data to generate and validate the number of children reached with CDC funds.	Case count and surveillance indicators provided weekly by WHO are reviewed and analyzed by the Global Immunization Division.
13.B.1.3	WHO provides the polio case data generated from reports submitted by countries.	Case count and surveillance indicators provided weekly by WHO are reviewed and analyzed by the Global Immunization Division.

Long-term Objective 13.B.1, Performance Measure 1

CDC continues to be one of the Global Polio Eradication Initiatives (GPEI) largest procurers of Oral Polio Vaccine (OPV). CDC works in partnership with WHO and UNICEF to ensure that CDC funding is used to fill critical unmet needs for the global initiative. The FY 2006 target for OPV procurement was not met, due to a number of programmatic reasons, including:

- The cost of OPV has increased 26 percent from FY 2004 ($0.10/dose) to FY 2006 ($0.126/dose). Average costs to date in FY 2007 are $0.14/dose.
- WHO and UNICEF have successfully mobilized new donor contributions to the GPEI, especially for OPV procurement. While critical OPV funding gaps have been filled, significant funding gaps remain for the extensive program operations required to reach children during supplemental immunization activities (SIAs) (transport, vaccinators, cold chain management). The average cost to reach a child during SIAs is $0.31/per child (variable by country). The availability of other donor support for OPV has allowed CDC to use its more flexible funding to fill critical SIA operational gaps, ensuring that the vaccines do indeed reach the child, as well as supporting outbreak response activities related to imported poliovirus.
- CDC support for SIA operations in FY 2006 allowed the GPEI to reach 37 million children for administration of OPV.

Long-term Objective 13.B.1, Performance Measure 2

The GPEI faced substantial funding gaps for SIAs in FY 2007 and FY 2008. A number of donors, including Japan and Germany, have recently announced new donations for OPV, covering the majority of the unmet vaccine needs. CDC, WHO and UNICEF have ongoing dialogue regarding CDC funding allocations. During a consultation meeting at UNICEF in July 2007, CDC was asked to shift approximately $13 million from the purchase of OPV to operational costs to avert an emerging funding crisis.

As a result, the Global Immunization Division (GID) proposed a broader indicator that captures the number of children reached with CDC funding, both through OPV procured and the operations required to get vaccines to children. This would be done using the existing performance measure related to vaccine procurement, supplemented by this new measure related to the number of children reached through CDC SIA operations funding.

In November 2007, Rotary International announced a partnership with the Bill and Melinda Gates Foundation that will provide $200 million into the global campaign to eradicate polio over the next three years. This helped to reduce the funding gap for 2007-2008 to $265 million with a further $220 million needed for 2009.

In FY 2007, the program procured 287 million doses of oral polio vaccine and provided operational funding that supports vaccinating 119.4 million children in mass vaccination campaigns. The performance target for the following measures was set at an appropriate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

Long-term Objective 13.B.1, Performance Measure 3

Global polio incidence declined by more than 99 percent from 1988 to 2007. The number of endemic countries reduced from 125 polio-endemic countries in 1988 to four countries (Afghanistan, India, Nigeria, and Pakistan). In 2007 more than 92 percent of cases reported globally were from these four endemic countries. Provisional data indicate that as of October

28, 2008 there has been a 228 percent increase in cases from the endemic countries as compared with the same period in 2007 with the most dramatic increases seen in Pakistan and Nigeria. The increase in Pakistan is largely due to deteriorating security in known endemic areas and increasing susceptibility of populations in areas previously free of the disease due to a low number of large-scale polio vaccination campaigns in the last 12 months. The increase in Nigeria is due to significant vaccination coverage gaps that persist during polio campaigns in the highest-risk states of northern Nigeria, where upwards of 60 percent of children remain under- or un-immunized (three doses or less, in some states). The use of monovalent OPV type 1, which provides greater protection against the Type 1 poliovirus, has caused the outbreaks to be less widespread than they otherwise would have been. (Type 1 polio causes higher disease burden and has greater potential to spread globally.) In 2008, transmission of Type 1 polio has increased by 880 percent in Nigeria and decreased by 10 percent in India as compared with the same period in 2007 (data as of October 28, 2008). In addition to the endemic countries, 11 countries have reported cases due to importations and subsequent transmission as of October 28,2008. Nevertheless, as a result of the polio eradication initiative, 250,000 lives have been saved and five million cases of childhood paralysis have been prevented.

Strategies being used to achieve the targets of polio eradication:

In India:

- Implementing multiple and large-scale mop-ups (on average every four to six weeks) in western Uttar Pradesh, to rapidly stop the type 1 outbreak.
- Conducting catch-up campaigns in parts of Bihar, following the extreme recent floods.
- Optimizing the mix of type-specific mOPVs.
- Implementing tailored strategies to access populations in access-compromised areas of Bihar (eg Kosi river basin).
- Rapidly evaluating new technical approaches to increase the impact of each immunization contact, in order to accelerate eradication (e.g., IPV, bivalent OPV).

In Nigeria:

- Implementing the ministerial directive to address the operational challenges, to ensure effective vaccinator and supervisor selection (and training), based on merit rather than affiliation.
- New technical approaches to simplify vaccination logistics, such as bivalent OPV, may help, though key to its efficacy is increasing vaccination coverage.
- Continued advocacy with the Head of State to further engage state governor ownership, to translate into Local Government Area (LGA) and ward-level engagement, including systematic monitoring of accountability at that level.
- Conducting polio vaccination campaigns in neighboring countries to minimize the risk and consequences of re-infection.
- Enhancing accountability and evaluation of Immunization Plus Days.

In Pakistan:

- In Sindh, the provincial government has placed the responsibility for polio eradication directly onto district-level governments and will hold this level accountable for

overcoming the operational challenges. Cross-ministerial engagement is being fostered, including between the health, education and family welfare departments, to ensure all sections of the administration are channeled appropriately.

- In NWFP and Balochistan, the involvement of all parties is being increased including government, anti-government elements, the military, non-governmental organizations and tribal leaders to allow safe passage of polio vaccinators; an extra dose of OPV is delivered to communities living in insecure areas, as and when opportunities arise, between large-scale nationwide vaccination campaigns.
- The number of nationwide immunization campaigns will be increased, to further raise population immunity levels also in polio-free areas, given the increase in population movements due to the recent rise in insecurity.
- The identification of persistent polio transmission is being enhanced, including through environmental surveillance, to come to a clearer understanding of transmission patterns.
- Seroprevalence surveys will be conducted, to identify the impact of vaccines and guide strategies on their use (including potentially bivalent OPV use, as it becomes available).

In Afghanistan:

- Further expanding the pilot project of working with NGOs responsible for rural development, as well as Community Development Councils (CDC's).
- Enhancing WHO technical support capacity in the southern region. Implementing tailored strategies to focus on reaching children in high-risk areas, including:
    - identifying and mapping mobile populations and routes and setting up vaccination posts at key nomadic gathering sites and cross-border points;
    - increasing the involvement of all parties including government, anti-government elements, the military, non-governmental organizations and tribal leaders to allow safe passage of polio vaccinators;
    - delivering an extra dose of OPV to communities living in insecure areas, as and when opportunities arise, between large-scale nationwide vaccination campaigns.

In importation countries:

- Fully implementing epidemiologically-appropriate emergency outbreak response plans.
- Increasing the number of preventive immunization campaigns in high-risk polio-free areas (especially areas bordering endemic countries).

Three of the six WHO Regions (the Americas, Western Pacific and European Regions) have achieved and maintained regional elimination of polio, with elimination certified in 1994, 2000, and 2002 respectively. Despite progress in the endemic countries, ongoing transmission is likely to delay global polio eradication until 2010. As long as polio transmission occurs anywhere in the world, it remains a threat to American children. CDC will continue to fight polio by collaborating with partners to increase the number and quality of National Immunization Days and intensify implementation of the other strategies to interrupt transmission. CDC will continue to provide scientific assistance to improve tracking to certify that polio eradication has occurred.

This measure is an adaptation developed as a result of the 2005 program assessment process

and serves as both a long term and annual measure. The ultimate objective is to eradicate polio. The previous goal tracked cases of polio, whereas the new goal tracks number of countries with endemic polio.

Measure	FY	Target	Result
Long Term Objective 13.B.2: Work with global partners to reduce the cumulative global measles-related mortality by 90% compared with 2000 estimates (baseline 777,000 deaths) and to maintain elimination of endemic measles transmission in all 47 countries of the Americas.			
13.B.2.1: Number of global measles-related deaths. *(Outcome)*	*Out-Year Target*	75,000 (2014)	Dec 31, 2016
	2010	75,000	Dec 31, 2011
	2009	100,000	Dec 31, 2010
	2008	327,600	Dec 31, 2009
	2007	363,400	197,000 (Target Exceeded)
	2006	399,200	242,000 (Target Exceeded)
	2005	435,000	345,000 (Target Exceeded)
13.B.2.2: Number of non-import measles cases in all 47 countries of the Americas as a measure of maintaining elimination of endemic measles transmission. *(Outcome)*	*2010*	0	Dec 31, 2011
	2009	0	Dec 31, 2010
	2008	0	Dec 31, 2009
	2007	0	0 (Target Met)
	2006	0	0 (Target Met)
	2005	0	0 (Target Met)

Measure	Data Source	Data Validation
13.B.2.1-13.B.2.2	WHO, Pan American Health Organization.	A team of WHO epidemiologists and statisticians annually review the estimates using a standardized methodology. This is supplemented with information obtained in national surveillance and program reviews as well as special studies. In addition, WHO works with partners to examine the quality and accuracy of these data.

Long-term Objective 13.B.2, Performance Measure 1

CDC provided scientific, technical, and programmatic support for measles outbreak investigations in Pakistan, Tanzania, Kenya, Sudan, Georgia and the Ukraine; supported reviews of immunization surveillance in the African and Western Pacific regions and a national review in the Republic of the Maldives and the Philippines; helped conduct a review of accelerated measles control activities in the western provinces of China; and evaluated the regional surveillance system for measles, rubella and congenital rubella syndrome in the American and European regions. CDC also contributed funding and or technical assistance to measles immunization campaigns in 23 African countries and to those planned and conducted in Afghanistan, Armenia, Bangladesh, Bhutan, Fiji Indonesia, Pakistan, Yemen, and others. These efforts resulted in recommendations for improved surveillance and control activities and contributed substantially to declines in measles mortality.

Measles has been eliminated from the Western Hemisphere. Outstanding progress has been made towards reducing measles mortality globally. In January 2007, the Measles Partnership announced that the goal for 50 percent global measles mortality reduction by 2005 (from 1999 levels) had been surpassed and a 60 percent reduction in measles mortality achieved. Most significant reductions were seen in the African region, where a 91 percent reduction was achieved due to implementation of the measles mortality reduction strategies. These achievements highlight the technical feasibility of measles mortality reduction. By 2010 CDC and global immunization partners aim to reduce the global measles-related mortality by 90 percent compared with this estimate from 2000. CDC's contributions to the achievements in the African Region were recognized with a special award at the African Region Task Force on Immunization (TFI) meeting in December 2007.

The model used to generate the preceding year coverage is based on routine and campaign related performance data that is captured by a joint WHO/UNICEF reporting form. WHO and UNICEF convene a panel committee to review this data annually and reach consensus on estimates of disease burden.

Long-term Objective 13.B.2, Performance Measure 2

This performance measure corresponds with the goal adopted by the PAHO for Latin America and the Caribbean. According to available surveillance information, measles transmission has been interrupted in all countries of the Western Hemisphere since November 2002. However, imported measles cases, with limited secondary spread, continue to occur in several countries, including the U.S. Deaths from measles complications in the Americas have virtually disappeared. Globally, measles caused an estimated 242,000 deaths in 2006 and was the leading cause of death among children under five years of age from a vaccine-preventable disease.

Global Malaria

Measure	FY	Target	Result
Long Term Objective 13.C: Decrease the rate of all-cause mortality in children under five in the President's Malaria Initiative target countries.			
13.C.1: Increase the proportion of children under five years old who slept under an insecticide treated net the previous night PMI target countries.	*Out-Year Target*	85% (median) in 2008 countries (2013)	Dec 31, 2013
	2012	85% (median) in 2007 countries	Dec 31, 2012
	2011	85% (median) in 2006 countries	Dec 31, 2011
	2008	3rd 6 of 8 countries - Baseline	13.1%
	2007	2nd 4 countries - Baseline	14.5%
	2006	1st 3 countries – Baseline	16.0%
13.C.2: Increase the proportion of children under five with fever in the previous two weeks that received treatment with antimalarials within 24 hours of onset of their symptoms in PMI target countries.	*Out-Year Target*	85% (median) in 2008 countries (2013)	Dec 31, 2013
	2012	85% (median) in 2007 countries	Dec 31, 2012
	2011	85% (median) in 2006 countries	Dec 31, 2010
	2008	3rd 6 of 8 countries – Baseline	29.5%
	2007	2nd 4 countries – Baseline	13.4%
	2006	1st 3 countries – Baseline	32.2%
13.C.3: Increase the proportion of women who have received two or more doses of intermittent preventive treatment during pregnancy (IPTp) among women that have completed a pregnancy in the last two years.	*Out-Year Target*	85% (median) in 2008 countries (2013)	Dec 31, 2013
	2012	85% (median) in 2007 countries	Dec 31, 2012
	2011	85% (median) in 2006 countries	Dec 31, 2011
	2008	3rd 5 of 8 countries - Baseline	4.9%
	2007	2nd 4 countries – Baseline	30.6%
	2006	1st 3 countries – Baseline	17.6%

Measure	Data Source	Data Validation
13.C.1 - 13.C.3	Demographic and Health Surveys (DHS), Multiple Indicator Surveys (MICS), and Malaria Indicator Surveys (MIS).	In sub-Saharan Africa, nationally representative household surveys, like the UNICEF Multiple Indicator Cluster Surveys (MICS) or the MEASURE Demographic and Health Surveys (DHS) conducted by MACRO/Measure Evaluation measure mortality of children less than five as a complement to decadal censuses. These surveys give robust estimates of mortality that can be used to track improvements in survival in populations without strong systems of vital registration. In PMI countries, malaria indicator surveys at baseline, midpoint and after four full years of implementation will be used to obtain nationally representative estimates of coverage with ITNs, ACTS, and

Measure	Data Source	Data Validation
		IPTp. In addition, a nationally representative mortality survey will provide baseline mortality data and a similar survey will provide follow-up data after at least three years of implementation. These surveys will most often be scheduled independently of PMI but may be supported by PMI funding. A fifty percent drop in malaria mortality would be evident through these surveys even if deaths together for children under five were considered together from all causes. The Demographic and Health Surveys are conducted and funded largely by USAID. They cover multiple programs such as HIV, Reproductive Health, etc. Each program module has a set of questions and in some cases laboratory tests. Countries decide what program modules they would like to add to the survey. The sample sizes are dependent on the population of the country. The surveys are designed to be representative of the country and vary by country. The methodologies are sound and widely accepted; the results are used by the MOHs and the global public health community for planning and evaluating. These surveys are designed to be repeated over time for consistency. More information is available at http://www.measuredhs.com/

Long-term Objective 13.C, Performance Measure 1

Malaria causes approximately 500 million infections and more than one million deaths annually; most deaths occur in young children. Although one-third of the worlds population is at risk for malaria, 90 percent of the cases and deaths occur in sub-Saharan Africa. In the U.S. about 1,500 people get malaria annually, almost all from traveling to countries where malaria is transmitted. In the last decade, 48 people in the United States have died from malaria. The Presidents Malaria Initiative (PMI) supports participating countries to achieve an ultimate goal of a fifty percent reduction in malaria mortality. Eight indicators focus on coverage with four interventions: long-lasting insecticidal bed nets (LLINs); indoor residual spraying with insecticide (IRS); intermittent preventive treatment for pregnant women (IPTp); and prompt treatment with artemisinin-based combination therapy. The mortality burden of malaria is concentrated among children in sub-Saharan Africa. For this reason, studies often focus on mortality among children less than five-years old to assess the impact of malaria control efforts on mortality.

Insecticide Treated Nets (ITNs) are highly effective in killing mosquitoes, and the netting acts as a protective barrier. Consistently sleeping under an ITN can decrease severe malaria by 45 percent, reduce premature births by 42 percent, and cut all-cause mortality by 17 percent to 63 percent. The targets are very ambitious, given the programmatic challenge of overcoming barriers to rapid scale-up of ITN distribution and usage often encountered in resource poor settings with infrastructure challenges.

Long-term Objective 13.C, Performance Measure 2

Malaria causes approximately 500 million infections and more than one million deaths annually; most deaths occur in young children. Although one-third of the worlds population is at risk for malaria, 90 percent of the cases and deaths occur in sub-Saharan Africa. In the U.S. about 1,500 people get malaria annually, almost all from traveling to countries where malaria is transmitted. In the last decade, 48 people in the United States have died from malaria. The

Presidents Malaria Initiative (PMI) supports participating countries to achieve an ultimate goal of a fifty percent reduction in malaria mortality. Eight indicators focus on coverage with four interventions: long-lasting insecticidal bed nets (LLINs); indoor residual spraying with insecticide (IRS); intermittent preventive treatment for pregnant women (IPTp); and prompt treatment with artemisinin-based combination therapy. The mortality burden of malaria is concentrated among children in sub-Saharan Africa. For this reason, studies often focus on mortality among children less than five-years old to assess the impact of malaria control efforts on mortality.

Artemisinin-based combination therapy (ACTs) represents the most effective drugs currently available for treating malaria. Three day treatment with ACTs will completely eliminate the malaria parasite from a persons body. The targets are very ambitious in light of programmatic challenges such as overcoming barriers to rapid scale-up of ACT procurement and distribution often in resource poor settings with infrastructure challenges.

Long-term Objective 13.C, Performance Measure 3

Malaria causes approximately 500 million infections and more than one million deaths annually; most deaths occur in young children. Although one-third of the worlds population is at risk for malaria, 90 percent of the cases and deaths occur in sub-Saharan Africa. In the U.S. about 1,500 people get malaria annually, almost all from traveling to countries where malaria is transmitted. In the last decade, 48 people in the United States have died from malaria. The Presidents Malaria Initiative (PMI) supports participating countries to achieve an ultimate goal of a fifty percent reduction in malaria mortality. Eight indicators focus on coverage with four interventions: long-lasting insecticidal bed nets (LLINs); indoor residual spraying with insecticide (IRS); intermittent preventive treatment for pregnant women (IPTp); and prompt treatment with artemisinin-based combination therapy. The mortality burden of malaria is concentrated among children in sub-Saharan Africa. For this reason, studies often focus on mortality among children less than five-years old to assess the impact of malaria control efforts on mortality.

Each year more than 30 million African women living in malaria-endemic areas become pregnant and are at risk for malaria. IPTP protects pregnant women from possible death and anemia and also prevents malaria-related low birth weight in infants, which is responsible for between 100,000 and 200,000 infant deaths annually in Africa. The targets are very ambitious in light of programmatic challenges such as overcoming barriers to rapid scale-up of IPTp implementation often in resource poor settings with infrastructure challenges.

PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP

Office of Minority Health and Health Disparities

Measure	FY	Target	Result
Long Term Objective 14.B.1: Prepare minority, medical, veterinary, pharmacy, undergraduate, and graduate students for careers in public health.			
14.B.1.1: Increase the number of minority students participating in the Hispanic Serving Health Professions Internship and Fellowships Program, Ferguson Emerging Infectious Disease Fellowship Program, Public Health Summer Fellowship Program, Research Initiatives fo *(Output)*	*2010*	95	Dec 31, 2010
	2009	95	Dec 31, 2009
	2008	95	112 (Target Exceeded)
	2007	87	106 (Target Exceeded)
	2006	87	106 (Target Exceeded)
	2005	95	101 (Target Exceeded)

Measure	Data Source	Data Validation
14.B.1.1	Administrative records identifying the number of interns and fellows	Data quality assurance is measured by review of quarterly and annual program progress reports.

Long-term Objective 14.B.1, Performance Measure 1

In FY 2008, the target was exceeded because of new programs with Kennedy Krieger Institute/RISE, and Morehouse College/IMHOTEP programs which provided opportunities for 17 additional students.

Measure	FY	Target	Result
Long Term Objective 14.B.2: Support HBCUs, Hispanic serving institutions, and Tribal Colleges and Universities (TCUS).			
14.B.2.1a: Maintain the number of funding mechanisms and increase the number of minority-serving institutions and TCUs receiving support: Cooperative Agreements. *(Output)*	*2010*	4	Dec 31, 2010
	2009	4	Dec 31, 2009
	2008	4	4 (Target Met)
	2007	4	4 (Target Met)
	2006	4	4 (Target Met)

Measure	FY	Target	Result
	2005	5	4 (Target Not Met)
14.B.2.1b: Maintain the number of funding mechanisms and increase the number of minority-serving institutions and TCUs receiving support: Schools *(Output)*	*2010*	52	Dec 31, 2010
	2009	52	Dec 31, 2009
	2008	50	50 (Target Met)
	2007	47	48 (Target Exceeded)
	2006	47	48 (Target Exceeded)
	2005	75	76 (Target Exceeded)

Measure	Data Source	Data Validation
14.B.2.1	Administrative records of the number of cooperative agreements funded and institutions supported	Data quality assurance is measured by review of quarterly and annual program progress reports.

Long-term Objective 14.B.2, Performance Measure 1

In FY 2008, a total of 50 schools were reached via four funding mechanisms, meeting the target.

Measure	FY	Target	Result
Long Term Objective 14.B.3: Enhance American Indian/Alaskan Native (AI/AN) access to CDC programs and resources and foster a stronger collective departmental perspective on AI/AN issues.			
14.B.3.1: Participate in the HHS National and Regional Tribal Consultation Sessions to strengthen CDC and HHS partnerships with tribes to accelerate health impact and address health disparities in AI/AN populations. *(Output)*	*2010*	Hold 3 tribal consultations	Oct 31, 2010
	2009	Hold 3 tribal consultations	Oct 31, 2009
	2008	Hold 3 tribal consultations	3 (Target Met)
	2007	Hold 2 tribal consultations (Baseline)	2 tribal consultations held
14.B.3.2: Maintain support for, and effective communication with the	*2010*	Hold 4 meetings and act on 5 tribal recommendations	Oct 31, 2010
	2009	Hold 4 meetings and act on 5 tribal recommendations	Oct 31, 2009

Measure	FY	Target	Result
CDC/ATSDR Tribal Consultation Advisory Committee (TCAC) *(Output)*	*2008*	Hold 4 meetings and act on 5 tribal recommendations	Held 5 meetings and acted on 10 recommendations (Target Exceeded)
	2007	Hold 4 meetings and act on 2 tribal recommendations	Held 4 meetings and acted on 2 tribal recommendations (Target Met)
14.B.3.3: Categorize, systematically monitor, and critically assess CDC resources allocated to programs that directly benefit AI/AN people and communities. *(Output)*	*2010*	2 Interagency Agreements	Oct 31, 2010
	2009	2 Interagency Agreements.	Oct 31, 2009
	2008	2 Interagency Agreements.	Maintained 2 IAAs (Target Met)
	2007	Maintained 2 IAAs and attended 2 meetings of each council.	Maintained 2 IAAs and attended 2 meetings of each council (Target Met)
14.B.3.4: Participate and support the Interagency Agreement for the Intradepartmental Council on Native American Affairs and the HHS AI/AN Research Council. *(Output)*	*2010*	Attend 2 meetings of each council.	Oct 31, 2010
	2009	Attend 2 meetings of each council.	Oct 31, 2009
	2008	Attend 2 meetings of each council.	Attended 2 meetings of each council (Target Met)
	2007	Maintain 2 IAAs and attend 2 meetings of each Council.	N/A

Measure	Data Source	Data Validation
14.B.3.1	Documented participation and consultation with AI/AN tribes and tribal organizations at regional or national consultation sessions or meetings, official meeting summaries, and TCAC recommendations to CDC leadership, reports from CDC funded projects and documented activities or collaborative efforts, and CDC Financial Management Office tracking of resources allocated to AI/AN tribal programs.	Data quality assurance is measured by review of quarterly TCAC meeting summaries and CDC Annual Tribal Budget and Consultation Report to OS/HHS, and documented outcomes of key program activities.
14.B.3.2	Documented participation and consultation with AI/AN tribes and tribal organizations at TCAC Meetings, HHS regional or national consultation sessions, CDC Biannual Tribal Consultation Sessions, and other tribal meetings which CDC participates in per invitation of individual tribes or tribal organizations/consortia or official meeting summaries.	Data quality assurance is measured by review of quarterly TCAC meeting summaries, meeting summaries of any AI/AN tribal meeting, TCAC official communication to CDC leadership, and documented agency response to TCAC recommendations shared internally and externally with AI/AN stakeholders and the OS/HHS.
14.B.3.3	Documented participation and consultation with AI/AN	Data quality assurance is

Measure	Data Source	Data Validation
	tribes and tribal organizations at regional or national consultation sessions or meetings, official meeting summaries, and TCAC recommendations to CDC leadership, reports from CDC funded projects and documented activities or collaborative efforts, and CDC Financial Management Office tracking of resources allocated to AI/AN tribal programs.	measured by review of quarterly TCAC meeting summaries and CDC Annual Tribal Budget and Consultation Report to OS/HHS, and documented outcomes of key program activities.
14.B.3.4	Documented participation and consultation with HHS-sponsored councils.	Data quality assurance is measured by review of biannual council meeting summaries.

Long-term Objective 14.B.3, Performance Measure 1

In FY 2008, CDC met the performance target by holding four agency-wide tribal consultations. In addition, three National Centers held center-specific consultations that complemented the agency-wide consultations. The target was exceeded reflecting increased effort to implement the consultation policy and better coordination of effort between CDC and its AI/AN partners. In FY 2006, CDC established an official Tribal Consultation Policy (TCP) that: delineates procedures and responsibilities for tribal consultation; provides guidance to CDC staff on working effectively with AI/AN governments, communities and organizations; and enhances tribal access to CDC programs and resources. OMHD/OCPHP is responsible for ensuring agency-wide adherence to CDC and HHS tribal consultation policies and CDC participation in regional and national tribal consultation sessions. The Division of State and Local Readiness (DSLR) has consulted with CDC's Tribal Consultation Advisory Committee (TCAC) on a quarterly basis over the past year to inform them about public health emergency preparedness (PHEP) activities. DSLR consulted with TCAC to develop language placed in Funding Opportunity Announcements to hold states more accountable as to how they engage tribes within their states. Beginning in FY 2007, CDC requires more explicit documentation in states' applications for PHEP/Pandemic Influenza cooperative agreement funds. A letter specifying tribal engagement from either the individual tribes within a state's boundaries or the tribal health board (or similar coalition) representing those tribes is necessary. In June of 2007, CDC's Division of Diabetes Translation consulted with tribal leader representatives from the 12 IHS Areas on the Native Diabetes Wellness Program ongoing projects, including the Eagle Books and the development of a new FOA. On April 5, 2007, the Office of Smoking and Health convened a meeting of the AI/AN Cessation Expert Panel (tribal leaders from six different tribal Nations) as a follow-up to an effort designed to more fully understand approaches, measures, and tools for promoting tobacco cessation efforts among this population. Lessons learned and next steps were also addressed. CDC participated in the HHS National Budget and Consultation session and two HHS regional consultation sessions.

Long-term Objective 14.B.3, Performance Measure 2

In FY 2008, CDC exceeded the targets. We held one additional meeting and acted on five additional recommendations because of increased attention to achieving the targets and more effective coordination of effort across the agency. Established formally in FY 2007, the TCAC is an advisory committee to the CDC Director and ATSDR Administrator wherein tribal representatives and CDC leadership exchange information about urgent public health issues in Indian country and collaborate on approaches to address these issues and needs. The TCAC

also helps to ensure that CDC activities or policies that affect tribal communities are brought to the attention of tribal leaders and, through its recommendations to CDC, serves to facilitate collaboration across the agency on a continuum of prevention and health protection actions that support CDC's health protection goals for AI/AN populations. The TCAC held three additional formal meetings in FY 2007 to increase the connectivity and knowledge between CDC and tribal leaders (October 9, 2006; November 2-3, 2006; January 30-31, 2007; July 11-12, 2007). The TCAC submitted recommendations to the CDC Director and ATSDR Administrator to inform them of and to address critical public health issues in Indian country. An inventory of CDC response to recommendations can be found at http://www.cdc.gov/omhd/TCAC/Recommendations.html.

Long-term Objective 14.B.3, Performance Measure 3

In FY 2008, CDC met the target by maintaining two interagency agreements between HHS/OS/Intergovernmental affairs and HHS/OS/Office of Minority Health. CDC contributes to the funding and execution of the agreements. One agreement supports the activities of the Interdepartmental Council on Native American Affairs (ICNAA) to improve access to and effective use of federal resources available to American Indian/Alaska Native (AI/AN) Tribes. The other agreement supports the activities of the AI/AN Health Research Advisory Council to improve the conduct and application of research findings to improve the health of AI/AN people. In FY 2003 through FY 2006, CDC developed improved procedures for tracking how its resources are allocated to benefit AI/AN populations. The annual reports produced from these data have enhanced accountability and increased transparency regarding how CDC programs and resources are made available to AI/AN populations. In FY 2007, CDC funded 68 cooperative agreements to 48 tribal partners (tribal governments, tribal health boards, tribal organizations, Alaska Native health corporations, urban Indian health centers, and tribal colleges) across 19 states and the District of Columbia. CDC maintained two IAAs with the IHS and also the IAAs with the Interdepartmental Council on Native American Affairs (ICNAA) and HHS OMH/ AI/AN Health Research Advisory Council and did attend two council meeting of each in FY 2007. CDC OD will continue to support and participate actively in HHS-sponsored councils and committees to collaborate more effectively with other agencies to maximize resources and increase tribal access to CDC and HHS programs.

Long-term Objective 14.B.3, Performance Measure 4

In FY 2008, CDC continued to support and participate actively in HHS-sponsored councils and committees to collaborate more effectively with other agencies to maximize resources and increase tribal access to CDC and HHS programs.

Measure	FY	Target	Result
Long Term Objective 14.B.4: Support and strengthen capacity development strategies of existing national and regional minority organizations.			
14.B.4.1: Increase the number of national and regional public health collaborations with public health agencies/organizations serving minority and AI/AN communities. *(Output)*	*2010*	100	Oct 31, 2010
	2009	100	Oct 31, 2009
	2008	100	240 (Target Exceeded)
	2007	85	240 (Target Exceeded)
	2006	75	477 (Target Exceeded)

Measure	FY	Target	Result
14.B.4.2: Identify program and organizational infrastructure needs (i.e., policy analysis, program assessment and development, and evaluation) of public health agencies/organizations serving minority communities and provide technical assistance to improve the health *(Output)*	*2010*	100	Oct 31, 2010
	2009	100	Oct 31, 2009
	2008	100	240 (Target Exceeded)
	2007	85	240 (Target Exceeded)
	2006	75	477 (Target Exceeded)

Measure	Data Source	Data Validation
14.B.4.1	The number of collaborative efforts, documented activities, and products	Data quality assurance is measured by review of quarterly and annual program progress reports, and documented outcome of key program activities.
14.B.4.2	The number of collaborative efforts, documented activities, and products	Data quality assurance is measured by review of quarterly and annual program progress reports, and documented outcome of key program activities.

Long-term Objective 14.B.4, Performance Measure 1

In FY 2008, despite reduced resources of 10-15 percent, interest and participation among partners remained high enabling CDC to exceed the level of participation predicted on the basis of funding uncertainty. Programs funded under this measure support national and/or regional initiatives to develop, expand, and enhance health promotion, educational, and community-based programs targeting racial and ethnic populations. The seven cooperative agreements awarded to support and strengthen existing NMOs/RMOs that engage in health advocacy, promotion, education and preventive health care with the intent of improving the health and well-being of racial and ethnic minority populations have led to collaborations and technical assistance that benefited 240 entities.

Long-term Objective 14.B.4, Performance Measure 2

In FY 2008, CDC and its cooperative agreement recipients worked with 240 partner entities to indentify and help meet their analytic and program management needs. The target was exceeded for reasons explained in 14.B.4.1. Programs funded under this measure support national and/or regional initiatives to develop, expand, and enhance health promotion, educational, and community-based programs targeting racial and ethnic populations. The

seven cooperative agreements awarded to support and strengthen existing NMOs/RMOs that engage in health advocacy, promotion, education and preventive health care with the intent of improving the health and well-being of racial and ethnic minority populations have led to collaborations and technical assistance that benefited 240 entities.

Office of the Chief of Public Health Law Practice

Measure	FY	Target	Result
Long Term Objective 14.C.1: Develop the legal preparedness of the public health system to address public health emergencies and other national public health priorities.			
14.C.1.1: Complete national dissemination of the revised "Forensic Epidemiology" and "Public Health Emergency Law" training curricula. *(Output)*	*2010*	Complete provision of technical assistance to support implementation of both curricula	Sep 30, 2010
	2009	Complete dissemination of both curricula to all state public health agencies.	Sep 30, 2009
	2008	Complete field testing and begin national dissemination of both curricula.	Yes (Target Met)
	2007	Complete development of second editions of both curricula.	N/A

Measure	Data Source	Data Validation
14.C.1.1	The CDC Public Health Law Program	Documentation of dissemination of the curricula will be provided by the CDC Public Health Law Program.

Long-term Objective 14.C.1, Performance Measure 1

A major strategic goal of CDC's Public Health Law Program is to improve state and local public health agencies' legal preparedness for public health emergencies. Originally developed by the Program, the "Forensic Epidemiology" and "Public Health Emergency Law" public health law training curricula are central to this goal by strengthening public health practitioners' competencies in applying public health emergency legal authorities. The first editions of these curricula were developed in 2003 and 2005, respectively. At present, more than 13,000 public health and partnering law enforcement officials have completed "Forensic Epidemiology" training and "Public Health Emergency Law" has been delivered in the District of Columbia and in at least 30 states. The Program completed systematic revisions and enhancements to both curricula in 2007. Version 3.0 revisions reflect feedback from initial field delivery of both curricula as well as front-line legal preparedness "lessons learned" from the 2005 Hurricane Katrina response. In addition, version 3.0 of "Forensic Epidemiology" includes a new module on joint public health-law enforcement implementation of pandemic influenza social distancing measures and version 3.0 of "Public Health Emergency Law" contains a new unit on joint public health-emergency management response to hazardous chemical spills. Additional information on both curricula is available on the website of the CDC Public Health Law Program (http://www.cdc.gov/phlp) as are instructions for ordering the complete instructional materials on a CD-ROM. National dissemination of the new curricula, including dissemination to all state public health agencies, was completed in 2008. Provision of technical assistance to support their implementation will be completed in FY 2010. Implementation of the curricula will lead to improved public health legal preparedness competencies nationally.

Public Health Workforce Development

Measure	FY	Target	Result
Long Term Objective 14.D.1: CDC will develop and implement training to provide for an effective, prepared, and sustainable health workforce able to meet emerging health challenges.			
14.D.1.1: Maintain the number of recruits who join public health programs in local, state, and federal health departments to participate in training in epidemiology or public health leadership management. *(Output)*	*2010*	200	Dec 31, 2010
	2009	200	Dec 31, 2009
	2008	200	203 (Target Exceeded)
	2007	200	205 (Target Exceeded)
	2006	200	206 (Target Exceeded)
	2005	200	216 (Target Exceeded)

Measure	Data Source	Data Validation
14.D.1.1	Currently, data are based on the number of core-funded fellows (EIS, PHPS, and PMR/F).	Staff reviews and validates data through the Public Health Workforce Development program's personnel system.

Long-term Objective 14.D.1, Performance Measure 1

In response to reports identifying public health workforce gaps at the federal, state, and local levels, CDC continues to train professional staff to address these gaps and investigate health problems affecting the nation's population, through its Epidemic Intelligence Service (EIS), its Preventive Medicine Residency and Fellowship (PMR/F), and the Public Health Prevention Service (PHPS).

The FY 2008 result slightly exceeded the target. Note: In FY 2007, the FY 2004 result was revised from 258 to 221 to reflect fellows that were core-funded in FY 2004. The previous result inadvertently included EIS officers funded with non-core funds (e.g., Bioterrorism, Food Safety). Additionally, the FY 2005 through FY 2010 targets have been revised to remain constant, due to the creation of the Office of Workforce and Career Development (OWCD) in 2004 and uncertainty about the programs' ability to increase the number of health professionals recruited and trained.

The number of recruits in public health programs in local, state, and federal health departments participating in epidemiology or public health leadership and management has dropped slightly (eight percent) during the past four years, from a high of 221 in 2004 to a low of 203 in 2008, but remains higher than the target of 200. One reason for the reported decline is that the number of PMR applications has declined for several years, resulting in fewer residents and fellows during the past two years. Another reason for the reported decline is that the number of core-funded EIS officers has decreased as the number of officers funded with terrorism preparedness and emergency response (TPER) funds has increased. TPER funds have allowed the Public Health Workforce Development program to continue to train the same number of EIS officers each

year.

To help track and report progress toward accomplishing this long-term objective, CDC is developing a Fellowship Management System, which is an electronic system designed to increase CDC's ability to monitor and track fellows in its 10 cross-cutting fellowship programs. Tracking alumni through a secure, online directory will 1) provide readily accessible contact information for alumni trained by the agency and possessing mission-critical skills in the event of a national public health emergency, 2) allow CDC to document the impact of the fellowships on the career paths of participants, and 3) allow alumni to maintain their professional networks for finding jobs, staffing jobs, and collaborating and interacting with other alumni. CDC also is researching the development of new fellowships designed to address the public health needs of the increasingly diverse U.S. population.

Measure	FY	Target	Result
Long Term Objective 14.D.2: Increase the number of frontline public health workers at the state and local level that are competent and prepared to respond to bioterrorism, 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.			
14.D.2.1: Evaluate the impact of training programs conducted by the NLTN on laboratory practices. *(Output)*	*2010*	More than 40% of public health and clinical laboratorians attending biosecurity and biosafety NLTN courses who reported lacking practices for protection of individuals, security of assets and information, or training/practice drills added these practices or modified current practices as a result of the course.	Dec 31, 2010
	2009	More than 40% of public health and clinical laboratorians attending biosecurity and biosafety NLTN courses who reported lacking practices for protection of individuals, security of assets and information, or training/practice drills added these practices or modified current practices as a result of the course.	Dec 31, 2009
	2008	More than 40% of public health and clinical laboratorians attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course. (Actual 51%)	51% (Target Met)

Measure	FY	Target	Result
	2007	More than 40% of public health and clinical laboratorians attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course. (Actual 51%)	51% (Target Met)

Measure	Data Source	Data Validation
14.D.2.1	Data for the FY 2006–FY 2010 targets are related to laboratory safety and security. The data are collected following each course, reviewed, and evaluated by a statistician.	Data are reviewed by the CDC Training Advisor responsible for the course. Collective data are checked quarterly.

Long-term Objective 14.D.2, Performance Measure 1

The National Laboratory Training Networks (NLTNs) training and gathering of statistical data was completed for FY 2008.

From October 1, 2007, through September 30, 2008, the NLTN provided more than 250 courses and trained more than 45,000 laboratorians via hands-on workshops, seminars, online and computer-based courses, audio conferences, and webcasts. During FY 2007, the NLTN provided 324 classes and trained more than 32,000 public health and clinical laboratorians through cost-effective, high quality continuing education in the laboratory sciences. NLTN courses are available in a variety of formats, developed based on documented training needs, and delivered in collaboration with state public health laboratories. Course topics include bioterrorism and chemical terrorism preparedness; safe packaging and shipping of diagnostic and infectious agents; biosafety and biosecurity; antimicrobial susceptibility testing; and pandemic influenza preparedness. Selected courses from the previous year are evaluated to determine outcomes of training.

The performance targets for the preceding measure were set at approximate target levels, and the deviation from those levels is slight. Overall program performance was not affected. Note: The previously submitted targets for 2007 through 2010 were revised to ensure that the targets are measurable. The targets for 2009 through 2011 were further revised to ensure that both basic and advanced biosafety and biosecurity practices are being added or modified as a result of the training courses. Results for the revised 2008 target were measured by a survey of those attending the courses.

To help accomplish the preceding long-term objective, NLTN expanded laboratory biosecurity and biosafety courses nationwide by offering a Biosecurity and Biosafety Train-the-Trainer two-day course at CDC in May 2008. Eight one-day courses were held in 2008 and a minimum of ten one-day courses for clinical laboratories are planned from October 2008 through September 2009. Each year, NLTN meets with its public health partners at state and local levels to determine what training laboratorians need. During the past several Fiscal years, NLTN has

consistently evaluated the number of course offerings and course content based on these needs.

BUILDINGS AND FACILITIES

Measure	FY	Target	Result
15.E.3: Reduce Energy and Water consumption. Implement high performance energy and water sustainability requirements. *(Efficiency)*	*2010*	15% (E); 6% (W)	Dec 31, 2010
	2009	12% (E); 4% (W)	Dec 31, 2009
	2008	9% (E); 2% (W)	16.7% (E); 24% (W) (Target Exceeded)
	2007	6% (E); Baseline – Water (W)	12.6% (E); 0% (W)
	2005	Baseline – Energy (E)	0% (E)
15.E.4: Incorporate sustainable practices in building construction, repair, renovation, and modernization projects, according to the Guiding Principles for High Performance and Sustainable Federal Buildings. *(Efficiency)*	*2010*	5%	Dec 31, 2010
	2009	4%	Dec 31, 2009
	2008	3%	3% (Target Met)
	2007	Baseline	0%

Measure	Data Source	Data Validation
15.E.3	Energy – electrical metering, utility bills, Water – water metering, water bills; Sustainability – HHS Assessment, Appendix H and Appendix G for new facilities.	N/A
15.E.4	Sustainability – HHS Assessment, Appendix H and Appendix G for new facilities.	Sustainability – through 3rd party verification from Green Globe and LEEDs

Efficiency Measure 15.E.3:

This measure provides goals for current/future energy reduction and the incorporation of sustainable practices for CDC constructed assets. Energy goals reduce costs, reduce environmental impact, and increase availability of energy sources for other users. Incorporation of sustainable practices ensures implementation of integrated design principles, increased energy efficiency, protection and conservation of water, enhancement of indoor air quality, and minimizes environmental impact of materials. Steam, water (gal), and power (kwhd) is metered and measured per the Energy Independence and Security Act (EISA) of 2007 for each government facility. EISA 2007 requires comprehensive energy and water evaluations for 25 percent of facilities annually. The evaluations are conducted in a manner that ensures the total facility is evaluated every four years. The target setting methodology is to reduce energy consumption by three percent every year from the 2005 baseline for a 30 percent reduction in energy use by 2015. Water usage is targeted to be reduced by two percent per year from the

2007 baseline to a 16 percent reduction in water usage by 2015. Assets built with sustainable practices, as per the Guiding Principles for High Performance and Sustainable Federal Buildings, will account for at least 15 percent of CDC aggregate assets by 2015. Regular assessments are made on sustainable practices utilized by CDC buildings.

Efficiency Measure 15.E.4:

Incorporation of sustainable practices ensures implementation of integrated design principles, increased energy efficiency, protection and conservation of water, enhancement of indoor air quality, and minimizes environmental impact of materials. Assets built with sustainable practices, as per the Guiding Principles for High Performance and Sustainable Federal Buildings, will account for at least 15 percent of CDC aggregate assets by 2015. Regular Assessments are made on sustainable practices utilized by CDC buildings. The requirement for implementation of sustainable practices is fairly recent, but CDC was proactive in incorporating sustainable practices into several building projects before this requirement came into effect. Two buildings have received Leadership in Energy and Environmental Design (LEED) ratings, and another building is currently in review for either LEED silver or gold rating. CDC's specific mission for disease control requires construction of state-of-the-art laboratory facilities. Such facilities have specific material and system design requirements, making the incorporation of all of the sustainable practices and the further reduction of energy and water consumption a challenge to implement The Guiding Principles for High Performance and Sustainable Federal Buildings has been incorporated into the CDC Design and Construction Standards. The result is that the Guiding Principles will be incorporated, as per the Department Health and Human Services' Policy for Sustainable and High Performance Buildings, in all projects to the greatest extent possible. Existing building assessments will be performed to determine opportunities for sustainable improvements of existing facilities as well as opportunities for energy and water use improvements.

CDC met the FY 2008 target for this performance measure. One notable achievement in this regard was the receipt of a LEED Gold rating for Building 106 at CDC's Chamblee campus.

Measure	FY	Target	Result
Long-Term Objective 15.2: Execute Earned Value Analysis/Earned Value Management for Project Management.			
15.2.1: Aggregate of scores for capital and repair/improvement projects rated on scope, schedule, and cost.	*2010*	1.00±0.09	Oct 31, 2010
	2009	1.00±0.10	Oct 31, 2009
	2008	1.00±0.10	99% (Target Exceeded)
	2007	Baseline	90%

Measure	Data Source	Data Validation
15.2.1	Cost and Schedule are tracked using Cost and Schedule Indexes from the Earned Value Analysis/ Management (EVA/EVM) - IFMS EVA/EVM Project Status Monthly Report	Independent Review of Project EAC, ETC, CPI, & SPI

Long-term Objective 15.2, Performance Measure 1

This measure provides a private industry and Government recognized performance tool for project progress: Earned Value Analysis (EVA). The Earned Value Analysis/Management (EVA/M) project management system uses normalized indexes to predict the S-curve trending of project progress. This allows a project manager to predict and adjust schedule and budget to meet shortfalls in either. Use of this tool has already been selected as program assessment goals for other agencies within the Department Health and Human Services (HHS). Successful management of construction, repair, and improvement projects is a major mission of CDC's Buildings and Facilities Office. EVA/M optimizes CDC's capability to manage projects for program assessment goals and adds a predictive enhancement to controlling budget and schedule. Use of EVA for project management is widely accepted throughout industry and Government and is consistent with other HHS OPDIVs project management tools. Participation in the EVA system has increased by over 90 percent since the first quarter of FY 2008. After its introduction during that same quarter, data has been consistently reported on a monthly basis. Targeted indexes have been met since the first quarter of FY 2008.

Measure	FY	Target	Result
Long-Term Objective 15.3: Execute Business and Project Tactics			
15.3.1a: Improve CDC's Buildings and Facilities Office's processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Work Order Closure Rates	*2010*	89%	Dec 31, 2010
	2009	87%	Dec 31, 2009
	2008	85%	95% (Target Exceeded)
15.3.1b: Improve CDC's Buildings and Facilities Office's	*2010*	80%	Dec 31, 2010
	2009	80%	Dec 31, 2009

Measure	FY	Target	Result
processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Customer Satisfaction Survey Results	*2008*	75%	94% (Target Exceeded)
15.3.1c: Improve CDC's Buildings and Facilities Office's processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Condition Index	*2010*	88.0 CI	Dec 31, 2010
	2009	87.6 CI	Dec 31, 2009
	2008	87.2 CI	93.9 (Target Exceeded)
15.3.1d: Improve CDC's Buildings and Facilities Office's	*2010*	5.00%	Dec 31, 2010
	2009	5.48%	Dec 31, 2009

Measure	FY	Target	Result
processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Mission Dependency	*2008*	5.95%	0% (Target Exceeded)
15.3.1e: Improve CDC's Buildings and Facilities Office's processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Utilization	*2010*	6.7%O, 5.00%U	Dec 31, 2010
	2009	6.7%O, 5.12%U	Dec 31, 2009
	2008	6.7%O, 5.24%U	1.8%O, 1.8%U (Target Exceeded)
15.3.1f: Improve CDC's Buildings and Facilities Office's	*2010*	5%	Dec 31, 2010
	2009	4%	Dec 31, 2009

Measure	FY	Target	Result
processes and performance as reflected by two Key Performance Indicators - Work Order Closure Rates and Customer Satisfaction - and by three Federal Real Property Council (FRPC) metrics of Utilization, Mission Dependency, and Facility Condition Index for CDC buildings: Operating Costs	*2008*	3%	3.12% (Target Exceeded)

Measure	Data Source	Data Validation
15.3.1	ARIS Data Tables, IFMS Project and Maintenance Data, Customer Satisfaction Surveys	Manual review

Long-term Objective 15.3, Performance Measure 1

This measure provides analysis (or assessment) of tactical business performance and execution of BFO services and stewardship of HHS-owned assets. The measure combines metrics required both locally at CDC (Work Order Closure Rate, Customer Satisfaction) with Department Health and Human Services (HHS) and Office of Management and Budget's (OMB) reporting requirements based on FRPC and Real Property Asset Management Program (RAMP) goals (Condition Index, Mission Dependency, Utilization, Operating Costs). It supports the offices adherence to the FRPC guidelines and requirements for owned and leased assets by providing performance metrics and asset value preservation. FRPC metrics continue to improve as all targets for FY 2008 were exceeded. Progress has occurred in new construction and demolition of older structures with poor conditional assessments.

TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

Upgrading State and Local Capacity

Measure	FY	Target	Result
16.E.1a: Decrease the amount of (A) time required for the Division of State and Local Readiness (DSLR) Project Development Officers to conduct technical reviews of work plans and budgets for all 62 grantees by providing appropriate tools and functionality in the DSLR System *(Efficiency)*	*2010*	20 days	Dec 31, 2011
	2009	21 days	Dec 31, 2010
	2008	25 days	Dec 31, 2009
	2007	28 days	30 days (Target Not Met)
	2006	Baseline	30.0
16.E.1b: Decrease the (B) dollars required for the Division of State and Local Readiness (DSLR) Project Development Officers to conduct technical reviews of work plans and budgets for all 62 grantees by providing appropriate tools and functionality in the DSLR System *(Efficiency)*	*2010*	23.3% reduction	Dec 31, 2011
	2009	22.9% reduction	Dec 31, 2010
	2008	11.6% reduction	Dec 31, 2009
	2007	4.3% reduction	0 (Target Not Met)
	2006	Baseline	$126,507

Measure	Data Source	Data Validation
16.E.1	CDC's Coordinating Office of Terrorism Preparedness and Emergency Response has maintained a management information system on CDC's Secure Data Network (SDN) for approximately three years. This system, known as SLPP-MIS, is used to receive, process, monitor, and evaluate cooperative agreements of over $750 million per year for 62 grantees.	When the technical review process begins, the date/ time will be noted in the system; Once the target date/time is reached, the system will be closed and Project Officers will not be able to conduct additional technical reviews.

Efficiency Measure 16.E.1:

CDC's DSLR is responsible for providing management oversight and technical assistance for the administration of the Public Health Emergency Preparedness (PHEP) Cooperative Agreement. As part of the application process, grantees are required to submit detailed work

plans and budgets which can total 100 pages each. CDC Project Development Officers (PDO) review, provide feedback, and approve applications before funds can be awarded. In addition, at the end of the extensive review process, PDOs provide recommendations for each work plan activity and line items are restricted or disallowed for the budget. The issues cited during this review are monitored and resolved during the year.

Historically, PDOs conducted technical reviews of the grants using paper-based approaches. This resulted in cumbersome paperwork and difficulty in tracking resolution of issues raised during the review process. To deal with these operational limitations, CDC's Management Information System (MIS) was enhanced to centralize the collection, tracking and management of review information. The MIS allows grantees to submit their budgets and work plans directly to the system. The MIS not only maximizes efficiency of the initial application review, but helps facilitate technical assistance efforts throughout the course of the year. The automation and integration of this process will create overall efficiencies in the grants management process by decreasing the time it takes to conduct initial reviews and by providing rapid access to information to track and manage over time.

The efficiency gained from the integration of the review section into the MIS translates into other efficiencies from the grantees standpoint, including a reduction in the time it takes grantees to obtain feedback regarding their work plans and budgets from Project Officers. This in turn results in a faster implementation of recommended changes, thereby improving the overall efficiency of their programmatic operations. MIS also enables rapid submission of applications and recommended changes, reducing potential for funding restrictions or delays.

The FY 2007 target of 28 days was unmet with an actual result of 30 days and, therefore, no associated cost savings; nonetheless, this efficiency measure continues to improve, as prior to implementing the MIS, receipt and review of grantee work plans and budgets relied upon inefficient manual processes. The two supplementary days purposely allocated for Project Officer review considers HHS clearance requirements, which were not anticipated when the original measure was drafted in 2006. CDC expects to meet future targets while accommodating HHS clearance requirements.

Measure	FY	Target	Result
Long Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.			
16.3.1: Percentage of states that have level three chemical lab capacity, and have agreements with and access to (specimens arriving within 8 hours) a level-one chemical lab equipped to detect exposure to nerve agents, mycotoxins, and select industrial toxins. *(Output)*	*2010*	100%	Dec 31, 2010
	2009	100%	Dec 31, 2009
	2008	100%	100% (Target Met)
	2007	100%	100% (Target Met)
	2006	100%	100% (Target Met)
	2005	25%	50% (Target Exceeded)
16.3.6: Percentage of state public health	*Out-Year Target*	96% (2013)	Mar 31, 2014

Measure	FY	Target	Result
laboratories that directly receive CDC PHEP funding that can correctly subtype E.coli O157:H7 and submit the results into a national reporting system within four working days for 90% of the samples received. *(Output)*	*2010*	96%	Mar 31, 2011
	2009	79%	Mar 31, 2010
	2008	63%	60% (Target Unmet but Improved)
	2007	Baseline	46%

Measure	Data Source	Data Validation
16.3.1	The Laboratory Response Network (LRN) delivers accurate and timely identification of agents causing public health threats, including naturally occurring diseases, organisms that could be used in a biologic terrorism attack, and chemical agents.	The data collection and validation activities across the LRN significantly enhances the capacity of laboratories to rapidly detect and identify agents likely to be used in a terrorist attack and provide timely information to health professionals.
16.3.6	Self-reported data as part of required progress reports	Quality assurance reviews with follow-up with grantees

Long-term Objective 16.3, Performance Measure 1

Currently, 62 state, territorial, and metropolitan public health laboratories are members of the chemical component of the Laboratory Response Network. Each chemical network member participates in Level 3 activities. CDC is training all 62 Level 3 public health chemical laboratories in the proper collection and shipment of human samples following a chemical terrorism event. This training also includes an overview of chemical agents; CDC's responsibilities in responding to chemical terrorism events; a discussion of federal regulations on diagnostic packaging procedures and evidentiary-control measures; and hands-on exercises involving the packaging and shipping of human samples. These public health chemical laboratories will then train internal partners (e.g., hospital laboratories, hazardous materials technicians, doctors, office laboratories) in the proper collection and shipment of human samples after a chemical terrorism event.

In FY 2006, significant progress was made on this measure as 100 percent of states have Level 3 lab capacity. This progress was maintained in FY 2007 and FY 2008. Fifty percent of the states are within an eight hour driving distance to a Level 1 chemical laboratory due to CDC's efforts in increasing the number of Level 1 laboratories from five to ten in FY 2005.

Long-term Objective 16.3, Performance Measure 6

Diagnosed cases of *E. coli* O157:H7 and other serious infections are routinely reported to health departments in most states; and then states report them to CDC. Grantees need to be able to inform local, state, and national laboratorians and epidemiologists of disease occurrences in a

timely manner in order to determine the extent and scope of potential outbreaks and to minimize the effects of these outbreaks.

Performing Pulsed Field Gel Electrophoresis subtyping and submitting data results to the PulseNet electronic database in a timely manner indicates the public health laboratory's ability to sub-type specific bacteria and share results quickly.

The FY 2007 baseline data indicated that additional progress is needed for states to report laboratory results within four working days for 90% of the samples received. The Public Health Emergency Preparedness (PHEP) program has developed additional guidance for grantees to help them improve performance on this measure, which resulted in improvements for FY 2008.

FY 2008 data indicate progress from FY 2007, although the target was not met. Some performance issues continue to be linked to grantee training and staffing abilities. Future improvement will be achieved through technical assistance.

Measure	FY	Target	Result
Long Term Objective 16.6: Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.			
16.6.1a: Cooperative Agreement recipients acknowledge receipt of health alert messages within 30 minutes of delivery on a 24/7 basis *(Outcome)*	*2010*	85%	Dec 31, 2010
	2009	85%	Dec 31, 2009
	2008	80%	88% (Target Exceeded)
	2007	75%	77% (Target Exceeded)
	2006	70%	58% (Target Not Met but Improved)
	2005	65%	57% (Target Not Met)
16.6.1b: State grantees will have a protocol for testing and documenting send/receive capabilities. *(Outcome)*	*2009*	85%	Dec 31, 2009
	2008	85%	Target Not Met
	2007	80%	Target Not Met
	2006	75%	60% (Target Not Met)
	2005	65%	97% (Target Exceeded)
16.6.2: Percentage of state public health agencies that are prepared to use materiel contained in the SNS as demonstrated by evaluation of standard functions as determined by CDC. *(Outcome)*	*2010*	90%	Dec 31, 2010
	2009	90%	Dec 31, 2009
	2008	90%	91% (Target Exceeded)
	2007	90%	78% (Target Not Met but Improved)
	2006	80%	70% (Target Not Met)
	2005	N/A	76%

Measure	Data Source	Data Validation
16.6.1	HAN, CDC's Division of Alliance Management and Consultation (NCPHI/DAMC)	At CDC, HAN is maintained by the National Center for Public Health Informatics (NCPHI). The data that passes through and is captured in HAN is frequently validated by NCPHI staff.
16.6.2	DSNS State Technical Assistance Review Tool	The SNS program maintains a staff Program Services Consultants who provide ongoing technical advice and training assistance to Public health Emergency Preparedness & Response grantees. The consultants also assess the grantee's level of preparedness to receive, distribute and dispense SNS assets. These services improve the grantee's ability to receive, stage, store and distribute the SNS material.

Long-term Objective 16.6, Performance Measure 1

To obtain the status of performance for this measure, CDC's National Center for Public Health Informatics (NCPHI) conducts quarterly Health Alert Networks (HAN) response tests based on 50 grantees (State HAN Coordinators). Three of the four quarterly tests scheduled to be completed in FY 2008 have been completed to date. Note that original baseline (FY 2004) targets b) and d) were retired after data was reported for FY 2005 activities.

In FY 2005 and FY 2006, the targets were significantly unmet because approximate target levels were initially set too high for achievement in the reporting fiscal year. In FY 2006, although the target was still unmet, there was an improvement from FY 2005. The trend indicates a steady improvement in performance on this measure from FY 2005 to FY 2008. Improvements in performance in FY 2007 and FY 2008 are largely attributed to close monitoring and managing of grantees' alerting contact data as well as meticulous and increased message communication testing troubleshooting and maintenance. During FY 2007 and FY 2008, the performance target for this measure was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

Long-term Objective 16.6, Performance Measure 2

CDC has made significant progress towards the achievement of 100 percent preparedness of state public health agencies regarding the use of materiel contained in the Strategic National Stockpile (SNS) as demonstrated by evaluation of standard functions that are determined by CDC. Assessment results at the end of the fourth quarter of FY 2008 were 91 percent,

representing 49 out of 54 project areas performing in the acceptable range. Preparedness to receive, stage, store and distribute SNS material is essential to saving lives at risk during a public health emergency. CDC will continue to evaluate the preparedness of state public health agencies through exercises and reviews of SNS distribution plans.

Evidence of SNS preparedness levels suggests that resources are needed to transfer knowledge and the application of various modeling techniques to state and local jurisdictions. To achieve this end, SNS successfully completed six regional meetings to provide avenues to share national best practices and is building capacity to address identified gaps through obtaining and testing new modeling techniques for mass distribution and dispensing, and collaborating to introduce new concepts and methods for dispensing medications such as closed Points of Dispensing (PODs).

Although there are many challenges to sustaining this preparedness capability, CDC believes that recent efforts to enhance preparedness through more rigorous planning and assessment processes combined with technical assistance, training, and exercises; and additional tools and future strategies for advancing innovative modeling, will improve grantees' long term ability to respond to and sustain preparedness for public health emergencies.

Measure	FY	Target	Result
Long Term Objective 16.9: Decrease the time needed to implement recommendation from after-action reports following threats to the public's health.			
16.9.1: Percentage of public health agencies that directly receive CDC PHEP funding that can convene within 60 minutes of notification a team of trained staff that can make decisions about appropriate response and interaction with partners. *(Output)*	*Out-Year Target*	97% (2013)	Mar 31, 2014
	2010	97%	Mar 31, 2011
	2009	92%	Mar 31, 2010
	2008	87%	85% (Target Not Met but Improved)
	2007	Baseline	84.0
16.9.5: Percentage of public health agencies that directly receive CDC PHEP funding that, at least once/year, re-test a response following completion of corrective action(s) identified in a prior actual or simulated response. *(Output)*	*Out-Year Target*	98% (2013)	Mar 31, 2014
	2010	98%	Mar 31, 2011
	2009	94%	Mar 31, 2010
	2008	85%	92% (Target Exceeded)
	2007	Baseline	81%

Measure	Data Source	Data Validation
16.9.1	Self-reported data as part of required progress reports	Quality assurance reviews with follow-up with grantees
16.9.5	Self-reported data as part of required progress reports	Quality assurance reviews with follow-up with grantees

Long-term Objective 16.9, Performance Measure 1

This measure stipulates that public health agencies must be able to rapidly convene staff to integrate information and prioritize resource allocation to ensure timely and effective coordination within the public health agency and with key response partners during an emergency response.

This measure is incorporated as a specific reporting measure for the Division of State and Local Readiness's (DSLR) grantees. The baseline for this revised measure was established by grantee self-reports. Although DSLR will continue to report on this measure, some grantees desire additional clarification of the measure. DSLR currently frame the measure as, Time to notify all primary staff (secondary or tertiary staff as needed) with public health agency Incident Command System (ICS) functional responsibilities that the public health agency's Emergency Operations Center (EOC) is being activated.

DSLR will continue to highlight this measure as a grantee reporting requirement, and identify personnel trained to function within the eight primary components of ICS within the EOC. Specific minutes are required to be reported by grantees, and these reporting requirements permit DSLR to analyze and compare scores across differing health jurisdictions. DSLR will continue providing technical assistance to improve future performance.

Long-term Objective 16.9, Performance Measure 5

This measure reflects the important ability of public health agencies to systematically re-test their response capabilities in order to provide evidence that planned and implemented corrective actions have been effective in improving response capacity. The expectation is that public health agencies should be progressively improving by addressing corrective actions within exercise-related after action reports (AAR's). The current baseline was developed by direct grantee reporting. Not all grantees conducted exercises or experienced a "real response" as defined in the guidance for this measure. Additionally, AAR reporting processes are oftentimes lengthy, and depending on the scope of the event, corrective actions might be numerous or their identification might be subject to time consuming processes.

The target for FY 2008 was exceeded, as grantees made significant progress in achieving this performance measure. Targets for FY 2009 and beyond remain ambitious as they require further improvement in total grantee achievement.

Data related to this measure will be specifically collected from the grantees. In partnership with our grantees, the Division of State and Local Readiness (DSLR) is collecting data about how corrective actions are being incorporated into opportunities for improvement, and providing technical assistance to improve future performance.

Upgrading CDC Capacity

Measure	FY	Target	Result
16.E.3: Decrease annual costs for personnel and materials development with the development and continuous improvement to the budget and performance integration information system tools. *(Efficiency)*	*2010*	$0/BPI and Health Impact system	Dec 31, 2010
	2009	$0/BPI and Health Impact system	Dec 31, 2009
	2008	$0/BPI and Health Impact system	$0/BPI and Health Impact system (Target Met)
	2007	$50,000/BPI and Health Impact system	$8,685.2/BPI and Health Impact system (Target Met)
	2006	N/A	$86,800$0/BPI and Health Impact system
	2005	N/A	$101,000/BPI and Health Impact system

Measure	Data Source	Data Validation
16.E.3	COTPER has been at the forefront of development of two information technology tools for budget and performance integration. These tools are now widely used by a variety of staff for a variety of purposes, including gaining efficiencies in the consolidation of information systems, and reducing the time required to find, collate, and use data.	Health Impact and IRIS B&PI are used to track annual costs for personnel and materials development.

Efficiency Measure 16.E.3:

This is an Office of Management and Budget (OMB) approved efficiency measure for both the Upgrading CDC Capacity and Biosurveillance programs. The Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) currently utilizes a team of contractors to help facilitate their Health Impact Planning (HIP) process each year. This team also provides supplemental support in regards to this measure. Since CDC's budget and performance tool is still being developed and improved, the system is not yet able to provide functionality with performance reporting and report generation. The contractor team has created a webform that the projects use to report on performance twice per year. The team also maintains an Access database that houses the same information, but is able to provide more robust report generation and analysis. The team logs hours spent on these activities. The intent of the measure is to reach a point where CDC's budget and performance integration (BPI) tool provides all of these services managed by internal full-time equivalents (FTE), therefore reducing costs for COTPER. FY 2007 showed a drastic decrease in cost due to the implementation of HealthImpact.net across CDC. As systems continue to improve, CDC aims to gradually decrease the time and material costs while not impacting the quality and timeliness of work developed and delivered. This trend has already begun as is evident from the decrease in costs from FY 2004 through FY 2007. This target was met in FY 2008 because of the implementation of HealthImpact.net across CDC.

Measure	FY	Target	Result
Long Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.			
16.3.2: Percentage of Laboratory Response Network (LRN) labs that pass proficiency testing for Category A and B threat agents. *(Output)*	*2010*	92%	Dec 31, 2010
	2009	92%	Dec 31, 2009
	2008	92%	94% (Target Exceeded)
	2007	100%	91% (Target Not Met but Improved)
	2006	84%	87% (Target Exceeded)
	2005	80%	83% (Target Exceeded)

Measure	Data Source	Data Validation
16.3.2	The Laboratory Response Network (LRN) delivers accurate and timely identification of agents causing public health threats, including both naturally occurring disease and organisms that could be used in a biologic terrorism attack.	The data collection and validation activities across the LRN significantly enhances the capacity of laboratories to rapidly detect and identify agents likely to be used in a terrorist attack and provide timely information to health professionals.

Long-term Objective 16.3, Performance Measure 2

This measure determines the readiness posture of the Laboratory Response Network (LRN) for rapid detection of biological threat agents. Since laboratories infrequently encounter biological threat agents, the proficiency testing (PT) program provides familiarity in working with these agents, performing LRN assays using agent-specific testing algorithms, and using available electronic resources to report test results.

The PT program has been in place since the LRN was founded in FY 1999. At its onset, very few LRN member laboratories were able to rapidly and accurately identify biological threat agents and other agents of public health importance. Due to testing challenges and the need for increased training, the FY 2003 baseline passing rate was approximately 75 percent. By the end of FY 2005, the passing rate rose to 83 percent and at the end of FY 2006 the passing rate increased again to 87 percent. The passing rate increased in FY 2007 to 91 percent, although the FY 2007 target of 100 percent was not met.

A 100 percent passing rate is not feasible for several reasons. First, an evolving priority threat list results in the introduction of new tests, technologies and equipment that require staff to gain additional training and experience. Additionally, the LRN program office at CDC is working to increase the complexity of the PT program to include a) multiple agents in a single challenge, b)

testing in various non-clinical samples (e.g., food, water, and environmental samples), and c) requirements to complete a full testing algorithm rather than solely focusing on rapid tests. Laboratories that fail a proficiency test are required to go through remediation steps that may include consultation, successful completion of a follow-up proficiency test, and/or hands-on training. Therefore, FY 2008 and FY 2009 targets have been adjusted accordingly, yet remain ambitious. The FY 2008 passing rate was 94 percent and exceeded the target.

Measure	FY	Target	Result
Long Term Objective 16.5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.			
16.5.9: By 2010, CDC's epidemiology system will reduce the time to initiate, coordinate and resolve investigations to identify causes, risk factors and recommended interventions. *(Output)*	*2010*	Targets under development	N/A

Measure	Data Source	Data Validation
16.5.9	N/A	N/A

Long-term Objective 16.5, Performance Measure 9

The time reductions stipulated by this performance measure will directly affect the ability of public health and emergency response entities to identify events of national public health importance. This measure will indirectly decrease the time needed to communicate with the public about important health issues, initiate investigations, and to identify and provide countermeasures.

Methods of incorporating individual project-level data reflecting current laboratory activities will contribute to the overarching implications of this Upgrading CDC Capacity performance measure. With further advancements of CDC goal action planning and identification of funding priorities, appropriate project alignment and contribution to finalizing target completion occurred in FY 2008. This information will be used to continue work on developing and refining targets in FY 2009 and FY 2010.

Measure	FY	Target	Result
Long Term Objective 16.6: Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.			
16.6.7: By 2010, CDC's response operations system will decrease the time from event to actions that will minimize morbidity and mortality. *(Outcome)*	*2009*	Targets under development	N/A

Measure	Data Source	Data Validation
16.6.7	N/A	N/A

Long-term Objective 16.6, Performance Measure 7

The time reductions stipulated by this performance measure will directly affect the ability of public health and emergency response entities to identify events of national public health importance. This measure will indirectly decrease the time needed to communicate with the public about important health issues, initiate investigations, and to identify and provide countermeasures.

Methods of incorporating individual project-level data reflecting current laboratory activities will contribute to the overarching implications of this Upgrading CDC Capacity performance measure. With further advancements of CDC goal action planning and identification of funding priorities, appropriate project alignment and contribution to finalizing target completion occurred in FY 2008. This information will be used to continue work on developing and refining targets in FY 2009 and FY 2010.

Measure	FY	Target	Result
Long Term Objective 16.9: Decrease the time needed to implement recommendation from after-action reports following threats to the public's health.			
16.9.2: Increase the percentage of the TPER allocation for which budget execution matches strategic funding priorities. *(Output)*	*2010*	June 30, 2009	N/A
16.9.3: Improve the on-time achievement of individual project milestones for Epidemiology, Laboratories and Emergency	*2010*	96%	Dec 31, 2010
	2009	95%	Dec 31, 2009
	2008	93%	89% (Target Not Met but Improved)
	2007	90%	84% (Target Not Met)

Measure	FY	Target	Result
Response. *(Output)*	*2006*	Baseline	87%
16.9.4: Achieve progressive improvements in the quality of projects submitted for TPER Upgrading CDC Capacity funding consideration. *(Output)*	*2010*	87%	Dec 31, 2010
	2009	85%	Dec 31, 2009
	2008	78%	83% (Target Exceeded)
	2007	Baseline	74%

Measure	Data Source	Data Validation
16.9.2 – 16.9.4	Self-reported data as part of required progress reports.	See Efficiency Measure Data Validation.

Long-term Objective 16.9, Performance Measure 2

This measure reflects the need to ensure that budget execution matches strategic funding priorities. The Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) has developed specific priorities for FY 2009 that built on priorities from the previous fiscal year. The priorities are derived from the recommendations in the Preparedness Goal Action Plan (GAP). The recommendations were organized by subject and first prioritized by the Preparedness Objective teams. These vertical priority lists were merged into a horizontal priority list by the Preparedness GAP champions for the entire agency. COTPER then developed its top priorities from the horizontal list and communicated these priorities to the agency for new FY 2009 proposals. Analysis of how these priorities affect budget decisions will be made at the close of fiscal year 2009Health Impact Planning, which will contribute to this process for target completion by June 2009.

Long-term Objective 16.9, Performance Measure 3

All individual projects funded to Upgrade CDC Capacity must improve performance in order to achieve the long term measures. Individual project performance is monitored continuously and can be summarized as the average time-appropriate achievement of milestones in the core functional areas. Improving on-time achievement of individual milestones for Epidemiology, Laboratory and Emergency Response functional objective related projects ensures that the projects are making substantial progress to complete all planned activities by the end of fiscal year 2008 in order to help achieve CDC's Health Protection Goals. The target for fiscal year 2008 was not achieved due to a number of projects extending the completion of their milestones into the next fiscal year. This extension is due to a number of reasons depending on the specific project's situation. For example, a project's priorities might change during the fiscal year so work specific to a milestone can get extended past the initial completion date while efforts are spent on other activities. In addition, in some cases milestones were delayed due to unexpected hiring difficulties or other personnel changes. However, performance improved from FY 2007 to FY 2008, and a more detailed feedback process was implemented to improve future performance. In addition, past project performance issues (i.e., projects that did not meet their milestones even with extensions) were taken into consideration during the review phase for

FY 2009 funding.

Long-term Objective 16.9, Performance Measure 4

Projects submitted for COTPER funding include detailed workplans, timelines, and responses to standardized evaluation questions that are used to rate and select projects for funding. This process allows for the selection of projects that are a) most likely to achieve the objectives of upgrading some part of CDC's preparedness capacity, b) not duplicative of each other, c) well-specified and d) likely to succeed, thus improving overall preparedness capacity.

FY 2007 performance represents a baseline of the quality of project submissions, relatively early in the evolution of the Coordinating Office for Terrorism Preparedness and Emergency Response's (COTPER) Health Impact Planning process. During FY 2008, the quality of project submitted improved due to additional specific guidance and criteria for project submissions In addition, to improve future performance, during FY 2008 COTPER implemented more specific scoring criteria so projects can receive more targeted feedback from reviewers. Note: FY 2008 performance represents FY 2008 program activities providing guidance for and reviewing project submissions for FY 2009 funding.

Biosurveillance

Measure	FY	Target	Result
Long Term Objective 16.2: Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies.			
16.2.1: Number of top 50 metropolitan areas using BioSense. *(Output)*	*2010*	10% increase from 2009	Dec 31, 2010
	2009	Additional Population coverage in Top 50 Metropolitan areas	Dec 31, 2009
	2008	50.0	50.0 (Target Met)
	2007	50.0	49.0 (Target Not Met but Improved)
	2006	40.0	38.0 (Target Not Met but Improved)
	2005	Baseline	10.0
16.2.2: By 2010, the BioSense program will reduce the time needed from a triggering biosurveillance event (the identification of a potential disease event or public health emergency event) to initiate event-specific standard operating procedures (the initiation of a public health investigation and, if needed, subsequent public health intervention) for all infectious, occupational or environmental (whether man-made or naturally occurring) threats of national importance. (days) *(Outcome)*	*2010*	6.3 days	Dec 31, 2010
	2009	7.3 days	Dec 31, 2009
	2008	Baseline	7.8 days

Measure	Data Source	Data Validation
16.2.1	The BioSense application tracks the number of members and users of the application weekly in a database. CDCs Epi-X network tracks the number of state and local public health professionals that use the system. The top 50 Metropolitan Statistical Areas were determined from the census bureau website identifying population estimates	The number of members and users will be reviewed on a regular basis. The number of state and local public health professionals who use Epi-X to share intelligence regarding

Measure	Data Source	Data Validation
	as of July 1, 2006.	outbreaks and other emerging health events is captured in the Epi-X application. This number is tracked through the registration process of the application. There are automated system controls in place as well as manual procedures that are frequently conducted to validate that the information being collected is accurate.
16.2.2	BioSense application data, chief complaints.	There are automated system controls in place as well as manual procedures that are frequently conducted to validate that the information being collected is accurate.

Long-term Objective 16.2, Performance Measure 1

For Fiscal years 2006 and 2007, the performance target for the following measures was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

The BioSense program began receiving aggregate data from the Department of Defense (DOD) and the Department of Veterans Affairs (VA) in 2004. In 2005, BioSense began to receive real-time clinical data from 32 hospitals in 10 major metropolitan areas around the country. By the end of 2006, CDC was receiving real-time data from 38 metropolitan areas, including a total of 350 healthcare facilities. Following these milestones, BioSense continued to seek partnerships with national data sources such as Laboratory Corporation of America (LabCorp) and Quest Diagnostics.

Today, there are approximately 800 users and 149 state and local public health jurisdictions with access to BioSense. The program has acquired real-time clinical care data from over 590 healthcare sources and receives data from 466 DOD and 863 VA healthcare facilities. This represents coverage for the top 50 metropolitan areas (MRAs) by population, as well as all of the BioWatch cities.

BioSense program officials have determined that by 2010, all levels of public health with jurisdiction over the top 50 most populated metropolitan areas will use the application for biosurveillance and local health situational awareness by accessing data from healthcare facilities (including both non-federal hospitals that report in near-real-time and DoD and VA clinics that report within two to four days). For FY 2009 and FY 2010, the target is to increase the population covered by BioSense in the top 50 metropolitan areas. This translates into a 10 percent increase in the number of hospitals in the top 50 cities, or an increase of 22 hospitals per year reporting in near real-time. The BioSense program has begun working towards this goal in FY 2008 through partnerships with three Health Information Exchanges (HIEs) in New York, Indiana, and Washington/Idaho. Each of the sites is now fully engaged in their required activities. One prominent deliverable already provided is

the biosurveillance implementation guide for the minimum data set, currently in review at CDC.

Also of interest is coverage within the CDC Cities Readiness Initiative (CRI) program. The CRI covers 72 Metropolitan Areas, representing approximately 57 percent of the total U.S. population based upon 2004 estimates. As of November 1, 2008, BioSense received data from 276 non-federal hospitals from 27 of the 72 CRI cities. By including the federal data sources (293 VA and 165 DoD facilities), all 72 CRI cities have some level of coverage in the BioSense program.

Future accomplishments will require continuous program improvement, establishment of new partnerships and data sharing agreements, information technology improvements, and realization of efficiencies. They also reflect the commitment of CDC to the Presidents national priorities in coordination with the Office of the National Coordinator for Health Information Technology and the American Health Information Community (AHIC).

This performance measure corresponds to the Health Monitoring and Surveillance functional objective.

Long-term Objective 16.2, Performance Measure 2

The time reductions stipulated by this performance measure will directly affect the ability of public health and law enforcement personnel to decrease the time to classify health issues as terrorism or naturally occurring, to decrease the time needed to detect aberrations. Indirectly, these time savings will decrease the time needed to communicate with the public about important health issues, and to identify and provide countermeasures.

BioSense data reflecting advancements in information technology infrastructure, workforce recruitment and training, and development of comprehensive and tested standard operating procedures will contribute to this biosurveillance performance measure. The performance outcome is calculated using a weighted average rather than a simple average. For FY 2008, the estimated number of days to perform an investigation for each data source are as follows: nonfederal hospitals, manual data collection (10 days), state syndromic surveillance, automated feed to CDC (2 days), hospitals with real time feed to state/CDC (0.5 days), DOD facilities (3 days), and VA facilities (2 days). Further advancements in rapid identification of trends in clinical data place the targets for 2010 as follows: nonfederal hospitals, manual data collection (10 days), state syndromic surveillance, automated feed to CDC (1 day), hospitals with real time feed to state/CDC (0.5 days), DOD facilities (1 day), and VA facilities (1 day).

This performance measure corresponds to the Public Health System Support functional objective.

Measure	FY	Target	Result
Long Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.			
16.3.3: Number of Laboratory Response Network member laboratories able to use their current	*2010*	15.0	Dec 31, 2010
	2009	7.0	Dec 31, 2009
	2008	3.0	0.0 (Target Not Met)

Measure	FY	Target	Result
Laboratory Information Management System (LIMS) for LRN-specific electronic data exchange. *(Output)*	*2007*	Baseline	0.0
16.3.4a: Reduce the time needed for a Laboratory Response Network (LRN) laboratory to enter and message LRN-related standardized results to the CDC: Chemical/ *(Outcome)*	*2010*	10 Minutes	Dec 31, 2010
	2009	17 Minutes	Dec 31, 2009
	2008	23 Minutes	20 minutes (Target Exceeded)
	2007	Baseline	30 minutes
16.3.4b: Reduce the time needed for a Laboratory Response Network (LRN) laboratory to enter and message LRN-related standardized results to the CDC: Biological. *(Outcome)*	*2010*	5 Minutes	Dec 31, 2010
	2009	16 Minutes	Dec 31, 2009
	2008	27 Minutes	20 minutes (Target Exceeded)
	2007	Baseline	37 minutes

Measure	Data Source	Data Validation
16.3.3	In addition to specimen and results data, the Health Level 7 (HL7) message utilized for messaging LRN data to the CDC carries information regarding the specific data source. This information will allow us to differentiate between LRN Results Messenger and a local LIMS data. Further development is underway to allow easy reporting on various types of messages from the different sources, allowing us to quickly discern the number of messages related to various programs.	Messages sent to the CDC from external sources must pass through the data broker before being parsed and sent to specific programs within the CDC. The Data and Message Brokering (DMB) team will perform edits to ensure that the message is formatted properly and that we have a Collaboration Protocol Agreement (CPA) with the originating entity. The DMB team will also perform some basic edits to ensure that the message contains all required fields and will also perform validation on the vocabulary included in the message to ensure that message utilizes standard vocabulary sets (LOINC, SNOMED, etc.). In addition, PHINMS reporting will be used to monitor activity, such as the volume of

Measure	Data Source	Data Validation
		messages received over a predefined period, from the various partners. Additional validation includes periodic review by BPRP and NCPHI resources to ensure data quality and completeness. And finally, data that is shared with other programs such as BioSense and Biological Warning and Incident Characterization (BWIC) will undergo additional validation specific to that system.
16.3.4	Data are obtained by using LRN Results Messenger to send simulated messages and measuring the amount of time to send messages for both biological and chemical agents.	Messages sent to the CDC from external sources must pass through the data broker before being parsed and sent to specific programs within the CDC. The Data and Message Brokering (DMB) team will perform edits to ensure that the message is formatted properly and that we have a Collaboration Protocol Agreement (CPA) with the originating entity. The DMB team will also perform some basic edits to ensure that the message contains all required fields and will also perform validation on the vocabulary included in the message to ensure that message utilizes standard vocabulary sets (LOINC, SNOMED, etc.). In addition, PHINMS reporting will be used to monitor activity, such as the volume of messages received over a predefined period, from the various partners. Additional validation includes periodic review by BPRP and NCPHI resources to ensure data quality and completeness. And finally, data that is shared with other programs such as BioSense and Biological Warning and Incident Characterization (BWIC) will undergo additional

Measure	Data Source	Data Validation
		validation specific to that system.

Long-term Objective 16.3, Performance Measure 3

This measure reflects CDC's efforts in working with Laboratory Response Network (LRN) member laboratories to migrate away from their current use of the LRN Results Messenger to their own Laboratory Information management System (LIMS) to exchange LRN-specific results. Transitioning from the LRN Results Messenger to LIMS will improve the speed and accuracy of results messaging to CDC, thus decreasing the time required to initiate a public health response. The targets proposed for the revised measure may appear low, but are considered ambitious in light of several challenges. Progress in transitioning efforts requires the availability of funding/resources, commitment and prioritization. Many LRN labs either do not have, or are currently implementing, an LIMS. Approximately 30 percent of LRN labs now receive funding through the Public Health Emergency Preparedness (PHEP) Cooperative Agreement enabling them to purchase and maintain a LIMS. Another 30 percent may receive funds indirectly, but these funds are limited and are often spent on other priority items. Of the LRN labs that currently have functional LIMS in place, many are still working to develop this capacity for their primary lab functions and have placed a lower priority on biological and chemical terrorism. These factors, most of which are outside of the CDC's sphere of influence, directly impact CDC's ability to demonstrate significant progress in a short period of time. The use of a lab's LIMS to electronically exchange LRN-specific data is CDC's ultimate goal, and one that will take a longer period of time to realize.

CDC is currently working with 27 LRN laboratories on development of the LRN Health Level (HL7) Test Result message. These labs represent a wide spectrum of capability and readiness, ranging from those that are still in the LIMS selection process to those that are currently configuring their LIMS and/or HL7 message. Strategies employed to assist LRN laboratories in reaching these performance measure targets include:

- The LIMS Integration (LIMSi) team has developed several re-usable components using the Rhapsody integration tool which can be shared with states using Rhapsody to accelerate their implementation of the HL7 message.
- The LIMSi team has created use cases and a proposed design.
- The LIMSi team has conducted site visits to the state public health labs in Florida, Washington and Minnesota to provide hands-on guidance to support their efforts to become capable of sending LRN-specific data.

LIMSi efforts are effected by limited resources and competing priorities within the LRN laboratories. It is projected that the FY 2008 target for this measure will be unmet. The inability to reach the FY 2008 target is due to the LRN lab's current state of readiness, not the CDC's readiness. CDC is prepared to receive and process incoming messages but as of December 2008, CDC does not have any LRN Member labs ready to send messages.

Long-term Objective 16.3, Performance Measure 4

The ability to exchange laboratory data, both within the Laboratory Response Network (LRN) as well as between the LRN and CDC, is critical to initiate event-specific standard operating procedures (e.g., aggregation of data at a national level) for all infectious, occupational or

environmental (whether man-made or naturally occurring) threats of national importance. Reducing the time needed for a LRN laboratory to enter and message LRN-related standardized results to CDC is one aspect of CDC efforts to minimize the time required to initiate event-specific standard operating procedures. The LRN Results Messenger project directly supports the CDCs Laboratory Response Network mission, standardizing the exchange of LRN-related data and easing the burden of reporting on LRN laboratories.

CDC is measuring the amount of time it takes a laboratorian to enter a specific number of samples into the system, assign and result typical tests performed, and to send those results to CDC:

- For LRN-Biological samples, CDC measures the time required to manually enter 10 samples, add three PCRs to each sample (one for Brucella, one for Coxiella and one for Burkholderia) add a Sample Summary for each sample and send the results to CDC. This is a recreation of a Proficiency Testing exercise from last year.
- For LRN-Chemical samples, CDC measures the time required to manually enter 10 batches, manually entering batch information and importing multiple runs of analytes/results, one run at a time. Batch details are then reviewed, validated and sent to CDC. This simulates LRN-C labs either proficiency testing, lab validation or emergency response.
- CDC intends to document the reduction (against the baseline) in time and effort required to enter, result and message LRN-specific results by the indicated percentages. It must be noted that this decrease does not take into account LRN policy that stipulates that notification should occur via a phone call to the Directors Emergency Operations Center within two hours of obtaining high-confidence presumptive or confirmatory results and that data messaging should occur within one hour of notifying CDC.

Original versions of LRN Results Messenger were targeted specifically at providing the capability to message LRN-specific results. Much work has been done to refine and enhance the performance of the application since its initial deployment. Reductions in the time required to enter, result and message LRN-specific results often receive a lower priority (per the LRN Program Office) than enhancements to programmatic functionality. For example, the addition of assays (such as the new BioPlex assay) typically pre-empt enhancements that result in faster data entry. However, the application has dramatically improved reporting times; labs initially reported taking more than an hour to enter 10 samples.

The LRN Results Messenger development team has taken a two pronged approach to reducing the time needed to enter and message LRN-specific results to the CDC:

First, the development of new user interface tools and controls (using Google Web Toolkit) provide additional performance enhancements at the user interface level.

Second, a complete re-write of the way sample groups are stored and retrieved in the database provide for faster data lookup.

Additional improvements will be based on user feedback and additional enhancements to the database structure.

Measure	FY	Target	Result
Long Term Objective 16.5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.			
16.5.1: Prevent the importation and spread of infectious diseases to the U.S. in mobile populations and non-human-primates, as measured by meeting 4 of 4 targets for the following measures (16.5.2 - 16.5.5) *(Output)*	*Out-Year Target*	4 of 4 (2015)	Jul 31, 2016
	2007	Baseline	1 of 4
16.5.2: Increase the proportion of applicants for U.S. immigration screened for tuberculosis by implementing revised tuberculosis technical instruction (TB TI). *(Output)*	*Out-Year Target*	60% (2015)	Jul 31, 2016
	2010	35%	Jul 31, 2011
	2009	35%	Jul 31, 2010
	2008	30%	Jul 31, 2009
	2007	N/A	22%
	2006	Baseline	0
16.5.3: By 2010, CDC's epidemiology system will reduce the time to initiate, coordinate and resolve investigations to identify causes, risk factors and recommended interventions. *(Outcome)*	*2010*	N/A	N/A
16.5.3a: Increase the likelihood of travelers seeking pre-travel medical advice for travel to Africa. *(Output)*	*2010*	30.0	Oct 31, 2011
	2009	30.0	Oct 31, 2010
	2008	29.0	Oct 31, 2009
	2007	N/A	44.0
	2006	N/A	49.0
	2005	N/A	33.0
15.5.3b: Increase the likelihood of travelers seeking pre-travel medical advice for	*2010*	19.0	Oct 31, 2011
	2009	19.0	Oct 31, 2010
	2008	19.0	Jan 31, 2009

Measure	FY	Target	Result
travel to Asia *(Output)*	*2007*	N/A	18.0
	2006	N/A	25.0
	2005	N/A	19.0
16.5.4: Increase of the percentage of immigrants and refugees with a "Class A or B medical notification for tuberculosis" who undergo medical follow-up after arrival in U.S *(Output)*	*Out-Year Target*	80% (2011)	Jul 31, 2012
	2010	68%	Jul 31, 2011
	2009	68%	Jul 31, 2010
	2008	65%	Jul 31, 2009
	2007	N/A	65%
	2006	Baseline	60%
16.5.5: Maintain low mortality in nonhuman primates (NHP) imported to the U.S. for science, exhibition, and education. *(Output)*	*2010*	< 1%	Dec 31, 2010
	2009	< 1%	Dec 31, 2009
	2008	< 1%	< 1% (Target Met)
	2007	N/A	< 1%
	2006	N/A	< 1%
	2005	N/A	< 1%
16.5.6: Protect the U.S. population by increasing the number of 25 US international airports and land borders covered by a communicable disease preparedness plan. *(Output)*	*Out-Year Target*	25.0 (2015)	Jan 31, 2016
	2008	N/A	6
	2007	N/A	9
	2006	N/A	5
	2005	N/A	2
	2004	Baseline	0
16.5.7: Increase the number of hospitals with MOAs in priority 1 cities. *(Output)*	*Out-Year Target*	200 (2011)	Jan 31, 2012
	2010	175	Jan 31, 2011
	2009	175	Jan 31, 2010
	2008	170	175
	2007	N/A	163
	2006	N/A	149
	2005	N/A	128
16.5.8: Increase the number of illnesses in	*Out-Year Target*	1,865 (2011)	Dec 31, 2011

Measure	FY	Target	Result
persons arriving in the United States that are reported to CDC DGMQ by conveyance operators, CBP, and others. *(Output)*	*2010*	1,692	Dec 31, 2010
	2009	1,692	Dec 31, 2009
	2008	1,651	1,677.0 (Target Exceeded)
	2007	N/A	1,543.0
	2006	N/A	1,464.0
	2005	Baseline	620.0
16.E.4: Decrease the cost of notifying state health departments of disease conditions in incoming refugees and immigrants by implementing the electronic disease notification system. *(Efficiency)*	*Out-Year Target*	$490,000 (2011)	Dec 31, 2011
	2010	$511,000	Dec 31, 2010
	2009	$534,500	Dec 31, 2009
	2008	$884,000	$838,426 (Target Exceeded)
	2007	N/A	$1,393,663
	2006	N/A	$1,461,172
	2005	Baseline	$647,200

Measure	Data Source	Data Validation
16.5.1	Data sources for annual measures 16.5.2 – 16.5.5 below.	See below
16.5.2	Office of Immigration Statistics for yearly number of immigrant and refugee arrivals. The number of immigrants screened under the 2007 TB TI is equivalent to the number of immigrants from countries that have adopted the 2007 TB TI; hence the same data source applies.	The Department of Homeland Security maintains the official U.S. government statistics of foreign-born persons entering the U.S.
16.5.3	GeoSentinel, International Trade Administration Survey of International Travelers * Outlier value: because 2006 does not follow the trend from the three previous years, we are basing our targets on the 3-year trend instead.	GeoSentinel data are validated through site visits and record review, and are derived from the GeoSentinel database with regular data cleaning and used in numerous peer-reviewed publications. The survey of International Air Travelers is conducted on an ongoing basis since 1980s by the International Trade Administration (ITA), Office of Travel and Tourism Industries (OTTI). DGMQ purchases the database once a year from ITA.
16.5.4	Information on Migrant Populations (IMP); Electronic Disease Notification (EDN) system	Immigrants and refugees with a TB class condition undergo a medical evaluation after entry into U.S. Results of medical evaluation are transmitted to CDC from state health departments and recorded

Measure	Data Source	Data Validation
		in one of two databases: IMP or EDN. IMP is a paper-based reporting system. EDN is an electronic database that will replace IMP.
16.5.5	CDC nonhuman primate importation program records - annual NHP mortality data	Data are validated by CDC staff site visits to importers.
16.5.6	Plan data are currently compiled and analyzed by contractor. International traveler data are collected by U.S. Department of Transportation (DOT) and U.S. Customs and Border Protection (CBP).	Plan data extracted from actual plan documents are submitted by CDC quarantine stations, and checked against a template. Air traveler data are obtained from airlines, and verified by DOT. CBP collects primary data on all international arrivals and validates them.
16.5.7	Signed CDC documents; Memorandum of Agreement Tracking System (MOATS)	Validity of legal documents is clear, and MOATS supports DGMQ personnel in the management and maintenance of established Memorandum of Agreements (MOAs) and information related to the MOA Program. MOATS standardizes and automates existing business processes for managing MOAs and notifying emergency contacts during a quarantine measure implementation. MOATS key functional categories include Station (Q-Station information), Port (various combinations), Memorandum (Hospital under MOA), Contact (Hosp., State and local HD and any other POC) and Workflow Management (user authentication/authorization). MOATS is on the SQL server and web based and defines and validates user authentication and authorization within the system.
16.5.8	Quarantine stations enter these reports into the quarantine activity reporting system (QARS)	Data are reviewed by the DGMQ QARS team.
16.E.4	Man hours, equipment, and FedEx costs for IMP (2005-2006 paper-based system) versus EDN (2006-09 electronic system) including centralized EDN 'IMP	Man hours are actual and projected personnel costs for FTEs and contractors performing data entry; equipment costs include one time set up and annual costs and are based on actual 2007 costs; FedEx costs are costs by the Quarantine stations to send paperwork to DGMQ headquarters and to state health departments. *the baseline is based on only 8 versus 20 quarantine stations and from an exclusively decentralized paper based system to an exclusively centralized electronic system.

Long-term Objective 16.5, Performance Measure 1

The public health burden for each of the four annual measures is described in greater detail for

each measure. As a composite long-term measure, it measures the overall trend towards preventing the importation and spread of infectious diseases to the United States (U.S). through four different approaches for a key disease (i.e., tuberculosis), in key populations (i.e., in immigrants, refugees, and travelers), and in key regulated animals (non-human primates).

In addition to benefiting the populations targeted in the measures, U.S. citizens, public health programs, and the research community at large benefit from preventing, regulating, controlling, and providing guidance for the measured diseases and populations.

The long-term measure with its four annual measures is in direct alignment with the Division of Global Migration and Quarantine's (DGMQ) regulatory authority and mission of preventing the importation and spread of infectious diseases in the U.S. and covers the range of legal requirements towards achieving the mission to appropriate public health interventions, guidance, and communication necessary to achieve its mission. They also are representative of DGMQs mandate to provide scientific and programmatic leadership in achieving DGMQs mission.

Measurements are described for each annual measure of which this composite long-term measure is comprised. In order achieve the long-term measure each annual measure has to have reached its final target. Hence, while each annual measure shows a positive trend for past performance, only one of the annual measures has reached its target and is being measured by maintaining the target.

Achieving the targets in all four annual measures is ambitious because of competing priorities and because each measure is ambitious. Given that all four annual measures directly align with DGMQs mission, DGMQ staff is dedicated to continue working towards their progress and focus their energy towards achieving the targets for all measures simultaneously.

Long-term Objective 16.5, Performance Measure 2

The outcome being measured is the proportion of overseas applicants for United States (U.S.) immigration screened according to modernized tuberculosis (TB) screening protocols. The majority (57 percent) of TB cases diagnosed in the U.S. are diagnosed in persons born outside the U.S. Medical screening for TB is legally required of applicants of U.S. immigration in order to receive a visa and enter the U.S. Improving TB screening of this population is an opportunity to appropriately diagnose and treat persons with TB disease before they arrive in the U.S. and identify persons at risk for having TB disease for prompt stateside follow-up. Improving the TB screening should contribute to decreasing the burden of TB in the U.S. among foreign-born populations overall.

CDC will benefit by fulfilling its regulatory role in preventing importation of TB disease into the U.S. U.S., state, and local TB control programs will also benefit from the reduction in importation of TB and better overseas identification of persons at risk for having TB. U.S. citizens benefit through decreased potential exposure to immigrants or refugees with potentially infectious TB conditions.

This program is in alignment with the strategic plan of the Division of Global Migration and Quarantine (DGMQ) to reduce the importation of disease into the U.S. The effort required to implement the new changes is also consistent with the Divisions strategic plan to build relationships across governmental and non-governmental lines to deliver quality medical screening and services to U.S.-bound immigrants and refugees.

The effort to modernize TB screening is compliant with IOM recommendations made for eliminating TB. In its book, Ending Neglect, Institute of Medicine (IOM) recommended that CDC improve the diagnostic capability of overseas TB screening and become more involved in

international TB control activities. Modernization of TB screening is also compliant with the IOM recommendations for building strategic leadership to support DGMQs mission, and having evidence-based interventions. DGMQ research showed that previous screening protocols had the potential to miss approximately 50 percent of culture positive, smear negative infectious TB; which is addressed in the revised technical instructions.

This is a measurement of the proportion of applicants for U.S. immigration screened for TB using the 2007 Technical Instructions for TB Screening and Treatment. Because all immigrants coming from a country which has implemented the revised TB TI will be screened accordingly, the number of arriving immigrants from that country and those screened for TB under the revised TB TI is identical.

The overseas TB screening algorithms were last released in 1991 and had become inadequate to meet the challenges of modern TB control. For example, studies demonstrated that the 1991 instructions were insensitive in detecting all cases of TB disease, preventing importation of TB into the U.S., or detecting cases of drug resistant TB, including multidrug resistant TB (MDR TB). For these reasons, the algorithms were updated and began implementation during 2007. Assessments of the performance of this measure therefore begin with implementation of the 2007 TB TI.

The updated algorithm is being implemented in countries prioritized on factors such as immigration volume and burden of TB. In 2007, the new requirements were implemented for approximately 22 percent of arriving immigrants and refugees. The populations screened in those countries have TB rates equal to five times the U.S. rates.

To maintain the momentum from FY 2007 accomplishments, cross-training of staff, additional staff, and financial resources will need to be devoted to this activity. Additional resources would be used to perform field assessments, develop collaborative relationships within countries, and where needed, directly assist in the development of TB infrastructure. Targets were adjusted in FY 2009 and FY 2010 to reflect the expected impact of the funding increase provided in the FY 2009 Omnibus.

The team overseeing the implementation of the TB changes will build relationships with collaborators, including the Department of State, CDC Division of TB Elimination, physicians performing the screening, ministries of health, and other non-governmental organizations to identify and/or develop the TB infrastructure for the medical screening.

Long-term Objective 16.5, Performance Measure 3

FY 2008 actuals will not be available until 10/1/2009 because the data set from the International Trade Administration is not available until then. CDC therefore requests that its annual reporting date for this measure be moved to October 2009 and all subsequent years.

With globalization of the world's economy the risk of translocation of infectious disease via travel and transportation is increasing. In 2006, there were 35 million individual travelers departing the United States to go overseas; these travelers took more than 63 million trips of at least one night abroad. Our ability to protect the U.S. from the introduction of infectious diseases depends at least in part on CDC's ability to educate U.S. travelers and healthcare providers about immunizations, medications, and other precautions to ensure safe and healthy travel while abroad and upon returning to the U.S. Because the highest disease risk is for travel to Africa and Asia, CDC currently focuses its outreach and educational activities on travelers to those two continents.

CDC will benefit other organizations whose responsibility is to protect travelers international corporations with employees going overseas, the State Department staff, the Peace Corps

volunteers and staff, student, missionary and volunteer organizations, etc. CDC will also benefit the primary healthcare community who will be better able to advise international travelers about safe travel.

The Division of Global Migration and Quarantine's (DGMQ) mission is to monitor, detect, and prevent the introduction and spread of communicable diseases via transportation and travel. This measure, which is designed to ensure that travelers leave the U.S. and return to the U.S. healthy, both to protect their own health and that of others, is in direct alignment with DGMQs mission.

The indicator for this measure is relative likelihood. The above ratios for Africa and Asia will be compared to travel to an area where there is a low(er) likelihood of seeking pre travel advice (Eastern Europe) to compare the relative likelihood of a traveler seeking pre travel health advice for a particular region. The result should be read as: In (year), compared to travelers to Eastern Europe, travelers to (Asia or Africa) were X times more likely to have sought pre travel advice. The numerator data for this measure is the GeoSentinel database of patients who are U.S. residents who have sought pre travel advice. The denominator is the number of U.S. travelers in International Trade Association Annual Survey of Air Travel who visit Asia and Africa.

Most efforts to date were related to production and distribution of the CDC Health Information for International Travel (The Yellow Book) and the CDC travelers health website, which is continuously being improved. For example, in 2007 and ongoing, regional travelers health advice has been tailored to country-specific advice. In addition to providing information about health measures to take directly on the website, the website and other outreach material (e.g., podcasts) also directly encourages travelers to seek individualized pre-travel advice with a medical provider.

The trend of seeking pre travel advice is increasing. However, DGMQ believes the Relative likelihood result of 49 for 2006 was an outlier, so estimates for 2007 and beyond are scaled according to the general trend from 2003 to 2005. Targets were adjusted for FY 2009 and beyond to reflect the impact of funding increases in the FY 2009 Omnibus.

Our efforts to increase the proportion of U.S. travelers to Asia and Africa seeking pre travel advice will be challenging because of annual increases in:

- The number of international travelers going abroad from the U.S.;
- Reports of introduction and spread of infectious diseases via travel and transportation due to globalization;
- Proportion of Visiting Friends and Relatives travelers: within U.S. travelers there is a subset of travelers we term travelers visiting friends and relatives (VFR travelers). VFRs are people born in an underdeveloped or developing country, who now reside in the U.S. and are returning to their country of origin to visit friends and relatives. Our data show that VFRs do not heed pre travel advice for vaccinations and antimalarial prophylaxis at the same rate as business or tourist travelers do. With the changing demographics of the U.S. population the number of VFR travelers will be increasing every year.

CDC will increase its efforts to reach and educate travelers and healthcare providers.

In addition to the website and Yellow Book CDC plans to:

- Increase outreach to State Health Departments, health insurance companies, travel industry, student travel associations, and missionary associations.
- At the end of 2007, awards were granted to two awards to two networks of travel health

clinics to study the knowledge attitudes and practices of travelers and clinicians regarding pre travel preparation. The data from these studies will help inform future outreach programs.

- CDC has in development with Michigan State University a travel medicine module for medical students and practitioners. This module will be available in FY 2009 and will be used in medical schools and as an online continuing education course.

Long-term Objective 16.5, Performance Measure 4

The majority (57 percent) of tuberculosis cases diagnosed in the United States are diagnosed in persons born outside the United States. Tuberculosis (TB) represents the largest burden of infectious disease in immigrant and refugee populations. The overseas medical examination identifies persons with tuberculosis and those at risk of having tuberculosis and in need of prompt follow-up after arrival in the United States (U.S.) Improving tuberculosis follow-up evaluation of this population is an opportunity to appropriately diagnose and treat persons with tuberculosis disease soon after they arrive in the United States and minimize secondary transmission to others. Improving the tuberculosis follow-up evaluation should contribute to decreasing the burden of tuberculosis in the United States among foreign-born populations.

CDC will benefit by fulfilling its regulatory role in appropriately informing receiving health departments of the arrival of persons with a classified tuberculosis condition, i.e., applicants for U.S. immigration who have been identified as needing a domestic evaluation for tuberculosis according to screening classifications, i.e., Class A, Class B1, Pulmonary, Class B1, Extrapulmonary, Class B2, Latent Tuberculosis Infection (LTBI) Evaluation, or Class B3, Contact Evaluation (based on new technical instructions), and assisting in the prompt evaluation and diagnosis of such persons with tuberculosis disease. U.S. state and local tuberculosis control programs will also benefit from the increased rates of stateside evaluations to better detect tuberculosis cases and prevent transmission to others, which directly benefits U.S. citizens overall.

This program is in alignment with the strategic plan of the Division of Global Migration and Quarantine (DGMQ) to promptly notify health departments when immigrants and refugees arrive with a TB classification. The effort required to implement the new changes is also consistent with the DGMQs strategic plan to build relationships across governmental and non-governmental lines to deliver quality medical screening and services to U.S.-bound immigrants and refugees.

The effort to improve rates of domestic tuberculosis evaluations is very compliant with the Institute of Medicine (IOM) recommendations made for eliminating tuberculosis. In its report, Ending Neglect, the IOM recommended that CDC improve the transmission of overseas medical information to U.S. health departments and increase stateside follow-up health evaluations. This kind of leadership role is also recommended in the IOM report on Quarantine Stations at Ports of Entry.

The denominator is the number of immigrants and refugees with a tuberculosis Class A or B condition. The numerator is the proportion of those who have a completed domestic evaluation by local or state health departments.

Immigrants arrive in the U.S. with their medical screening package, which upon arrival are reviewed by Customs and Border Protection officers. If the immigrant is classified with having an infectious disease, the package is given to DGMQ by Customs and Border Protection upon entry of the immigrant into the U.S. DGMQ then enters the information into Electronic Disease Notification (EDN). All refugee medical screening packages are given to

DGMQ by Customs and Border Protection upon the refugees arrival and these are all entered into EDN. CDC provides the information either through EDN or by mail to the state health departments.

The Division has utilized a paper, mail-based system to notify receiving health departments of the arrival of a TB class condition destined to their jurisdiction and to receive results of the follow-up health evaluations performed in the U.S. The Division is in the process of transitioning to an electronic secure data network and web based system known as Electronic Disease Notification (EDN) system. EDN will allow more timely, secure and reliable notification to the health departments and a streamlined web-based mechanism for reporting the results of the domestic health evaluations. Baseline data were determined by taking the 5-year average of the most recent data available. Currently, 31 states have implemented EDN. DGMQ is in the process of improving reporting from those states while it expands to other states.

To maintain the momentum from EDN deployment, additional staff and financial resources will need to be devoted to this activity to ensure domestic evaluations are appropriately reported. Health Department staff needs to be trained in the use of EDN, and regular follow up on patients needs to be further encouraged.

The team devoted to increasing the proportion of arriving immigrants and refugees receiving a domestic evaluation will build relationships with collaborators to enhance follow up reporting, contact tracing, and agreement for screening and treatment guidelines. Collaborators include: CDC Division of Tuberculosis Elimination, the Advisory Council for the Elimination of Tuberculosis, National Tuberculosis Controllers Association, STOP TB USA, and state and local health departments performing the domestic evaluations.

Long-term Objective 16.5, Performance Measure 5

Maintaining low mortality in imported nonhuman primates (NHPs) means they are healthier when they arrive in the U.S., thus decreasing the likelihood that people will be exposed to/become infected with zoonotic pathogens carried by NHPs. Generally, NHPs are imported for scientific research, education or exhibition. Outbreaks of serious illness can result in the euthanasia of the entire shipment, resulting in an economic loss to the importer and a potential shortage of available animals for research. For example, a shipment of 100 NHPscould be lost to research if mortality were not kept low, resulting in a substantial economic loss to the importer at approximately, $6,000 per NHP. Additionally, if a researcher purchases 20 animals to add to his 80 that are already on a long term study and the animals became ill with an infectious disease, he would lose all 100 animals.

Importing healthier animals results in less illness and death during the quarantine period and decreases the potential zoonotic disease exposure to people. NHPs can carry diseases of public health concern such as Ebola, shigella, salmonella and tuberculosis.

This measure directly benefits the biomedical medical research community by providing a healthier animal for research. It also benefits importers economically, and protects other NHP from being exposed to sick animals.

The Nonhuman Primate Import Quarantine Program has a direct link to the Division of Global Migration and Quarantine's (DGMQ) mission by enforcing regulations regarding the importation of nonhuman primates to prevent the importation of animals carrying diseases of public health concern such as Ebola, shigella, salmonella and tuberculosis.

The IOM recommendations state that overseeing the importation of nonhuman primates to ensure that the process is performed according to a protocol designed to prevent the transmission of zoonotic disease to humans if the nonhuman primates were infected should be

continued. The DGMQ NHP Import Quarantine Program is in compliance with this recommendation, as it ensures that the protocols for proper handling of imported NHP are reviewed and approved before the arrival of the animals. Routine inspections of facilities and paperwork, along with review of existing protocols, help identify potential problems in procedure or documentation. As a result, standard operating procedures (SOPs) can be changed to correct these problems before a crisis occurs. For example, during a routine inspection of a facility, it was found that the laundry of clothing worn in quarantine was not being properly disinfected before it was sent out for washing. This problem was corrected and the SOP updated before any problems could occur.

This measure is measuring annual mortality of NHPs in quarantine in U.S. importer facilities by reviewing importer records and conducting site visits to importers.

Animals are quarantined and monitored for illness for a total of 31 days. If they present with clinical signs consistent with hemorrhagic fevers such as bloody diarrhea, bloody nose, or petechial hemorrhages, they must be tested at the end of quarantine for filovirus. If any animal dies during quarantine, it must be necropsied to determine the cause of death and liver samples must be submitted for filovirus testing. During the quarantine period, all animals must test negative to three tuberculin skin tests administered at two week intervals.

In the late 1980s mortality among imported NHP was around 20 percent and importers were not provided with clear and strict guidance as to the proper shipment and keep of the animals. When DGMQ put out guidance, which continues to be refined, and implemented regular site visits to importers, mortality in imported NHP was reduced to less than one percent.

Before 1989, there were large numbers (up to 100) of registered NHP importers. In late 1989, after an outbreak of Ebola Reston in a group of imported NHPs, letters were sent to all registered importers outlining infection control requirements. DGMQ staff inspected every facility. Many importers lost their registration until they could meet the infection control requirements. As a result, the number of importers decreased with currently only 20 registered importers in the US.

Before 1989, the imported NHP mortality rate among was approximately 20 percent. After CDC instituted inspection of facilities and new infection control requirements, the mortality rate began to decrease and by 1999, the mortality rate was less than one percent. The year 1999 represents the first year in which DGMQ has published data since 1989.

The target is ambitious because to maintain this low mortality rate, registered importers must be in good compliance with CDC regulations. Sites must be visited by CDC staff at least once per year, with all protocols reviewed and violation letters sent, with follow up and monitoring to ensure violators are in compliance with CDC's requirements. A mortality rate of zero is not realistic as animals will die for a variety of reasons that are outside regulatory control. An example of this would be a NHP that died as a result of trauma, stress due to shipment, or environmental factors such as getting overheated or cold.

A programmatic challenge is CDC staffing for regular inspections of each registered importer to assure compliance with our regulations. Inspections are necessary as issues are usually identified that need correction or clarification from the importer to assure that the risk to public health is low.

To obtain future targets DGMQ will:

- Cross train CDC employees for facilities inspections;
- Review and approve importer protocols on a regular basis;

- Update CDC nonhuman primate importation regulations to clarify requirements and to address problems that were not addressed in previous guidelines issued by CDC.

Long-term Objective 16.5, Performance Measure 6

The first opportunity to detect and control imported infectious diseases is at international ports of entry. The 25 top US international airports and land borders account for about 85% of international arrivals in this country. A comprehensive communicable disease preparedness plan at such ports increases the likelihood that control will be successful. Such plans integrate the responses of all relevant agencies.

Existing plans have been developed through ongoing and oftentimes intense collaboration among a wide range of agencies, each of which would receive benefit from the plan in the event of a public health emergency at the port. The agencies include, but are not limited to: air and sea port authorities, local EMS, public health agencies at all levels, hospitals, US Department of Homeland Security (Customs and Border Protection (CBP), Transportation Security Administration (TSA), United States Coast Guard (USCG), local fire departments and law enforcement. Overall, the plans are designed to protect the U.S. population from the importation and spread of infectious diseases.

Preparedness for communicable disease emergencies at ports of entry is at the heart of DGMQs mission to control entry of infectious disease. Port preparedness plans help ensure CDC's ability to control public health emergencies.

Preparedness is central to IOM's recommendations. The IOM recommended that CDC/DGMQ strategically lead the United States in its effort to minimize the effect of imported infectious disease. These port preparedness plans represent a concrete product of CDC's leadership and partnership with local agencies.

Preparedness plans are measured according to completeness of recommended elements met; a plan is considered to have met its target when it includes at least 95 percent of recommended elements and how each port would address each issue. The issues include command and control, who will respond, assignment of responsibilities, aircraft and ship movement, care for ill passengers (where, how, by whom, how to prevent exposure and infection of others), quarantine of exposed passengers, personal protection of responders, prophylaxis, security, media relations, legal issues, and aircraft/vessel decontamination. Actual execution of these issues is remarkably complex. An ad hoc approach invites less-than-optimal outcomes, loss of the public's confidence and support, and unnecessary morbidity, mortality, and expense.

Development of plans was initiated in 2005 at which time two plans were present (they had to be revised to an updated template) when DGMQ had the minimum critical staff for this activity. In 2004, there were only 30 members of DGMQ's field staff which increased to 60 by 2005, thus allowing DGMQ to dedicate more resources to plan development. By 2008, 83 field staff at CDC's quarantine stations dedicate a portion of their time towards plan development working towards the goal of 25 port preparedness plans by FY 2015. In addition to field staff, DGMQ has initiated several activities to reach progress to date towards this goal including:

1. Each quarantine station initiated development of a plan for its port(s) in collaboration with local partners.
2. DGMQ headquarters staff has supported the individual stations by: a. Gathering and compiling plans from ports; b. Defining critical components; c. Identifying lessons learned; and d. Creating a template with 22 recommended elements to improve content and national consistency.

3. DGMQ produced and evaluated exercises of the plans at individual ports.
4. DGMQ created a Port Preparedness Team in order to focus resources on system-wide planning activities.

During FY 2008, DGMQ developed a port of entry public health emergency response plan template with sample information and text, and 22 recommended planning elements. Much has been accomplished in the development of public health emergency response plans at ports of entry. A follow up 2008 assessment of public health emergency response plans shows that 20 ports of entry where CDC quarantine stations are located (100%) do have a public health emergency response plan in place. However, only six of these ports of entry (30%) had adequately addressed all (95-100 pecent) of the recommended planning elements. DGMQ is working closely with these ports of entry to ensure that all plans reach the goal of incorporating at least 95% of all recommended elements.

Over the next 12 months, DGMQ will update and revise its quarantine station public health emergency response plan template in coordination with port of entry and community partners. Following the template plan update, quarantine stations will be asked to revise and update their port of entry response plans. During FY 2009, DGMQ will reevaluate quarantine station communicable disease response plans and provide recommendations for improvements, as needed.

Long-term Objective 16.5, Performance Measure 7

Priority one cities have the largest number of passenger volume via commercial aircraft or border crossings and are therefore at increased risk for introduction and spread of infectious diseases. Having a Memorandum of Agreement (MOA) in place allows rapid selection of a referral hospital if and when a passenger with a potentially communicable disease arrives. The MOA process ensures that the hospital has adequate facilities to care for such passengers without endangering the health of other patients or the wider community.

Airport authorities and EMS staff benefit knowing which hospital to transport an ill passenger with a communicable disease to for appropriate care. MOA hospitals benefit by being prepared to receive such patients; non-MOA hospitals benefit by not having to review an individual patients conditions before possibly determining to not care for the patient.

This measure aligns closely with the Division of Global Migration and Quarantine's (DGMQ) regulatory authority, mission and the Institute of Medicine (IOM) recommendation in that it assures that the appropriate partnerships and infrastructure exist to ensure isolation if necessary and provide care for passengers that need to be isolated in a hospital. This will prevent further spread of infectious disease into the U.S.

This measures how CDC has prepared to provide clinical care for passengers, who enter the United States with a potentially quarantinable disease or a disease of public health significance. Specifically, it describes the availability of a hospital in a port city that is capable of providing care to such passengers in a safe manner (e.g., including demonstration of isolation capabilities).

CDC worked with state health departments to identify and enlist appropriate hospitals in high priority cities.

Excellent progress was made initially because legacy hospitals could be enrolled based on the newly established Preparedness Criteria for Healthcare Facilities. Progress has slowed because new hospitals had to be identified, key regions have been unwilling to participate, and pediatric hospitals are more reluctant to agree than adult care hospitals.

The target is ambitious because many hospitals in regions yet to be covered by MOAs have been reluctant to participate in the program, and MOAs would need to be developed in areas where DGMQ does not have a physical presence, and for pediatric populations that are currently insufficiently covered. In addition, there have been very substantial changes in air and maritime travel patterns since the list of Priority 1 cities was developed in 2002. Revisions to the list are needed, further necessitating conclusion of agreements with additional hospitals.

DGMQ will establish criteria based on total travel volume, changes in travel volume including international arrivals at ports of entry, on pediatric versus adult care hospitals, and on proximity to a port of entry that may be selected for funneling in a public health emergency such as an influenza pandemic. DGMQ has to seek support from state and local health departments to establish MOAs with hospital in cities within their jurisdiction.

CDC exceeded the target of 170 hospital MOAs in priority 1 cities in FY 2008. Quarantine system expansion has allowed for growth in partnerships with state and local health departments and hospitals which contributed to CDC's success in exceeding this performance target. Targets were adjusted in FY 2009 and FY 2010 to reflect the expected impact of the funding increase provided in the FY 2009 Omnibus.

Long-term Objective 16.5, Performance Measure 8

Each year about 600 million persons cross into the United States temporarily or permanently. Each of these entries poses some risk of introduction of communicable disease. CDC's Division of Global Migration and Quarantine (DGMQ) operates quarantine stations at 20 strategically selected ports of entry that cover approximately 85 percent of U.S. bound international travelers. However, the 20 quarantine stations are currently staffed at around 50 percent capacity and DGMQ staff are not present at hundreds of ports and cannot visualize each and every person for signs of illness. DGMQ relies on conveyance operators or medical staff, the U.S. Coast Guard, and especially U.S. Customs and Border Protection (CBP) to be DGMQs eyes and ears at all U.S. entry points. The number of reports received by DGMQ is an indication of DGMQs success at forming public health partnerships with these other entities. CBP, for example, conducts passive public health surveillance on every person entering the U.S. based on DGMQ guidance and training, and plays an important role in reporting ill travelers to CDC for public health response.

The partnerships reflected in these reports offer the reporting entities better access to DGMQs expertise on issues that are of direct importance to their staff in the field. The general public benefits by the potential of limiting further disease spread from the affected individual(s) to others, by being made aware of their potential exposure risk, and by potentially receiving prophylaxis prior to disease onset after being exposed.

Increasing illness reports of arriving international travelers align directly with the division's regulatory authority and mission of preventing the introduction, transmission, or spread of communicable diseases from foreign countries into the U.S. It reflects on successfully forming partnerships with agencies and groups that have direct involvement with persons who enter the U.S., and aligns with providing leadership through training, particularly of CBP Officers in recognizing and reporting public health threats to amplify the surveillance and response capability of CDC.

This is a direct measurement of the number of illnesses reported to DGMQ. Some of this reporting is required by regulation (air and maritime conveyance operators) and some reflects formal agreements between CDC and other agencies (CBP and United States (U.S.) Coast Guard). The change in the number of reports is an indirect measure of the intensity of our efforts to work directly with these entities, whether through training, exercises,

the formation of relationships between CDC staff and individuals in the field, or formal written reminders of reporting requirements. Illness reports get noted in the Quarantine Activity Reporting System (QARS).

There were local, sporadic, and less intense activities at fewer airports to encourage reporting from CBP, but data were not recorded and analyzed systematically until the development of QARS. Prior to 2005, division activities to encourage reporting were essentially the same as what we do now (presentations and training to CBP and airlines), though at far fewer airports and in a more sporadic and less intense manner. So, we could say that the progress (especially the increase from 2005 to 2008) is a result of quarantine system expansion to 20 airports and having more staff in the field to do outreach. Having people on the aviation team nearly full time has reinforced the message to the airlines. Progress has been made in this area through the expansion of the quarantine system; building a training unit; conducting systematic, regular training at CBP training sites; forming aviation, maritime and land border teams that built stronger relationships with partners; and regularly reinforcing the reporting requirements.

These targets are ambitious because reaching them will require intense training and educational efforts from DGMQ, which is the focus of the training team in DGMQ headquarters as well as staff in the field. There are 20,000 CBP Officers working at 325 ports of entry in comparison to approximately 70 DGMQ field staff at 20 ports of entry, and only six DGMQ training staff. Several pilot projects have shown that it is difficult to induce substantial increases in reporting, because of competing priorities of CBP and that all training must be approved by CBPs Labor and Employee Relations group (Union). In addition, it is necessary for DGMQ field staff to have regular meetings with CBP and provide regular reminders to conveyance operators, EMS and other point of entry personnel in contact with passengers. Targets were adjusted in FY 2009 and FY 2010 to reflect the expected impact of the funding increase provided in the FY 2009 Omnibus.

Increasing the number of quarantine stations and staffing capacity within those stations has allowed much closer interaction between DGMQ and the partners in the field. Additional improvement will occur through continued and enhanced interaction and training between DGMQ staff and ports of entry where quarantine stations do not exist. A major challenge will be how the limited staff will enhance interactions and trainings in ports far from quarantine stations, while at the same time performing routine work at the stations and maintaining relationships with local partners. Additional challenges include competing priorities of CBP staff, high staff turn over at some ports, and a potential disincentive of conveyance operators to report illness on a conveyance.

The primary strategy towards achieving these targets will be seeking additional DGMQ field staff who will be assigned primary responsibility for liaison with partner locations distant from quarantine station. Additional strategies include leveraging state and local public health agencies to train staff of CBP, U.S. Coast Guard, etc. at sites distant from quarantine stations; placing a DGMQ trainer at the CBP Academy at the Federal Law Enforcement Training Center; and developing and providing web-based training modules to be distributed to CBP Officers in the field for refresher training.

CDC exceeded the target of 1,651 illnesses reported in FY 2008. The placement of the DGMQ trainer at the CBP Academy at the Federal Law Enforcement Training Center has been very effective. In addition to this trainer, quarantine system expansion has allowed for growth in partnerships and web-based training modules that have also contributed to CDC's success in exceeding this performance target.

Efficiency Measure 16.E.4:

An overseas medical examination, performed by more than 650 panel physicians worldwide, is required for immigrant visa and refugee status applicants, before migrating to the United States (U.S.). New immigrants and refugees arrive in the United States each year with this medical examination documentation. For immigrants and refugees arriving with a Class A/B medical condition, such as tuberculosis (TB), DGMQ notifies the local/state health department of their arrival to ensure medical follow up and electronically submit their medical information. This information is stored in the Electronic Disease Notification (EDN) system. The EDN system is replacing an untimely hard-copy mailing system prone to loss of information that used the U.S. postal service. Complete information from the thorough medical screening is entered for all refugees arriving in the U.S. each year (approximately 70,000), and for immigrants only those records indicating Class A/B conditions are being entered (approximately 20,000 per year).

The CDC will benefit from this measure by fulfilling its regulatory role of notifying the state or local health department of newly arriving migrants with a notifiable condition, and by preventing the importation and spread of infectious diseases and other conditions of public health significance into the U.S. by these groups. The system already has a fully functional tuberculosis (TB) module that is used by 31 states and plays a significant role in enhancing TB control and prevention efforts among arriving immigrants and refugees. EDN will continue planning and expansion to include additional modules for HIV, STDs, and other health conditions of public health importance. In addition, the U.S. taxpayers will benefit because the money saved through EDN can be applied to programmatic efforts, rather than administration / infrastructure.

This program is directly aligned with the strategic goal of the Division of Global Migration and Quarantine (DGMQ) to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the United States. The EDN system will achieve this goal by providing a system that is reliable, timely and secured. This will enable health officials to quickly receive information that requires follow-up, provide medical treatment and evaluate the effectiveness of the follow up of immigrants and refugees with suspect TB and prevent the spread of infections diseases.

This measure is measuring the operating costs the cost of using an electronic system in a centralized location at the CDC headquarters, compared to the previous notification method using the paper copy system or an electronic system that was decentralized at the quarantine stations. Operating costs are measured in personnel costs (man hours) and equipment costs. Cost estimations are based on historical data and anticipated volume based on projections.

In the past, all immigrants and refugee data were entered into the old Information on Migrant Population (IMP) system. Data entry of alien data into the IMP system included a very limited number of data fields for alien demographics and classification.

With the development on EDN, the number of data fields entered into EDN has increased from only entering the 'Demographics' and classification' sections on the Department of State's Medical Examination Form (DS 2053) to entering information for four complete forms (Medical Examination - DS 2053, Chest X-Ray Worksheet DS 3024, Immunization Worksheet - DS 3025, and Medical History DS - DS 3026),. including information on the medical examination, chest x-ray, immunization record and medical history. The package is also scanned into EDN to allow the state health department to refer to a copy of the original medical package.

Furthermore, the EDN system has demonstrated the incremental improvement in processing time and data quality compared to the old notification method including: 1) processing time - the electronic notification is expected to significantly reduce the notification time compared to the

old system where information was sent via mail. Prior to EDN, it often took one-two weeks to notify the states from the moment the alien arrived to the U.S. and, at times, even several weeks. With the EDN system, for records transmitted via the IOM interface, it is expected that the notification time will be reduced to as little as three-five days, and for all other records that are manually entered into EDN (not via the Institute of Medicine (IOM) interface), it is expected that the notification time will be reduced to seven-ten days. The majority of records will be transmitted via the IOM interface and therefore major time savings will be realized; 2) data quality - the EDN system includes validation rules that detect discrepancies on the medical forms. This provides the capability of DGMQ to monitor and improve the quality of the overseas assessment by feeding this information into the Quality Assessment Program.

Prior to EDN, DGMQ used the IMP system which is paper based. The IMP system was implemented in eight quarantine stations. Each station had staff that was dedicated to do IMP notifications.

Switching from a paper-based to an electronic system, EDN was initially implemented in a few selected quarantine stations whereas the rest were using IMP. The total number of quarantine stations using either IMP or EDN has gradually increased during 2006 and 2007 and resulted in the need to hire additional staff to enter the medical records for the arriving immigrants/refugees with the need to also duplicate equipment purchases and maintenance at each of the selected quarantine stations.

Centralization of the data entry function - EDN is in the process of centralizing the data entry function for all quarantine stations. This centralization will eliminate the need to keep full time personnel in each one of the 20 quarantine stations. This change will also reduce the workload processing at ports of entry, streamline the data entry process and eliminate networking infrastructure gaps. It will also result in cost savings and improve quality control. The data entry function is already performed for seven quarantine stations at the CDC headquarters.

Integration with IOM - DGMQ has recently completed an 18 month initiative in collaboration with the International Organization of Migration (IOM) to create an interface between EDN and IOMs Migrant Management and Operational Service (MiMOSA) information system using HL7 messaging standards.

Application redesign The EDN system has undergone a complete application redesign to accommodate increased information capacity in preparation for a nationwide roll-out and future expansion to include other disease modules.

Significant progress has been made in the following activities:

- Switching from a paper-based to an electronic database system this effort is saving substantial staff time in the field, and improves the timeliness of notification to the State Health Departments, which in turn gives them an increased opportunity to successfully contact newly arrived immigrants and refugees at their first arrival destination in the U.S. It also allows health departments to inform other health departments of secondary migration (within the U.S.) of immigrants and refugees with TB conditions within the U.S., and provides them with an electronic system to record and evaluate the outcome of domestic follow-up examinations.
- Centralization of the data entry function - The centralized data entry function at the CDC headquarters is expected to significantly reduce the personnel costs compared to a decentralized model and facilitate the monitoring of the system from a management and technical support perspective. By monitoring the system performance, DGMQ staff can detect, identify, and include needed improvements into EDN before extending its use to

additional states and eventually nationwide. Because data entry and processing for EDN is being centralized with dedicated staff, performance consistency, quality and timeliness have significantly improved.

- Integration with the International Organization of Migration (IOM) DGMQ has collaborated with the International Organization of Migration (IOM) to create an interface between EDN and IOMs Migrant Management and Operational Service information system using HL7 messaging standards. IOM electronically enters information for approximately 85 percent of all refugees entering the U.S. directly at their field stations (into their database). This information is then electronically transmitted to the CDC through an electronic interface. This introduces a significant improvement in the timeliness of the notification process to the state/local health jurisdictions.

While the costs for the transition from IMP in FY 2005 to EDN in FY 2006 show an initial increase, this is due to the small number of quarantine stations that were participating in FY 2005 (eight only) compared to the increased number of stations during FY 2006, as well as the set up costs of EDN. Cost-savings with a completely centralized system will include data entry of a substantially larger volume of data per immigrant/refugee package to the decentralized system with a smaller number of staff. Health Departments will be able to reach more patients in total and sooner before they may have moved or have become infectious and in turn exposed others.

The efficiency measurement model illustrates the anticipated cost savings despite the significant increase of time spent on data entry, scanning and medical review to ensure quality.

The EDN team rolled out the EDN system to all states during FY 2008. Currently there are 31 states that are already using EDN. The objective is to bring everyone on board and retire the old system that is still used by the states that are not yet on EDN.

Integration with IOM - Collaboration with IOM is expected to continue next year for newly developed forms/modules and a new focus on electronically submitting immigrants medical data.

Additional functionality and new modules The EDN TB module has gradually increased its scope. Every few months a new system release is deployed, providing additional features and enhanced functionality. Additional U.S. Department of State forms, reports, letters, search capability, and business rules have been added, allowing the user to rely on the system for TB control-related activities. DGMQ is currently in the planning phase to add additional modules to the EDN system as well as reporting and analysis capability and integration to other systems.

Progress has been made with regard to this measure. Of 20 DGMQ airports and land borders (that account for about 80-85 percent of international air arrivals), 18 have plans at present. Six of 18 plans have been revised extensively since creation of the plan template and contain more than95 percent of the recommended elements. In total 9 of 18 plans address more than 95 percent of the elements.

These targets are ambitious because a complete plan requires consensus among a large number of stakeholders. CDC does not have authority over any of these entities. An operational plan requires that some of these stakeholders assume substantial responsibilities that would incur large costs (staff, financial, etc) in the event the plan was actually used. Thus, the process of reaching a final plan that is meaningful is long and slow, taking as long as three years to reach even less than complete status. Completion of plans at additional ports will be especially challenging because they are located distant from CDC quarantine stations, reducing the intensity of contact between CDC staff and local agencies. In addition, these plans are

dynamic. They are continuously revised in response to changing federal policy and to the lessons learned when the plans are exercised (all plans are exercised). The 95 percent criterion was chosen because of the constant revision of the recommended elements; without a five percent buffer, few plans could be considered complete at any point in time because they require constant updating.

To achieve future targets we will continue our present strategy of constant discussion with local partners to move the process forward, and substantial support nationally from contractors and the Port Preparedness Team. Expand our activities to ports of entry distant from current CDC quarantine stations. Continue to work at the federal interagency level to resolve national policy issues that affect planning at the local level (e.g., funneling of international aircraft to select airports in the event of an influenza pandemic).

CDC exceeded its target in FY 2008 because of success in implementing changes to Electronic Disease Notification (EDN) system: 1) Information on Migrant Population (IMP) used in selected quarantine stations and 2) EDN was centralized at CDC headquarters in Atlanta. In the future, CDC will complete the centralization process for all quarantine stations and retire IMP. This will result in future cost savings.

Strategic National Stockpile

Measure	FY	Target	Result
16.E.2: Dollars saved per $1 invested in the Food and Drug Administration's (FDA) Shelf Life Extension Program (SLEP) for available projects. *(Efficiency)*	*2010*	$28	Dec 31, 2010
	2009	$28	Dec 31, 2009
	2008	$28	$10 (Target Not Met)
	2007	$26	$13 (Target Not Met)
	2006	$24	$20 (Target Not Met)
	2005	Baseline	$22

Measure	Data Source	Data Validation
16.E.2	CDC's SNS analysis of product Life Cycle Tools.	CDC's SNS coordinates with the FDA and maintains an internal tracking system for identification of products that may be eligible for the SLEP.

Efficiency Measure 16.E.2:

The performance target for FY 2006 was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance. CDC will continue to partner with the U.S. Food and Drug Administration (FDA) on the Shelf Life Extension Program (SLEP). The return on investment (ROI) calculation for Strategic National Stockpile (SNS) participation in SLEP is based on each dollar spent on SLEP costs (e.g., testing, shipping, re-labeling). For FY 2008, return on investment (ROI) was 10 dollars for each dollar spent on SLEP costs. Cost avoidance projections do not reflect fluctuations in product handling costs or the actual amount of product eligible for FDA SLEP program. In order to capture the true efficiency gained by participating in the program, the focus should be on the actual ROI. CDC will continue to pursue cost avoidance savings in association with participation in the SLEP program in FY 2009. It is important to note that the performance targets reflect incremental progress and may not accurately capture the true efficiency gained by participating in the FDA SLEP program. For example, actual cost avoidance figures may be much higher or lower than targets due to the volume of stockpiled products eligible for SLEP during the planning period. Actual cost avoidance projections are also affected by fluctuation in handling costs.

Measure	FY	Target	Result
Long Term Objective16.6: Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.			
16.6.3: Number of treatments/prophylaxis for the appropriate response to known terrorist threats or public health emergencies for chemical, biological, radiological and nuclear threats in millions. *(Outcome)*	*2010*	N/A	N/A
	2008	2.3, 60, .17	N/A
	2003	Baseline	0.2, 1.4, 0.4
16.6.4: The number of successful annual exercises that test response to multiple events with a 12-hour response time. *(Outcome)*	*2010*	1	Dec 31, 2010
	2009	1	Dec 31, 2009
	2008	1	1 (Target Met)
	2007	1	1 (Target Met)
	2006	1	1 (Target Met)
	2005	Baseline	1
16.6.5: Number of trained and ready Technical Advisory Response Units (TARU) for response to multiple events. *(Output)*	*2010*	7	Dec 31, 2010
	2009	7	Dec 31, 2009
	2008	9	9 (Target Met)
	2007	7	6 (Target Not Met)
	2006	6	6 (Target Met)
	2005	Baseline	5
16.6.6: Percentage of inventory discrepancies that are reduced by using quality inventory management systems. *(Outcome)*	*2010*	< 5%	Dec 31, 2010
	2009	< 5%	Dec 31, 2009
	2008	< 5%	0.9% (Target Exceeded)
	2007	< 5%	24.3% (Target Not Met)
	2006	< 5%	0.3% (Target Exceeded)
	2005	Baseline	6%

Measure	Data Source	Data Validation
16.6.3 - 16.6.6	DSNS	DSNS maintains internal tracking systems to monitor its ability to deliver critical medical assets in a national emergency. A Stockpile Resource Planning (SRP) database and inventory system is used to track and validate stockpiled material.

Long-term Objective 16.6, Performance Measure 3

The Division of Strategic National Stockpile (DSNS) in CDC's Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) went through the program assessment process in CY 2005. Since that time, DSNS has undergone internal strategic planning processes first at the CDC Coordinating Center level and then a cascaded planning process at the program level. These strategic planning processes have complimented the ongoing internal CDC Goals Action Planning. Also since then, the Pandemic and All Hazards Preparedness Act provides guidance for the development of medical countermeasure acquisition targets that will impact the Strategic National Stockpile (SNS). Measure 3 will be particularly impacted as acquisition targets are reassessed and set by the newly formed Biomedical Advanced Research and Development Authority (BARDA).

Long-term Objective 16.6, Performance Measure 4

CDC has conducted one full scale anthrax exercise each year from FY 2005 through FY 2008, meeting the targets for this measure. CDC conducted a full scale anthrax exercise at the end of FY 2008 to test its response operations and validate the ability to respond to multiple public health emergencies in a timely manner. The annual full scale exercise to fulfill this measure requirement allowed the Strategic National Stockpile (SNS) to test a twelve-hour response capability with more than one event. CDC plans to conduct annual exercises in FY 2009 and FY 2010 to meet future targets.

Long-term Objective 16.6, Performance Measure 5

The performance target for the following measures for FY 2007 was set at an approximate target level, and the deviation from that level is slight. There was no effect on overall program or activity performance.

As a result of a program evaluation, the Division of Strategic National Stockpile (DSNS) in The Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) developed new performance measures. In FY 2008, CDC met its goal of nine trained and ready Technical Advisory Response Units (TARU) for response to multiple events. At this time, TARU capacity remains at the target level. The challenge ahead will continue to be sustaining the current teams and finding innovative ways to build additional teams and develop supporting response plans. The added mission of deploying Federal Medical Stations (FMS) when needed with CDC personnel will have an impact on the programs future ability to increase the number TARUs. Earlier this FY, CDC reduced its TARU target from nine in FY 2008 to seven in FY 2009 and projecting sustainment of those seven teams for FY 2010. As a result of an evaluation of the capability to sustain current emergency response systems and meet growth targets, CDC implemented more strategic response plans and team configurations resulting in program improvement and nine teams.

Long-term Objective 16.6, Performance Measure 6

As a result of the program assessment and Strategic National Stockpile (SNS) planning process, CDC developed performance measures to track inventory discrepancies. The discrepancy percentage represents the total number of instances where the locations for items identified for that quarter's inventory do not exactly match with the inventory report for that item. In fiscal year 2006, inventory discrepancies were reduced to 0.33 percent, exceeding the target of less than five percent. In fiscal year 2007, discrepancies were at the rate of 24.33 percent. This large discrepancy rate was caused by a single clerical error and no SNS items were lost as a result of that error. As of the fourth quarter of fiscal year 2008, the SNS discrepancy target has been met with a 0.88 percent actual rate. Over the past three fiscal years, systems and inventory management processes have been implemented to improve program performance, resulting in a more consistent accuracy rate. Future strategies are being explored to introduce electronic data collection systems to enhance inventory accuracy and accountability.

OVERVIEW OF PERFORMANCE

STATEMENT OF MISSION

CDC's Mission: To promote health and quality of life by preventing and controlling disease, injury, and disability.

When the Centers for Disease Control and Prevention (CDC) was founded in 1946, the major threats to public health involved infectious diseases. Today, as a leading public health agency in the United States and abroad, CDC faces contemporary urgent health threats like terrorism and SARS in addition to fighting less sensational public health realities such as obesity and heart disease. Accordingly, CDC's mission and scope have evolved to face the broad range of public health threats and challenges of the 21st Century. CDC strives to maintain a balanced portfolio of health protection activities, emphasizing both the urgent threats we must be prepared to face tomorrow and the urgent realities we are confronting today.

The world today is more interconnected than ever, necessitating a new broader approach to public health. CDC collaborates with a diverse set of local, state, and international partners to prevent, monitor, investigate, and resolve the wide range of complex health issues facing the United States and global communities. CDC also recognizes the importance of providing and delivering health information directly to citizens when, where, and how they need it most. CDC's scientific expertise and workforce remains committed to basing all public health decisions on the highest quality of scientific data and research—thus assuring the trust given to us by our partners and individuals.

The Agency's work directly supports the HHS strategic plan and the Administration's priorities, transforming public health to ensure that its science and programs continue to secure the homeland, improve the human condition around the world, and protect the lives of Americans. As diligent stewards of the public dollars with which we are entrusted each year, CDC focuses its efforts to accelerate health impact, reduce health disparities, and protect people from current and imminent health threats.

STRATEGIC PLAN

CDC has refocused its efforts, reflected in its Health Protection Goals, to accelerate health impact, reduce health disparities, and protect people from current and imminent health threats. These goals are organized in four thematic areas:

- **Healthy People in Every Stage of Life** – CDC is customizing science and programs in the areas where it can accelerate health impact by focusing on Americans' health protection needs during each stage of life. Recognizing that many health problems that occur in adulthood can be prevented by mitigating risk factors early in life, the life stage goals take an early and lifelong approach to prevention. By using the unique routes by which people at various stages of life receive health information most effectively, CDC will improve its ability to develop targeted prevention-oriented health solutions.
- **Healthy People in Healthy Places** – CDC is exploring the potential for accelerating health impact by improving the quality and safety of the places where Americans live, work, learn, and play. By bringing CDC science and programs together to focus on these environments, we will ensure that we are doing everything we can to improve the lives and health of Americans.
- **People Prepared for Emerging Health Threats** – CDC has shifted the strategic focus of its preparedness investments from building infrastructure to improving the speed at which the agency and its partners respond to public health emergencies. Our preparedness goals are designed to directly measure how quickly we prevent, detect, investigate, and control public health emergencies resulting from natural disasters, terrorism, infectious disease, and occupational and environmental threats. CDC is using scenario analysis to identify key factors for improving response time. The first scenarios to be addressed include influenza, anthrax, plague, emerging infections, and toxic chemical and radiation exposure.
- **Healthy People in a Healthy World** – The pace at which global threats are emerging is accelerating with increasing international travel and the interconnectivity of national economies. Recognizing the growing health, economic, and political consequences of global health threats, CDC is working with American and international partners to dramatically increase the scale and effectiveness of its efforts to protect Americans at home and abroad and to promote health globally.

CDC is now a more integrated, adaptable, and responsive agency. Six strategic imperatives have been identified to support the effective implementation of our goals and 98 percent of the agency's budget is aligned with agency goals and strategic imperatives. CDC is developing goal action plans to link, leverage, and coordinate CDC's ongoing activities and further align resources with priorities. Coordinating Centers and Offices are structured to improve internal and external coordination and leveraging of resources to achieve these priorities. CDC's National Centers conduct and support the highest quality science that drives the agency's work. As always, CDC's program Divisions and National Centers will be responsible for planning and implementing activities and projects, overseeing their quality, and measuring their results. The agency's goal action planning and implementation cycle is aligned with the federal budget cycle and CDC will continue to be guided by Administration and Congressional intent to ensure that categorical disease dollars target the appropriate activities. However, the timing of the goals action planning will allow CDC to gather input from partners, stakeholders, advisory committees, and the public before the annual budget cycle begins. Over time, CDC's Health Protection Goals will allow CDC to objectively measure and demonstrate the impact of our health

protection activities and will inform the public, the Administration, partners, and stakeholders about the state of the public's health.

Supporting HHS Strategic Goals and Objectives

As an operating division of HHS, CDC makes significant contributions to the development and advancement of the HHS Strategic Plan 2007–2012. As our Health Protection Goals continue to develop, they will continue to be informed by the strategic goals and objectives of the Department and the Secretary's Priorities.

CDC's Health Protection Goals strategically align with and directly support the four HHS Strategic Goal areas. Each of our overarching Health Protection Goals and their respective objectives support:

- Preventing the spread of infectious diseases (HHS Strategic Objective 2.1);
- Protecting the public against injuries and environmental threats (HHS Strategic Objective 2.2);
- Addressing the needs, strengths, and abilities of vulnerable populations (HHS Strategic Objective 3.4);
- Conducting and overseeing applied research to improve health and well-being (HHS Strategic Objective 4.3); and,
- Communicating and transferring research results into clinical, public health, and human service practice (HHS Strategic Objective 4.4).

In addition, the overarching Healthy People in Every Stage of Life goals directly support:

- Increasing health care availability and accessibility (HHS Strategic Objective 1.2);
- Promoting and encouraging preventive health care, including mental health, lifelong healthy behaviors, and recovery (HHS Strategic Objective 2.3);
- Promoting the economic independence and social well-being of individuals and families across their lifespan (HHS Strategic Objective 3.1); and,
- Protecting the safety and fostering the well-being of children and youth (HHS Strategic Objective 3.2).

The overarching Healthy People in Healthy Places goals directly support:

- Improving health care quality, safety, cost, and value (HHS Strategic Objective 1.3);
- Protecting the safety and fostering the well-being of children and youth (HHS Strategic Objective 3.2); and,
- Encouraging the development of strong, healthy, and supportive communities (HHS Strategic Objective 3.3).

The overarching People Prepared for Emerging Health Threats goals and Healthy People in a Healthy World goals directly support preparing for and responding to natural and man-made disasters (HHS Strategic Objective 2.4).

The overarching Healthy People in a Healthy World goals also expand CDC's existing life stages goals to promote health globally in support of HHS Strategic Objectives 1.2, 2.3, 3.1, and 3.2.

The following tables illustrate the strategic alignment between CDC's Health Protection Goals and HHS strategic goals and objectives.

Supporting Healthy People 2010 National Health Objectives

CDC fully supports Healthy People 2010, and CDC's Health Protection Goals are designed to make CDC and our partners stronger contributors to the success of Healthy People 2010. The overarching Healthy People in Every Stage of Life and Healthy People in Healthy Places goals directly support the goals and objectives for Healthy People 2010. Consequently, Healthy People 2010 measures will support many of the objectives within the CDC Health Protection Goals. The overarching People Prepared for Emerging Health Threats goals address crucial public health issues that are not priorities in Healthy People 2010. CDC is actively participating in HHS' efforts to plan for Healthy People 2020. Through this engagement and CDC's integration of Healthy People 2010 measures into our strategic Health Protection Goals Action Plans, the Agency is strategically aligned with, and responsive to, the health objectives of the nation. The CDC objectives for the four overarching goals—Healthy People in Every Stage of Life, Healthy People in Healthy Places, People Prepared for Emerging Health Threats, and Healthy People in a Healthy World—lead to several sample objectives that are in full support of both Healthy People 2020 and the CDC Health Protection Goals.

LINKS TO HHS AND CDC STRATEGIC PLANS

	CDC STRATEGIC GOALS			
	People	Places	Preparedness	Global Health
HHS STRATEGIC GOALS				
GOAL 1: Improve the safety, quality, affordability and accessibility of health care, including behavioral health care and long-term care.	**X**	**X**	**-**	**X**
1.1 Broaden health insurance and long-term care coverage.	-	-	-	-
1.2 Increase health care service availability and accessibility.	X	-	-	X
1.3 Improve health care quality, safety, cost and value.	-	X	-	-
1.4 Recruit, develop and retain a competent health care workforce.	-	-	-	-
GOAL 2: Prevent and control disease, injury, illness and disability across the lifespan, and protect the public from infectious, occupational, environmental and terrorist threats.	**X**	**X**	**X**	**X**
2.1 Prevent the spread of infectious diseases.	X	X	X	X
2.2 Protect the public against injuries and environmental threats.	X	X	X	X
2.3 Promote and encourage preventive health care, including mental health, lifelong healthy behaviors and recovery.	X	-	-	X
2.4 Prepare for and respond to natural and man-made disasters.	-	-	X	X
GOAL 3: Promote the economic and social well-being of individuals, families and communities.	**X**	**X**	**X**	**X**
3.1 Promote the economic independence and social well-being of individuals and families across the lifespan.	X	-	-	X
3.2 Protect the safety and foster the well-being of children and youth.	X	X	-	X
3.3 Encourage the development of strong, healthy and supportive communities.	-	X	-	-
3.4 Address the needs, strengths and abilities of vulnerable populations.	X	X	X	X
GOAL 4: Advance scientific and biomedical research and development related to health and human services.	**X**	**X**	**X**	**X**
4.1 Strengthen the pool of qualified health and behavioral science researchers.	-	-	-	-
4.2 Increase basic scientific knowledge to improve human health and development.	-	-	-	-
4.3 Conduct and oversee applied research to improve health and well-being.	X	X	X	X
4.4 Communicate and transfer research results into clinical, public health and human service practice.	X	X	X	X

ADDITIONAL ITEMS

FULL COST TABLE

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
HHS Strategy Goal 1				
HHS Strategy Goal 1.3				
INFECTIOUS DISEASES				
Preparedness, Detection, and Control of Infectious Diseases		**$18.6**	**$19.8**	**$20.0**
4.1	Goal 1	$1.4	$1.5	$1.5
4.1.1	*Measure 1*	$0.3	$0.3	$0.3
4.2	Goal 2	$17.3	$18.4	$18.5
4.2.1	*Measure 1*	$1.2	$1.3	$1.3
ENVIRONMENTAL HEALTH AND INJURY				
Environmental Health		$6.4	$7.5	$7.3
10.1	Goal 1	$6.4	$7.5	$7.3
10.1.3	*Measure 3*	$6.4	$7.5	$7.3
	Sub-total	***$25.0***	***$27.4***	***$27.3***
HHS Strategy Goal 2				
HHS Strategy Goal 2.1				
INFECTIOUS DISEASES				
Immunization and Respiratory Diseases [1]		**$3,574.8**	**$4,169.5**	**$4,115.3**
Immunization Grant Program		*$3,406.5*	*$3,992.7*	*$3,938.6*
1.1	Goal 1[1]	$1,684.9	$1,973.3	$1,946.2
1.1.1	*Measure 1*	$168.5	$197.3	$194.6
1.1.2	*Measure 2*	$25.3	$29.6	$29.2
1.1.3	*Measure 3*	$25.3	$29.6	$29.2
1.2	Goal 2[1]	$1,684.9	$1,973.3	$1,946.2
1.2.1	*Measure 1*	$463.4	$542.7	$535.2
1.2.2	*Measure 2*	$42.1	$49.3	$48.7
1.3	Goal 3	$36.6	$46.1	$46.1
1.3.1	*Measure 1*	$0.9	$1.4	$1.4
1.3.2	*Measure 2*	$0.9	$1.4	$1.4
1.4	Goal 4	N/A	N/A	N/A
1.4.1	*Measure 1*	N/A	N/A	N/A
Influenza		*$168.4*	*$176.8*	*$176.8*
1.1	Goal 1	$168.4	$176.8	$176.8
1.1.1	*Measure 1*	$37.9	$39.8	$39.8
HIV/AIDS, STD and TB Prevention		**$824.8**	**$923.1**	**$949.8**

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
HIV/AIDS, Research and Domestic		*$780.6*	*$873.8*	*$899.2*
2.1	Goal 1	$470.5	$526.7	$542.0
2.1.1	*Measure 1*	$470.5	$526.7	$542.0
2.1.2	*Measure 2*	$2.0	$2.2	$2.3
2.1.3	*Measure 3*	$240.4	$269.1	$276.9
2.1.4	*Measure 4*	$98.3	$110.1	$113.3
2.1.5	*Measure 5*	$49.2	$55.0	$56.6
2.1.6	*Measure 6*	$21.2	$23.8	$24.4
2.1.7	*Measure 7*	$17.5	$19.6	$20.2
2.1.8	*Measure 8*	$17.5	$19.6	$20.2
2.2	Goal 2	$30.9	$34.6	$35.6
2.2.1	*Measure 1*[2]	$2.0	$2.3	$2.3
2.2.2	*Measure 2*	$2.0	$2.3	$2.3
2.3	Goal 3	$123.7	$138.5	$142.5
2.3.1	*Measure 1*[2]	$123.7	$138.5	$142.5
2.3.2	*Measure 2*	$123.7	$138.5	$142.5
2.4	Goal 4	$132.6	$148.4	$152.7
2.4.1	*Measure 1*[2]	$132.6	$148.4	$148.4
2.4.2	*Measure 2*	$66.2	$74.1	$76.2
2.4.3	*Measure 3*	$132.6	$148.4	$152.7
2.5	Goal 5	$22.9	$25.7	$26.4
2.5.1	*Measure 12*	$17.4	$19.5	$20.0
2.5.2	*Measure 2*	$5.6	$6.2	$6.4
2.5.3	*Measure 3*	$17.4	$19.5	$20.0
2.5.4	*Measure 4*	$5.6	$6.2	$6.4
Viral Hepatitis		*$0.4*	*$0.1*	
2.6	Goal 6	$0.4	$0.4	$0.4
2.6.1	*Measure 1*	$0.1	$0.1	$0.1
2.6.2	*Measure 2*	$0.1	$0.1	$0.1
2.6.3	*Measure 3*	$0.1	$0.2	$0.2
2.6.4	*Measure 4*	$0.0	$0.0	$0.0
SexuallyTransmitted Diseases		*$22.8*	*$25.6*	*$26.3*
2.7	Goal 7	$22.8	$25.6	$26.3
2.7.1	*Measure 1*	$13.0	$14.6	$15.0
2.7.2	*Measure 2*	$4.1	$4.6	$4.7
2.7.3	*Measure 3*	$4.6	$5.1	$5.3
2.7.4	*Measure 4*	$4.3	$4.9	$5.0
2.7.5	*Measure 5*	$8.7	$9.7	$10.0

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
2.7.6(a)	*Measure 6(a)*	$6.2	$6.9	$7.1
2.7.6(b)	*Measure 6(b)*	$1.6	$1.8	$1.8
2.7.7	*Measure 7*	-	-	-
2.7.8	*Measure 8*	$0.9	$1.0	$1.1
Tuberculosis		*$21.1*	*$23.6*	*$24.3*
2.8	Goal 8	$21.1	$23.6	$24.3
2.8.1	*Measure 1*	$150.3	$23.6	$24.3
2.8.2	*Measure 2*	$6.7	$7.5	$7.7
2.8.3	*Measure 3*	$1.9	$2.1	$2.2
2.8.4	*Measure 4*	$0.9	$1.0	$1.0
Zoonotic, Vector-Borne, and Entric Diseases		**$35.7**	**$37.2**	**$36.2**
3.1	Goal 1	$35.7	$37.2	$36.2
3.1.1	*Measure 1*	$21.7	$22.6	$21.4
GLOBAL HEALTH				
Global Health - GAP		**$100.7**	**$103.2**	**$105.8**
13.A.1	Goal 1	$65.7	$67.3	$62.1
13.A.1.1	*Measure 1*	$7.9	$8.1	$7.5
13.A.1.2	*Measure 2*	$4.6	$4.7	$4.3
13.A.1.3	*Measure 3*	$5.9	$6.1	$5.6
13.A.1.4	*Measure 4*	$4.6	$4.7	$4.3
13.A.2	Goal 2	$35.0	$35.9	$43.7
13.A.2.1	*Measure 1*	$4.2	$4.3	$5.2
13.A.2.2	*Measure 2*	$2.5	$2.5	$3.1
13.A.2.3	*Measure 3*	$3.2	$3.2	$3.9
13.A.2.4	*Measure 4*	$2.5	$2.5	$3.1
Global Health - Immunization		**$100.7**	**$103.2**	**$105.8**
13.B.1	Goal 3	$70.1	$71.8	$73.6
13.B.1.1	*Measure 1*	$10.4	$8.8	$8.8
13.B.1.2	*Measure 2*	$3.0	$3.8	$3.8
13.B.1.3	*Measure 3*	-	-	-
13.B.2	Goal 4	$30.7	$31.4	$32.2
13.B.2.1	*Measure 1*	$2.5	$2.6	$2.6
13.B.2.2	*Measure 2*	$0.4	$0.4	$0.4
Global Health - Malaria		**$109.5**	**$109.5**	**$109.5**
13.C.1	*Goal 5*	$109.5	$109.5	$109.5
13.C.1.1	*Measure 1*	$27.4	$27.4	$27.4
13.C.1.2	*Measure 2*	$16.4	$16.4	$16.4
13.C.1.3	*Measure 3*	$10.9	$10.9	$10.9
TERRORISM				

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
16.5	Preparedness Goal 5	$11.5	$11.8	$12.0
16.5.1	*Measure 1*	N/A	N/A	N/A
16.5.2	*Measure 2*	$3.7	$3.8	$3.8
16.5.3	*Measure 3*	$3.8	$3.9	$3.9
16.5.4	*Measure 4*	$2.8	$2.9	$2.9
16.5.5	*Measure 5*	$1.2	$1.2	$1.2
	Sub-total	***$4,769.0***	***$5,469.5***	***$5,446.1***
HHS Strategy Goal 2.2				
ENVIRONMENTAL HEALTH AND INJURY				
Environmental Health		**$110.8**	**$131.1**	**$127.5**
10.1	Goal 1	$8.5	$10.1	$9.8
10.1.1	*Measure 1*	$8.5	$10.1	$9.8
10.2	Goal 2	$102.3	$121.0	$117.7
10.2.1	*Measure 1*	-	-	-
10.2.2	*Measure 2*	$42.8	$50.6	$49.2
Injury Prevention and Control		**$148.1**	**$159.9**	**$160.6**
11.1	Goal 1	$109.6	$118.3	$118.8
11.1.1	*Measure 1*	$18.6	$20.1	$20.2
11.1.2	*Measure 2*	$23.5	$25.3	$25.4
11.2	Goal 2	$38.5	$41.6	$41.7
11.2.1	*Measure 1*	$0.7	$0.7	$0.8
11.2.2	*Measure 2*	$0.3	$0.3	$0.3
11.2.3	*Measure 3*	$0.3	$0.3	$0.3
OCCUPATIONAL SAFETY AND HEALTH				
12.1	Goal 1	$270.5	$264.1	$257.4
12.1.3	*Measure 3*	$270.5	$264.1	$257.4
12.2	Goal 2	$14.4	$14.1	$13.7
12.2.2	*Measure 2*	$14.4	$14.1	$13.7
12.2.3	*Measure 3*	N/A	N/A	N/A
	Sub-total	***$543.8***	***$569.2***	***$559.2***
HHS Strategy Goal 2.3				
HEALTH PROMOTION				
Chronic Disease Prevention and Health Promotion		**$708.5**	**$752.1**	**$751.6**
Cancer				
5.1	Goal 1	$317.0	$336.5	$336.3
5.1.1	*Measure 1*	$119.2	$126.5	$126.4
5.1.2	*Measure 2*	$119.2	$126.5	$126.4
5.1.3	*Measure 3*	$119.2	$126.5	$126.4

FY 2010 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION SUMMARY OF FULL COST (DOLLAR IN MILLIONS)				
Unique ID	**Performance by HHS Strategy Goals and Performance Area**	**FY 2008**	**FY 2009**	**FY 2010**
5.1.4	*Measure 4*	$79.6	$84.5	$84.4
Tobacco				
5.2	Goal 2	$102.6	$109.0	$108.9
5.2.1	*Measure 1*	$102.6	$109.0	$108.9
5.2.2	*Measure 2*	$82.1	$87.2	$87.1
Diabetes				
5.3	Goal 3	$79.0	$83.9	$83.8
5.3.1	*Measure 1*	$39.5	$41.9	$41.9
5.3.2	*Measure 2*	$39.5	$41.9	$41.9
Heart Disease and Stroke				
5.4	Goal 4	$69.0	$73.3	$73.2
5.4.1	*Measure 1*	$69.0	$73.3	$73.2
5.4.2	*Measure 2*	$34.5	$36.6	$36.6
5.4.3	*Measure 3*	$34.5	$36.6	$36.6
Nutrition and Physical Activity				
5.5	Goal 5	$50.0	$53.0	$53.0
5.5.1	*Measure 1*	$25.0	$26.5	$26.5
5.5.2	*Measure 2*	$50.0	$53.0	$53.0
School Health				
5.6	Goal 6	$90.8	$96.4	$96.4
5.6.1	*Measure 1*	$21.8	$23.1	$23.1
5.6.2	*Measure 2*	$36.8	$39.1	$39.0
5.6.3	*Measure 3*	$17.0	$18.0	$18.0
5.6.4	*Measure 4*	$2.2	$2.3	$2.3
Birth Defects, Developmental Disabilities, Disability and Health		**$5.2**	**$5.6**	**$8.0**
6.1	Goal 1	$1.0	$1.1	$1.0
6.1.3	*Measure 3*	$0.4	$0.4	$0.4
6.1.4	*Measure 4*	$0.6	$0.7	$0.7
6.2	Goal 2	$4.2	$4.5	$7.0
6.2.3	*Measure 3*	$4.2	$4.5	$7.0
	PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	**$97.3**	**$97.3**	**$99.5**
	Sub-total	***$811.0***	***$855.0***	***$859.1***
HHS Strategy Goal 2.4				
HEALTH INFORMATION SERVICES				
Health Marketing		**$3.5**	**$3.3**	**$5.2**

FY 2010 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION SUMMARY OF FULL COST (DOLLAR IN MILLIONS)				
Unique ID	**Performance by HHS Strategy Goals and Performance Area**	**FY 2008**	**FY 2009**	**FY 2010**
9.2	Goal 2	$3.5	$3.3	$5.2
9.2.1	*Measure 1*	$1.7	$1.7	$2.6
TERRORISM				
16.2	Preparedness Goal 2	$132.2	$135.5	$137.9
16.2.1	*Measure 1*	$18.2	$18.7	$36.4
16.2.2	*Measure 2*	$18.2	$18.7	$36.4
16.3	Preparedness Goal 3	$106.7	$109.3	$111.3
16.3.1	*Measure 1*	$7.1	$7.3	$7.5
16.3.2	*Measure 2*	$8.0	$8.2	$8.3
16.3.3	*Measure 3*	$2.2	$2.3	$2.3
16.3.4	*Measure 4*	$2.2	$2.3	$2.3
16.3.5	*Measure 5*	N/A	N/A	N/A
	Measure 6	N/A	N/A	N/A
16.4	Preparedness Goal 4	$97.6	$100.1	$101.9
16.4.1	*Measure 1*	$0.8	$0.8	$0.8
16.5	Preparedness Goal 5	$96.7	$99.1	$100.9
16.5.6	*Measure 6*	$3.5	$3.5	$3.6
16.5.7	*Measure 7*	$6.1	$6.2	$6.3
16.5.8	*Measure 8*	$6.9	$7.1	$7.2
16.5.9	*Measure 9*	N/A	N/A	N/A
16.6	Preparedness Goal 6	$658.0	$674.5	$686.5
16.6.1	*Measure 1*	$8.6	$8.8	$8.9
16.6.2	*Measure 2*	$12.5	$12.8	$13.0
16.6.3	*Measure 3*	$469.1	$480.9	$489.5
16.6.4	*Measure 4*	$17.8	$18.2	$18.5
16.6.5	*Measure 5*	$17.8	$18.2	$18.5
16.6.6	*Measure 6*	$469.1	$480.9	$489.5
16.6.7	*Measure 7*	N/A	N/A	N/A
16.9	Preparedness Goal 9	$97.6	$100.1	$101.9
	Measure 1	N/A	N/A	N/A
16.9.2	*Measure 2*	N/A	N/A	N/A
16.9.3	*Measure 3*	N/A	N/A	N/A
16.9.4	*Measure 4*	N/A	N/A	N/A
	Sub-total	**$1,192.3**	**$1,221.9**	**$1,245.5**
HHS Strategy Goal 3				
HHS Strategy Goal 3.4				
PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP				
Office of Minority Health		**$2.8**	**$2.8**	**$2.8**

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
14.B.1	Goal 1	$0.7	$0.7	$0.7
14.B.1.1	*Measure 1*	$0.2	$0.2	$0.2
14.B.2	Goal 2	$0.7	$0.7	$0.7
14.B.2.1	*Measure 1*	$0.2	$0.2	-
14.B.3	Goal 3[2]	$0.7	$0.7	$0.7
14.B.3.1	*Measure 1*	$0.0	$0.0	$0.0
14.B.3.2	*Measure 2*	$0.0	$0.0	$0.0
14.B.3.3	*Measure 3*	$0.0	$0.0	$0.0
14.B.3.4	*Measure 4*	$0.0	$0.0	$0.0
14.B.4	Goal 4	$0.7	$0.7	$0.7
14.B.4.1	*Measure 1*	$0.1	$0.1	$0.1
14.B.4.2	*Measure 2*	$0.1	$0.1	$0.1
	Sub-total	**$2.8**	**$2.8**	**$2.8**
HHS Strategy Goal 4				
HHS Strategy Goal 4.1				
OCCUPATIONAL SAFETY AND HEALTH				
Occupational Safety and Health		**$105.8**	**$103.3**	**$100.7**
12.2	Goal 2	$105.8	$103.3	$100.7
12.2.1	*Measure 1*	$15.6	$15.3	$14.9
12.2.4	*Measure 4*	N/A	N/A	N/A
	PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP			
Office of Workforce and Development		**$60.3**	**$63.0**	**$57.8**
14.D.1	Goal 1	$60.3	$63.0	$57.8
14.D.1.1	*Measure 1*	$54.2	$56.7	$52.1
	Sub-total	**$166.1**	**$166.3**	**$158.5**
HHS Strategy Goal 4.2				
INFECTIOUS DISEASES				
Preparedness, Detection, and Control of Infectious Diseases		**$18.3**	**$18.3**	**$18.3**
	Immunization Program	*$18.3*	*$18.3*	*$18.3*
1.5	Goal 5	$18.3	$18.3	$18.3
1.5.1	*Measure 1*	$0.2	$0.2	$0.2
HEALTH PROMOTION				
Birth Defects, Developmental Disabilities, Disability and Health		**$9.5**	**$10.3**	**$10.6**

FY 2010 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION SUMMARY OF FULL COST (DOLLAR IN MILLIONS)				
Unique ID	**Performance by HHS Strategy Goals and Performance Area**	**FY 2008**	**FY 2009**	**FY 2010**
6.1	Goal 1	$5.4	$5.8	$6.3
6.1.1	*Measure 1*	$5.4	$5.8	$6.3
6.2	Goal 2	$4.1	$4.5	$4.3
6.2.4	*Measure 4*	$4.1	$4.5	$4.3
HEALTH INFORMATION SERVICES				
Health Statistics		**$151.5**	**$166.6**	**$172.9**
7.1	Goal 1	$151.5	$166.6	$172.9
7.1.1	*Measure 1*	N/A	N/A	N/A
7.1.2	*Measure 2*	$7.6	$8.3	$8.6
7.1.3	*Measure 3*	$7.6	$8.3	$8.6
ENVIRONMENTAL HEALTH AND INJURY				
Environmental Health		**$72.3**	**$85.5**	**$83.1**
10.1	Goal 1	$72.3	$85.5	$83.1
10.1.2	*Measure 2*	$21.3	$25.1	$24.5
OCCUPATIONAL SAFETY AND HEALTH				
	Occupational Safety and Health	**$25.2**	**$24.6**	**$24.0**
12.1	Goal 1	$25.2	$24.6	$24.0
12.1.2	*Measure 2*	$25.2	$24.6	$24.0
PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP				
Office of Workforce and Development		**N/A**	**N/A**	**N/A**
14.D.2	Goal 2 [3]	N/A	N/A	N/A
14.D.2.1	*Measure 1*	N/A	N/A	N/A
	Sub-total	***$276.8***	***$305.4***	***$308.9***
HHS Strategy Goal 4.3				
HEALTH PROMOTION				
Birth Defects, Developmental Disabilities, Disability and Health		**$70.6**	**$76.6**	**$77.4**
6.1	Goal 1	$9.5	$10.3	$11.0
6.1.2	*Measure 2*	$9.5	$10.3	$11.0
6.2	Goal 2	$61.1	$66.3	$66.4
6.2.2	*Measure 2*	$2.3	$2.4	$2.3
OCCUPATIONAL SAFETY AND HEALTH				
Occupational Safety and Health		**$64.9**	**$52.8**	**$51.5**
12.1	Goal 1	$64.9	$52.8	$51.5
12.1.1	*Measure 1*	$54.1	$52.8	$51.5
	Sub-total	***$135.5***	***$129.4***	***$128.9***
HHS Strategy Goal 4.4				

FY 2010 BUDGET SUBMISSION
CENTERS FOR DISEASE CONTROL AND PREVENTION
SUMMARY OF FULL COST
(DOLLAR IN MILLIONS)

Unique ID	Performance by HHS Strategy Goals and Performance Area	FY 2008	FY 2009	FY 2010
HEALTH PROMOTION				
Birth Defects, Developmental Disabilities, Disability and Health		**$11.2**	**$12.2**	**$11.7**
6.2	Goal 2	$11.2	$12.2	$11.7
6.2.1	*Measure 1*	$11.2	$12.2	$11.7
HEALTH INFORMATION SERVICES				
Health Marketing		**$20.9**	**$19.9**	**$20.8**
9.1	Goal 2	-	-	-
9.1.1	*Measure 1*	-	-	-
9.3	Goal 3	$20.9	$19.9	$20.8
9.3.1	*Measure 1*	$18.8	$18.8	$18.8
	Sub-total	***$32.1***	***$32.1***	***$32.5***
	Total	**$7,954.4**	**$8,778.9**	**$8,768.9**

[1] Includes VFC funding.

[2] This is an overarching long-term measure.

[3] The activities covered by these goals & measures are funded by other areas within CDC.

N/A signifies retired goals and measures, measures Full Cost was not calculated for, or measures not reported in a fiscal year.

SUMMARY OF FINDINGS AND RECOMMENDATIONS FROM COMPLETED PROGRAM EVALUATIONS

Evaluations Included in HHS Programs Evaluations Database for FY 2008

1. What are the facilitators and challenges to start-up of the CDC Colorectal Cancer Screening Demonstration Program?
    a. Link: http://www.cdc.gov/pcd/issues/2008/apr/07_0205.htm

2. What is the cost of starting a colorectal cancer screening program in a community based setting?
    a. Link: http://www.cdc.gov/pcd/issues/2008/apr/07_0202.htm

3. What characteristics are shared by high performing immunization programs?
    a. Link: http://cdc.confex.com/cdc/nic2008/webprogram/Paper15418.html

4. Are school-based clinics a feasible option for mass vaccination of children?
    a. Link: http://cdc.confex.com/cdc/nic2008/webprogram/Paper15856.html

5. What screening instruments for older adults with depression are suitable for dissemination and what community-based interventions are effective and ready for translation?
    a. Link: http://www.cdc.gov/pcd/issues/2008/jan/07_0154.htm.

6. What is the relevance of the National Institute of Occupational Safety and Health's work to the most important safety and health problems in the workplace, and what has been the impact?
    a. Link: http://www.cdc.gov/niosh/nas/

7. What does the evaluation literature tell us about effectiveness of different campaigns, and what evaluation has been conducted on state program awareness campaigns?

8. How can evaluation methods be used to help public health partnerships reach their goals?
    a. Link: http://www.cdc.gov/dhdsp/state_program/evaluation_guides/index.htm

9. What are the evidence-based indicators that are linked to program outcomes, and how can they be used to measure program progress toward national goals?

10. What factors contributed to blood pressure control among patients in two highly successful community blood pressure control clinics?
    a. Link: http://www.cdc.gov/pcd/issues/2008/apr/07_0200.htm

11. What promising health care practices and policy, environmental, and system interventions have been successful for controlling high blood pressure and high cholesterol?
    a. Link: http://www.cdc.gov/pcd/issues/2008/jul/07_0218.htm

DISCONTINUED PERFORMANCE MEASURES

HIV/AIDS, Viral Hepatitis, and TB Prevention

Dropped Annual Measure	FY	Target	Result
Goal 1 PM1: Reduce the rate of HIV infections diagnosed each year among people under 25 years of age. [O]	*2007*	<4,000 cases in 30 areas	6/2009
	2006	Overall: 2,420 reported cases in 30 areas	6/2009
	2005	Overall: 1,800 reported cases in 25 states	2,700 in 25 states; (Unmet) 3,605 in 30 areas 7.4/100,000 in 33 states
	2004	Overall: 1,900 reported cases in 25 states	2,606 in 25 states; (Unmet) 3,465 in 30 areas (Unmet); 7.2/100,000 in 33 states
	2003	Baseline	2,286 in 25 states; 3,134 in 30 areas; 6.9/100,000 in 33 states
Goal 1 PM 2: Decrease the number of perinatally acquired AIDS cases, from the 1998 base of 247 cases. [O]	*2007*	<100 cases	28 (Exceeded)
	2006	<100 cases	38 (Exceeded)
	2005	<100 cases	53 (Exceeded)
	2004	<100 cases	53 (Exceeded)
	2003	<139 cases	70 (Exceeded)
Goal 2 PM 1: Among HIV-infected persons 18 years of age and over, reduce the proportion that had high-risk sex with a negative partner or partner of unknown status. [O]	*2007*	<11%	Not available (Unmet)
	2006	<11%	Not available (Unmet)
	2005	<10%	Not available (Unmet)
	2004	<10%	13.4% (median) (Unmet)
	2003	N/A	17.0% (median)
Goal 3 PM 1: Among persons with HIV infection, increase the proportion diagnosed before progression to AIDS. [O]	*2007*	**Dropped/Revised**	N/A
	2006	79%	N/A
	2005	80%	77% (Unmet)
	2004	80%	78% (Unmet)
	2003	N/A	78% Data are from 30 areas with stable HIV reporting systems
Goal 3 PM 2: Increase the percentage of HIV-positive tests with post-test counseling sessions reported from CDC funded test sites. [O]	*2007*	**Dropped/Revised**	N/A
	2006	75%	N/A
	2005	80%	N/A
	2004	80%	71% (Unmet)
	2003	75%	71% (Unmet)
Goal 4 PM 1: Increase the proportion of HIV-infected people who received some form of medical care within 3 months of HIV diagnosis. [O] (Data are from interviews taken from a sample of persons in 16 areas.)	*2007*	**Dropped/Revised**	N/A
	2006	80%	Not available (Unmet)
	2005	80%	Not available (Unmet)
	2004	80%	86.1% (Exceeded)
	2003	N/A	83.3%
Goal 5 PM 1: Increase the number of states and the District of Columbia that conduct HIV case reporting in adults and adolescents.	*2007*	50 states and D.C.	50 states and DC; 48 states and DC use confidential, name-based reporting (Met)
	2006	50 states and D.C.	50 states and DC; 46 states and DC use confidential, name-based reporting (Met)

Dropped Annual Measure	FY	Target	Result
	2005	50 states and D.C.	50 states and DC; 38 use confidential, name-based reporting (Met)
	2004	50 states and D.C.	50 states and DC; 38 use confidential, name-based reporting (Met)
	2003	50 states	49 states and D.C.; 34 use confidential, name-based reporting (Unmet)
Goal 6 PM 1: Reduce the prevalence of chlamydia among high-risk women under age 25 by 15%. [O]	*2007*	9.3%	13.2% (Unmet)
	2006	9.3%	13.1% (Unmet)
	2002	Baseline	10.1%
Goal 6 PM 2: Reduce the prevalence of chlamydia among women under age 25, in publicly funded family planning clinics by 15%. [O]	*2007*	6.3%	6.9% (Unmet)
	2006	6.3%	6.7% (Unmet)
	2002	Baseline	5.6%
Goal 6 PM 3: Reduce the incidence of gonorrhea in women aged 15 to 44 by 15%. [O]	*2007*	278/100,000	290/100,000 (Unmet)
	2006	278/100,000	290/100,000 (Unmet)
	2002	Baseline	279/100,000
Goal 7 PM 1a): Reduce the incidence of P&S syphilis in men per 100,000 population by 7%. [O]	*2007*	4.5/100,000	6.6/100,000 (Unmet)
	2006	Establish Baseline	5.6/100,000
Goal 7 PM 1b): Reduce the incidence of P&S syphilis in women per 100,000 population by 65%. [O]	*2007*	0.8/100,000	1.1/100,000 (Unmet)
	2006	0.58/100,000	1.0/100,000 (Unmet)
	2002	Baseline	1.1/100,000
Goal 7 PM 2: Reduce the incidence of congenital syphilis per 100,000 live births. [O]	*2007*	8.8/100,000	10.5/100,000 (Unmet)
	2006	8.8/100,000	9.3/100,000 (Unmet)
	2002	Baseline	10.2/100,000
Goal 7 PM 3: Reduce the racial disparity of P&S syphilis by 63% (reported ratio is black:white). [O]	*2007*	5.6 to 1	7.1 to 1 (Unmet)
	2006	5.6 to 1	5.9 to 1 (Unmet)
	2002	Baseline	8.1 to 1
Goal 8 PM 1. Decrease the number of persons with TB among US-born persons, foreign-born persons, and overall (per 100,000 population). [O]	*2007*	US-born 1.9 ; Foreign-born 21.2; Overall 3.9	US-born 2.1 (Unmet); Foreign-born 20.7 (Met); Overall 4.4 (Unmet)
	2006	US-born 1.9 ; Foreign-born 21.2; Overall 3.9	US-born 2.3 (Unmet); Foreign-born 22.0 (Unmet); Overall 4.6 (Unmet)
	2004	Baseline	US born: 2.6; Foreign-born: 22.8; Overall: 4.9
Goal 8 PM 2: 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). [O]	*2007*	88%	9/2010
	2006	88%	9/2009
	2005	88%	82.7% (Unmet)
	2004	88%	82.3% (Unmet)
	2003	88%	81.3% (Unmet)
	2002	88%	80.9% (Unmet)
	1999	Baseline	67.6%
Goal 8 PM 3: Increase the percentage of TB patients with initial positive cultures who also have drug susceptibility results. [O]	*2007*	95%	94.6% (Unmet)
	2006	95%	92.2% (Unmet)
	2005	95%	92.4% (Unmet)
	2004	95%	92.9% (Unmet)
	1994	Baseline	74.7%
Goal 8 PM 4: Increase the percentage of contacts of infectious (Acid-Fast Bacillus	*2007*	43%	12/2010
	2006	59%	12/2009

Dropped Annual Measure	FY	Target	Result
(AFB) smear-positive) cases that are placed on treatment for latent TB infection and complete a treatment regimen. [O]	*2005*	61%	43.5% (Unmet)
	2004	61%	43.3% (Unmet)
	2003	63%	41% (Unmet)
	2002	63%	41% (Unmet)
	1999	Baseline	45.5%
Goal 9 PM 1: By 2010 reduce the number of new cases of hepatitis A to 2.25 new cases per 100,000	*2007*	2.5	1.0 (Unmet)
	2006	2.6	1.2 (Unmet)
	2005	N/A	1.9

Preparedness, Detection, and Control of Infectious Diseases

Dropped Annual Measure	FY	Target	Result
Goal 1 PM 1: Reduce the number of courses of antibiotics for ear infections for children < 5 years to 57 courses per 100 children. [O]	*2006*	60 courses	51 (Unmet)
	2005	61 courses	50 (Exceeded)
	2004	62 courses	42 (Exceeded)
	2003	63 courses	53 (Exceeded)

Chronic Disease Prevention, Health Promotion, and Genomics

Dropped Annual Measure	FY	Target	Result
Goal 1 PM 1: Reduce the proportion of heart disease and stroke deaths that occur before transport to emergency services in states funded for basic implementation programs. [O]	*2006*	Heart disease deaths 45%; Stroke deaths 43%	12/2009
	2005	Heart disease deaths 45%; Stroke deaths 43%	Heart disease deaths 52% (Unmet) Stroke deaths 47% (Unmet)
	2004	Heart disease deaths 45%; Stroke deaths 43%	Heart disease deaths 51% (Unmet) Stroke deaths 47% (Unmet)
	20031	N/A	Heart disease deaths 49%; Stroke deaths 46%
	2002	N/A	Heart disease deaths 48%; Stroke deaths 45%
	2001	Baseline	Heart disease deaths 47%; Stroke deaths 44%
Goal 2 PM 1: Excluding invasive cervical cancers diagnosed on an initial screen in NBCCEDP, lower the age-adjusted rate of invasive cervical cancer in women aged 20 and older. [O]	*2006*	<14/100,000	15/100,000 (Unmet)
	2005	<14/100,000	15/100,000 (Unmet)
	2004	<15/100,000	17/100,000 (Unmet)
	2003	<16/100,000	15/100,000 (Exceeded)
	2002	<22/100,000	15/100,000 (Exceeded)
Goal 3 PM 1: Increase the number of women screened. [O] Breast: mammogram or Clinical Breast Examination (CBE) Cervical: Pap Smear	*2006*	Breast 401,000; Cervical 280,000	Breast 534,684 (Exceeded) Cervical 349,585 (Exceeded)
	2005	Breast 401,000; Cervical 280,000	Breast 572,173 (Exceeded) Cervical 344,959 (Exceeded)
	2004	Breast 381,682; Cervical 275,000	Breast 558,846 (Exceeded) Cervical 329,645 (Exceeded)
	2003	N/A	Breast 537,619; Cervical 304,407
	2002	N/A	Breast 394,146; Cervical 280,330
	2000	Baseline	Breast: 229,000; Cervical: 247,192
Goal 3 PM 2: Increase the percentage of	*2006*	Cervical 25%	22.5% (Unmet)

Dropped Annual Measure	FY	Target	Result
newly enrolled women who have not received a Pap test within the past 5 years. [O]	*2005*	Cervical 25%	21.8% (Unmet)
	2004	Cervical 22.5%	22.1% (Unmet)
	2003	Cervical 22.5%	21.3% (Unmet)
	2002	N/A	22.2%
	2000	Baseline	Cervical 21.7%
Goal 3 PM 3: Increase the percentage of women with abnormal results who receive a final diagnosis within 60 days of screening. [O] 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	*2006*	Breast 87.5%; Cervical 64.5%	Breast 85.5% (Unmet) Cervical 68% (Met)
	2005	Breast 87.5%; Cervical 64.5%	Breast 83.8% (Unmet) Cervical 65.6% (Met)
	2004	Breast 86.5%; Cervical 64%	Breast 80.7% (Unmet) Cervical 62.6% (Unmet)
	2003	N/A	Breast 81.4%; Cervical 62.0%
	2002	N/A	Breast 82.8%; Cervical 63.0%
	2000	Baseline	Breast: 82.2%; Cervical: 61.2%
Goal 3 PM 4: Increase the percentage of women with cancer who start treatment within 60 days of diagnosis. [O]	*2006*	Breast 95.5%; Cervical 92.5%	Breast 93.3% (Unmet) Cervical 93.5% (Met)
	2005	Breast 95.5%; Cervical 92.5%	Breast 93.7% (Unmet) Cervical 92.6% (Met)
	2004	Breast 95%; Cervical 92%	Breast 93.1% (Unmet) Cervical 87.6% (Unmet)
	2003	N/A	Breast 93.0% Cervical 91.9%
	2002	N/A	Breast 92.9%; Cervical 88.6%
	2000	Baseline	Breast: 94%; Cervical: 88%
Goal 3 PM 5: Cervical: Increase the percentage of women with precancerous lesions who start treatment within 90 days of diagnosis (includes CIN (cervical intraepithelial neoplasia) II, CIN III, and CIS). [O]	*2006*	94.5%	92.2% (Unmet)
	2005	94.5%	91.1% (Unmet)
	2004	94%	90.4% (Unmet)
	2003	N/A	89.0%
	2002	N/A	90.3%
	2000	Baseline	92.4%
Goal 4 PM 1: For states receiving CDC funding for Diabetes Prevention and Control Programs (DPCPs), increase the percentage of persons with diabetes who receive annual eye and foot exams. [O]	*2006*	Eye 75%; Foot 70%	Eye 64.1% (Unmet); Foot 67.8% (Unmet)
	2005	Eye 75%; Foot 70%	Eye 60.6% (Unmet); Foot 66.0% (Unmet)
	2004	Eye 72%; Foot 62%	Eye 61.9% (Unmet); Foot 66.6% (Exceeded)
	2003	Eye 72%; Foot 62%	Eye 61.3% (Unmet); Foot 67.4% (Exceeded)
	2002	Eye 72%; Foot 62%	Eye 64.2% (Unmet); Foot 66.6% (Exceeded)
Goal 4 PM 2: For states receiving CDC funding for DPCPs, increase the percentage of persons with diabetes who receive at least two A1c measures per year. [O]	*2006*	72.5%	68.0% (Unmet)
	2005	72.5%	64.3% (Unmet)
	2004	72.5%	68.8% (Unmet)
	2003	N/A	63.3%

Dropped Annual Measure	FY	Target	Result
	2002	Baseline	62.0%
Goal 4 PM 3: Increase the number of DPCPs that promote health system approaches among those who are at high risk for developing diabetes.	*2006*	5	5 (Met)
	2005	5	5 (Met)
	2004	5	5 (Met)
	2002	Baseline	0
Goal 5 PM 1: Increase the number of nutrition and physical activity interventions that are implemented and evaluated in funded states.	*2006*	25 interventions	132 (Exceeded)
	2005	20 interventions	81 (Exceeded)
	2004	12 interventions	12 (Met)
	2002	Baseline	0 interventions
Goal 6 PM 1: Collect qualitative and quantitative data in REACH 2010 communities to evaluate community capacity-building, intervention strategies, systems change, change among change agents, and change in risk/protective behaviors.	*2006*	REACH 2010 Risk Factor Survey data (quantitative) on changes in risk/protective behaviors will be collected and disseminated in 100% of the communities with health priority areas in breast and cervical cancer, cardiovascular diseases, and diabetes, (excluding the REACH Elderly projects); 85% of REACH 2010 communities will collect and disseminate data (qualitative).	100%/ 85% (Met)
	2005	Same as above	100%/85% (Met)
	2004	REACH 2010 Risk Factor Survey data (quantitative) on changes in risk/protective behaviors will be collected and disseminated in 100% of the communities with health priority areas in breast and cervical cancer, cardiovascular diseases, and diabetes, (excluding the REACH Elderly projects); 60% of REACH 2010 communities will collect and disseminate data (qualitative).	100%/60% (Met)

Birth Defects, Developmental Disabilities, Disability and Health

Dropped Annual Measure	FY	Target	Result
Efficiency Measure 1: Increase the number of autism cases included in the data coordinating center, resulting in savings of program and staff time and expediting efforts to understand the prevalence and find the causes of autism. [E]	*2006*	250	0
Goal 1 PM 1: Decrease the percentage of women who report any alcohol consumption during pregnancy. [O]	*2006*	8.0%	6.2% (Exceeded)[1]
	2005	8.5%	11.9% (Unmet)
	2004	10.0%	10.8% (Unmet)
	2003	11.5%	10.6 % (Exceeded)
	1999	Baseline	12.8%
Goal 1 PM 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. [O]	*2006*	4% reduction	12/2009
	2005	3% reduction	2,116 (Unmet)
	2004	2% reduction	2,171 (Unmet)
	2003	1% reduction	2,021 (Unmet)
	2000	Baseline	1,932
Goal 2 PM 1: By 2010, decrease to 10% the percentage of newborns that screen positive for hearing loss but are lost to follow-up. [O]	*2006*	22%	34% [2]
	2005	25%	47% [3]
	2004	30%	23% (Exceeded)[4]
	2003	35%	31% (Exceeded)[5]

[1] The decrease may be due in part to a change in the question order on the BRFSS that may increase social desirability bias. In 2006 pregnancy status was asked before drinking behavior whereas in 2005 drinking behavior was asked before pregnancy status. Also, note that this rate is substantially lower than the rate reported by the National Survey on Drug Use and Health which was 11.8% for pregnant women (15-44 years).
[2] 2005 and 2006 data from the CDC EHDI Hearing Screening and Follow-up Survey
[3] 2005 and 2006 data from the CDC EHDI Hearing Screening and Follow-up Survey
[4] Data for 2004 and previous years were obtained from the Directors of Speech and Hearing Programs in State Health and Welfare Agencies (DSHPSHWA) Survey, which is no longer in use.
[5] Data for 2004 and previous years were obtained from the Directors of Speech and Hearing Programs in State Health and Welfare Agencies (DSHPSHWA) Survey, which is no longer in use.

Injury Prevention and Control

Dropped Annual Measure	FY	Target	Result
Goal 1 PM 1: Reduce the incidence of rape or attempted rape by increasing the number of school and college-aged people reached through educational programs.	*2006*	3% increase from previous year	2,505,760 (Met)
	2005	3% increase from previous year	3,195,563 (Unmet)
	2004	Establish baseline	3,328,735 (Met)
Goal 1 PM 2: Among the states receiving funding from CDC, reduce deaths from residential fire. [O]	*2006*	1.27 per 100,000	6/2009
	2005	1.28 per 100,000	1.11 per 100,000 (Exceeded)
	2004	1.29 per 100,000	1.18 per 100,000 (Exceeded)
	2003	1.30 per 100,000	1.17 per 100,000 (Exceeded)
	2001	Baseline	1.26 per 100,000

Buildings and Facilities

Dropped Annual Measure	FY	Target	Result
15.E.1: Energy and water reduction. [E] Goals under EPAct '05 and E.O. 13423	*2008*	Energy 6%; Water 2%	Energy 16.7% (Exceeded); Water 02.4%
	2007	Energy 3%; Water N/A	Energy 12.6% (Exceeded); Water N/A
	2006	250	0
Goals under E.O. 13123	*2007*	Energy N/A; Water 30% (Met)	Water +43% (Unmet)
	2005	Energy 20%; Water 15%	Energy 18% (Unmet); Water 09% (Unmet)
15.E.2: Deliver leased space below Atlanta's sub-market rate. [E]	*2008*	10% under market	- 10% (Unmet)
	2007	10% under market	N/A
	2006	10% under market	- 10% (Met)
	2005	10% under market	- 10% (Met)
	2003	Baseline	- 5%
15.1.1: Aggregate of scores for capital projects rated on scope, schedule, budget, and quality.	*2008*	=>90%	Met
	2007	=>90%	Met
	2006	=>90%	Met
	2005	=>90%	Met
15.1.2: Placement of NCID & NCEH laboratorians in CDC standard space.	*2008*	NCID 70%; NCEH 100%	70%, 100% (Met)
	2007	NCID 70%; NCEH 100%	70%, 100% (Met)
	2006	NCID 70%; NCEH 100%	70%, 100% (Met)
	2005	Baseline	70%, 100%
15.1.3: Relationship of work orders (scheduled and unscheduled maintenance).	*2008*	Scheduled 95%; Unscheduled 5%	95%, 5% (Met)
	2007	Scheduled 95%; Unscheduled 5%	95%, 5% (Met)
	2006	Scheduled 95%; Unscheduled 5%	95%, 5% (Met)
	2005	Baseline	Scheduled 95%; Unscheduled 5%

Terrorism Preparedness and Emergency Response

Dropped Annual Measure	FY	Target	Result
Goal 6 PM 4: Percentage of LRN labs that report routine public health testing results through standards-based electronic disease surveillance systems and have protocols for immediate reporting by telephone for Category A agents (bacillus anthracis, yersina pestis, francisella tularensis, clostridium botulinum toxin and variola major) for which they conduct testing. [O]	*2007*	100%	100% (Met)
	2006	100%	80% (Unmet)
	2005	100%	100%(Met)
	2004	100%	100%(Met)