



# Indian Health Service 2006 National Summary

*Measuring and Improving  
Quality Healthcare for  
American Indian/Alaska Natives*



Government Performance and Results Act (GPRA)

January 2007



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## Introduction

The Indian Health Service (IHS), an agency within the Department of Health and Human Services, carries out the federal government's trust responsibility to provide health care services to eligible American Indian and Alaska Native (AI/AN) people. The AI/AN population has been growing rapidly (an increase of 26% from 1990 to 2000 compared to 13% for the total U.S. population) and has a significant percentage living in poverty (25.7% compared to 8% of the non-Hispanic white population in 1999). In addition, the AI/AN population suffers disproportionately from a number of health problems. For example, the 2000-2002 death rate from alcohol abuse was more than 6.1 times higher among AI/ANs than all races in 2001, and the cervical cancer death rate was 3.2 times higher. Despite these challenges, IHS has succeeded in substantially improving the health status of the AI/AN population, primarily by focusing on preventive and primary care services and developing a community-based public health system. As a result, the average death rate from all causes for the AI/AN population dropped a significant 28 percent between 1972-1974 and 2000-2002.

The Government Performance Results Act (GPRA) requires each agency to develop a performance-based budget, including performance measures to demonstrate its effectiveness in meeting its mission. GPRA performance measures for the Indian Health Service assess the Agency's progress toward improving quality and access to health care and reducing health disparities for the more than 1.4 million AI/AN people receiving care through the IHS network. In Fiscal Year (FY) 2006 there were a total of 34 annual GPRA clinical and non-clinical Measures. Thirty-three have been reported, and IHS met 82% of these. In addition, IHS has long term and annual performance measures developed in conjunction with the Office of Management and Budget Program Assessment Rating Tool (PART) reviews of individual IHS programs. Some of these PART measures are unique and distinct from GPRA measures, such as the measure to increase the number of hospitals and clinics using the Electronic Health Record. However, many PART measures are based on GPRA measures. For example, the Tribal PART tracks Tribal clinics' performance on 17 GPRA clinical measures. The PART of the Health Care Facilities Construction Program tracks performance at new facilities through 8 clinical GPRA measures.

This report provides a summary of results for the 22 clinical GPRA measures for FY 2006. These represent the performance of IHS and Tribally-operated health facilities in the 12 IHS Areas, based on aggregated data that the Clinical Reporting System (CRS) software extracted from individual patient health records at 192 participating sites. (Although CRS is now collecting childhood immunization information, this year the results for the childhood immunization measure come from aggregated Area reports to the National Immunization Program) A dashboard display of the non-clinical measures results appears in Appendix A. Performance measures and results relating to PART reviews of individual programs are available at [www.ExpectMore.gov](http://www.ExpectMore.gov).

## Introduction

In FY 2006, sixteen of the twenty-two clinical measures met their pre-determined targets and ten measures not only met but also exceeded their target. The remaining six clinical measures all came within 1% of meeting their targets for FY 2006.

IHS and Tribal programs made impressive progress toward meeting the IHS commitment to achieve a 10 percent *relative* increase in program performance from FY 2004 levels by FY 2007 on four measures, in accordance with the “One HHS” 10 Department-wide Management Objectives. In FY 2006, IHS met and exceeded the FY 2007 target for three of these measures:

- The screening rates for Domestic (Intimate Partner) Violence increased from only 4% in 2004 to 28% in FY 2006, exceeding the FY 2007 goal of 15% by 13 percentage points.
- The screening rate for alcohol use in women to prevent Fetal Alcohol Syndrome also increased dramatically, from 7% in FY 2004 to 28% in FY 2006, exceeding the FY 2007 target of 13% by 15 percentage points. This result also exceeds the IHS 2010 goal of 25%.
- Dyslipidemia (LDL cholesterol) screening rates of patients with diabetes increased from 53% in FY 2004 and FY 2005 to 60% in FY 2006, exceeding the FY 2007 target of 59%.

While results for the fourth measure, Adult Pneumococcal Vaccinations, have not yet reached the FY 2007 target, the 74% rate exceeded the FY 2006 target by 2 percentage points and represents an increase of 5 percentage points from FY 2005. The improvement and maintenance of Pneumococcal vaccination rates is important because studies have shown that AI/AN people are at high risk for this disease; the 2000-2002 AI/AN death rate from pneumonia and influenza is 41 percent greater than the 2001 U.S. all-races death rate. Pneumococcal vaccination is a low-cost medical intervention that has been shown to prevent serious health complications among the elderly.

Federal and Tribal facilities also made significant improvement on the following measures between FY 2005 and FY 2006:

- Increased the proportion of patients with diabetes assessed for nephropathy from 47% to 55%
- Increased the proportion of children ages 19-35 months who have had the recommended combined immunization series from 75% to 80%, based on National Immunization Program Reports
- Increased the proportion of pregnant women screened for HIV from 54% to 65%
- Increased the proportion of patients with cholesterol screening within the past five years from 43% to 48%
- Increased the number of patients receiving topical fluorides from 85,318 to 95,439, an increase of 12%

## Introduction

Six clinical measures are related to care for patients with diabetes, and as noted above, the Agency achieved significant increases in screening rates for nephropathy and dyslipidemia (LDL cholesterol). In addition, the blood pressure control measure target was met by maintaining the FY 2005 rate. For the retinopathy measure, a baseline rate for retinal screening at all sites was set and sites participating in a retinopathy pilot improved performance from 50% to 52% in FY 2006. Although the Agency did not meet the target to increase by 2% the number of patients in ideal glycemic control, the rate increased by one percentage point to 31%. The target of maintaining the proportion of patients in poor glycemic control was not met, with the proportion increasing from 15% to 16%.

Progress made on diabetic measures is especially important given the continuing epidemic of diabetes among the AI/AN populations. In 2002, AI/AN people were 2.2 times more likely to have diagnosed diabetes than non-Hispanic whites, and the death rate from diabetes in the AI/AN community increased by 55 percent between 1972-1974 and 2000-2002. Between 1997 and 2003, the prevalence of diabetes increased by 41 percent in the population served by the IHS. Furthermore, between FY 1999 and FY 2002, total IHS expenditures for medications increased almost 20 percent annually; a significant proportion of this increase included medications to treat diabetes and to prevent related complications.

Although the decrease in the percentage of clinical measures met in FY 2006 (73% compared with 90% in FY 2005) is a concern, IHS has made significant progress on many important performance measures. Moreover, the measures not met all came with 1% of their targets. The increasing cost of healthcare combined with the growing population and the increasing prevalence of diabetes and obesity represent ongoing challenges. IHS is committed to improving efficiency and effectiveness in order to continue meeting its mission of raising the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

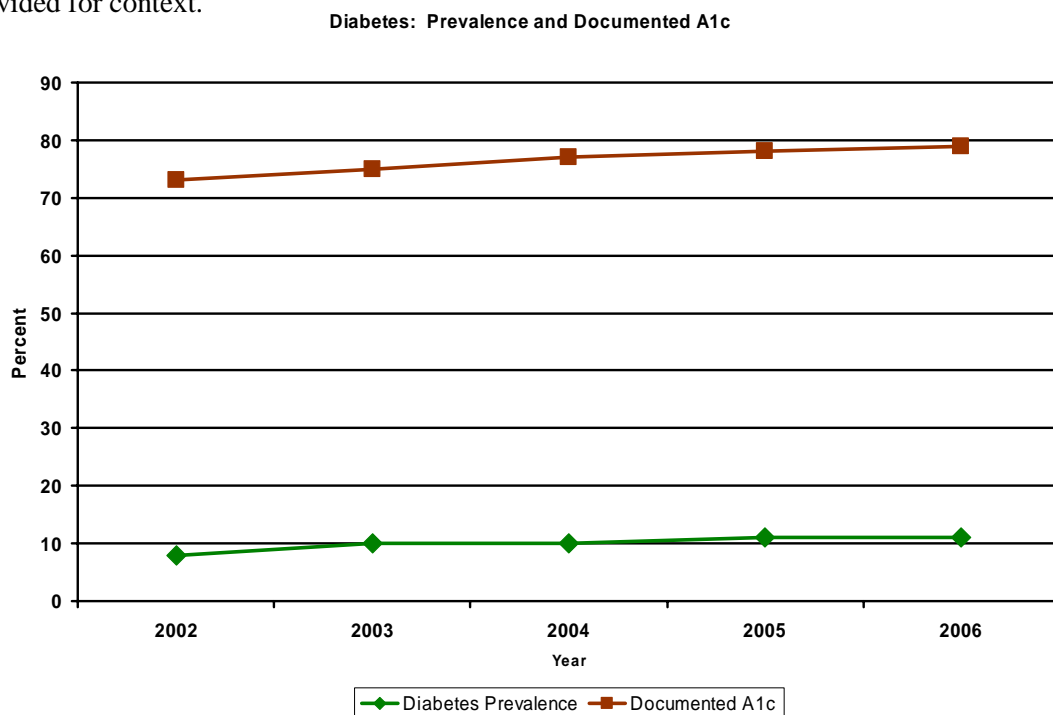
## 2006 Results

### Diabetes: Prevalence and Documented A1c

**Measure(s):** Prevalence: Proportion of patients with diagnosed diabetes prior to the end of the report period. Documented A1c: Proportion of patients with hemoglobin A1c documented during the Report Period, regardless of result.

**Importance:** *Diabetes is a major cofactor in morbidity as well as one of the leading causes of mortality among AI/AN people. Diabetes is a major risk factor for cardiovascular disease, and CVD is the leading cause of death for American Indians. “Documented A1c” refers to a blood test called the Hemoglobin A1c, which determines blood sugar levels in patients with diabetes. This test can be used to determine a patient’s level of “glycemic control,” or how well blood sugars are controlled. These levels of control are divided into “Ideal” (<7 percent); “Good” (7.0-7.9 percent); “Fair” (8.0-<9.5 percent); and “Poor” (>9.5 percent), based on national diabetes care standards.*

**2006 Target:** Diabetes Prevalence and Documented A1c are not GPRA measures but are tracked by CRS and provided for context.



**Data source:** CRS 6.1 electronic examination of 1,271,568 patient records for Diabetes prevalence and 91,026 for documented A1c.

**Results and Analysis:** In FY 2006, the unadjusted diabetes prevalence rate among the IHS active patient population was 11% as measured by CRS. This is well above the national average of 7% for all races. The documented A1c rate for patients diagnosed with diabetes was 79%, which far exceeds the Healthy People 2010 goal of 65%.



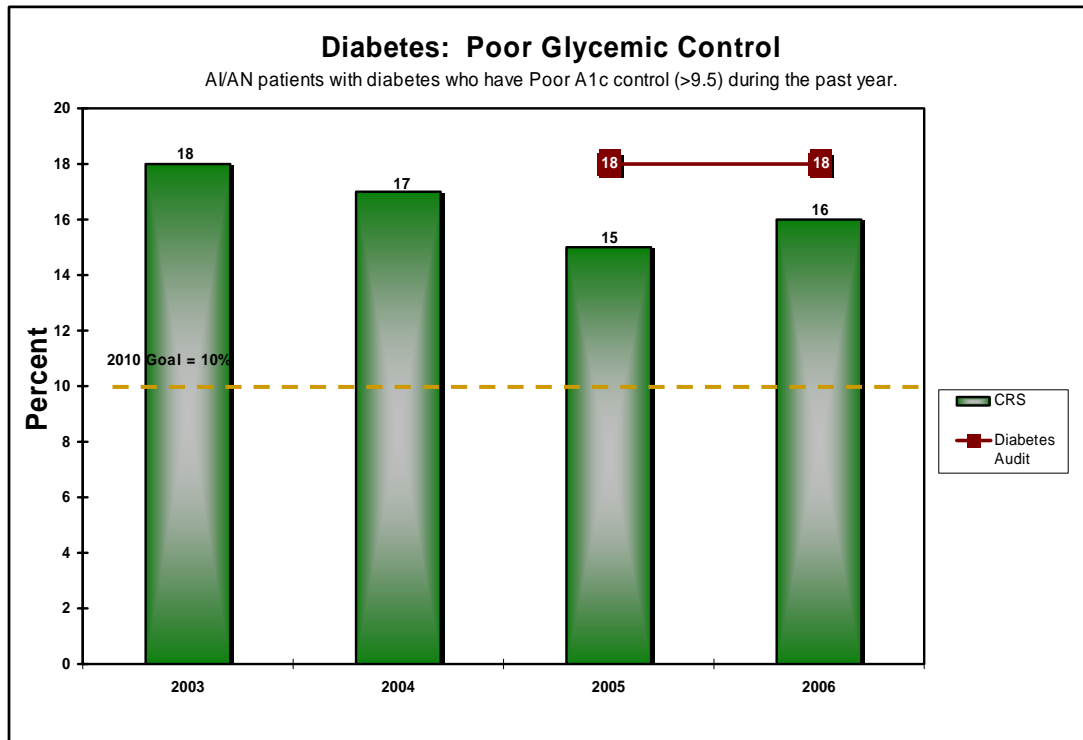
## 2006 Results

### Diabetes: Poor Glycemic Control

**Measure:** Proportion of patients with diagnosed diabetes that have poor glycemic control.

**Importance:** *Reducing the number of patients with poor glycemic control will reduce the prevalence of diabetes complications. Some clinical studies have shown that a 1% decrease in the absolute A1c level translates into a: 14% decrease in total mortality, 21% decrease in diabetes-related deaths, 14% decrease in myocardial infarction, 40% decrease in eye disease, 12% decrease in strokes, 43% decrease in amputations, and a 24% decrease in kidney failure..*

**2006 Target:** Assure that the proportion of patients with diabetes that have poor glycemic control does not increase above the FY 2005 level of 15%.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Diabetes audit data comes from the IHS Diabetes program. Audit data is based on different collection methods and exclusion criteria, but Audit data trends generally mirror CRS data trends.

**Results and Analysis:** IHS did not meet the target to maintain the percent of patients with poor glycemic control at 15%. The number of patients with poor glycemic control rose to 16% in FY 2006.

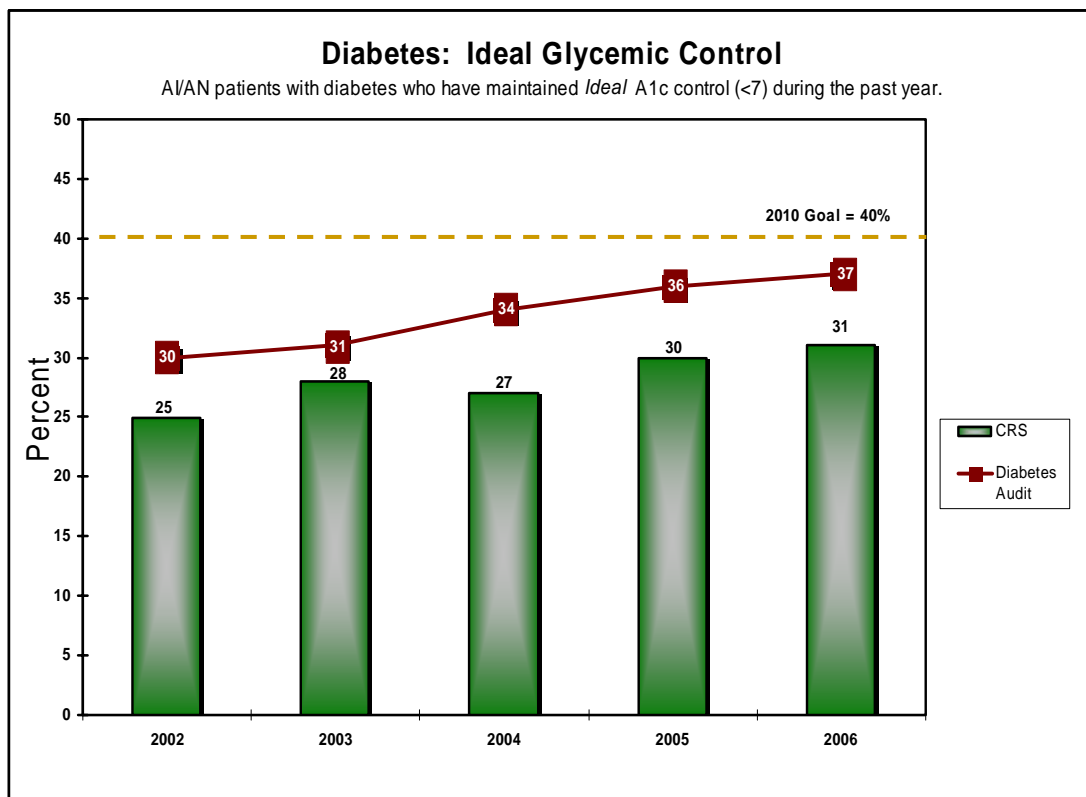
## 2006 Results

### Diabetes: Ideal Glycemic Control

**Measure:** Proportion of patients with diagnosed diabetes with ideal glycemic control (A1c<7.0).

**Importance:** *Keeping blood sugar levels below 7 can slow or prevent the onset and progression of eye, kidney, and nerve disease caused by diabetes. Good blood sugar control also lowers the risk of heart attack and stroke.*

**2006 Target:** Increase the proportion of patients with diabetes that have demonstrated ideal glycemic control by 2% above the FY 2005 level of 30% to 32%.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Diabetes audit data comes from the IHS Diabetes program. Audit data is based on different collection methods and exclusion criteria, but Audit data trends generally mirror CRS data trends.

**Results and Analysis:** IHS did not meet the target to increase the proportion of patients with ideal glycemic control by 2% overall, from 30% in FY 2005 to 32% in FY 2006. The proportion of patients in ideal control rose by 1% to 31%.

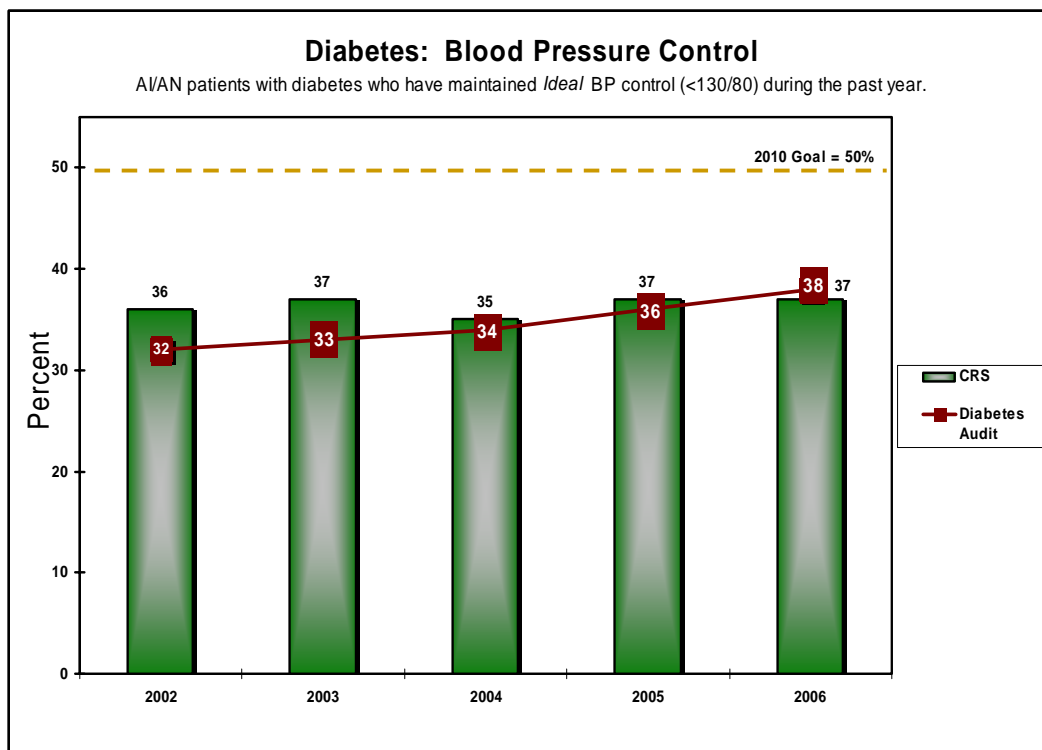
## 2006 Results

### Diabetes: Blood Pressure Control

**Measure:** Proportion of patients with diagnosed diabetes that have achieved blood pressure control (BP < 130/80).

**Importance:** *This measure is directed at reducing complications of diabetes. A National Heart, Lung, and Blood Institute report indicates that the risk of heart disease and stroke doubles for every increase of 20 mm in systolic or 10 mm in diastolic pressure. Lower blood pressure levels in people with diabetes reduce the risk of heart disease and stroke by 33-50%. Blood pressure control also reduces the risk of eye, kidney, and nerve disease by one third.*

**2006 Target:** Maintain the proportion of patients with diagnosed diabetes that have achieved blood pressure control at the FY 2005 level of 37%.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Diabetes audit data comes from the IHS Diabetes program. Audit data is based on different collection methods and exclusion criteria, but Audit data trends generally mirror CRS data trends.

**Results and Analysis:** IHS met the target for this measure, maintaining the percent of patients with ideal blood pressure control at 37%. By meeting the target for this measure, the Agency helped reduce the potential complications of high blood pressure among diabetics.

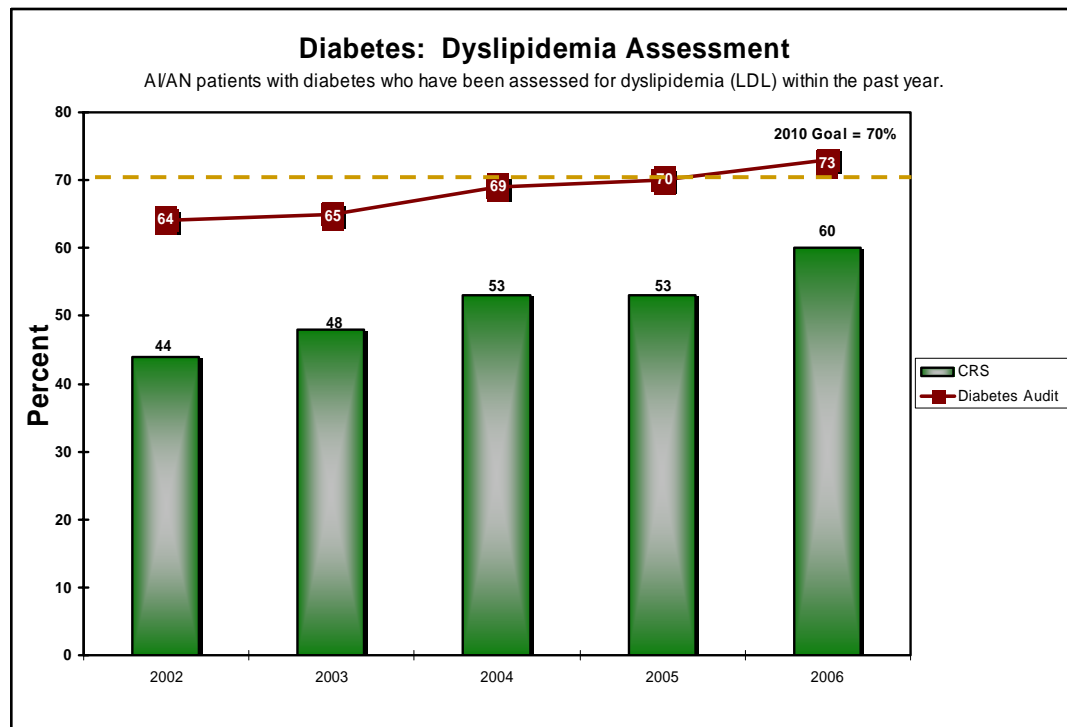
## 2006 Results

### Diabetes: Dyslipidemia Assessment

**Measure:** Proportion of patients with diagnosed diabetes assessed for dyslipidemia.

**Importance:** *Dyslipidemia refers to disorders in the lipoprotein metabolism, including hypercholesterolemia (high LDL cholesterol), and low HDL cholesterol. Low LDL and total cholesterol levels help to protect diabetic patients from developing heart disease. Improved control of cholesterol levels reduces the risk of cardiovascular complications by 20-50%. National standards recommend that people with diabetes keep their total cholesterol levels below 200 mg/dl, and their LDL cholesterol levels below 130 mg/dl and ideally below 100 mg/dl. Diabetic patients are especially prone to develop heart disease; therefore identification and treatment of elevated lipids in diabetic patients is extremely important.*

**2006 Target:** Increase the proportion of patients with diagnosed diabetes assessed for dyslipidemia by 3% over the FY 2005 level of 53% to 56%.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Diabetes audit data comes from the IHS Diabetes program. Audit data is based on different collection methods and exclusion criteria, but Audit data trends generally mirror CRS data trends.

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the percentage of patients assessed for dyslipidemia by 7% from 53% in FY 2005 to 60% in FY 2006. By substantially increasing the percentage of patients screened, the Agency helped to control the risk of cardiovascular complications in patients diagnosed with diabetes.

# 2006 Results

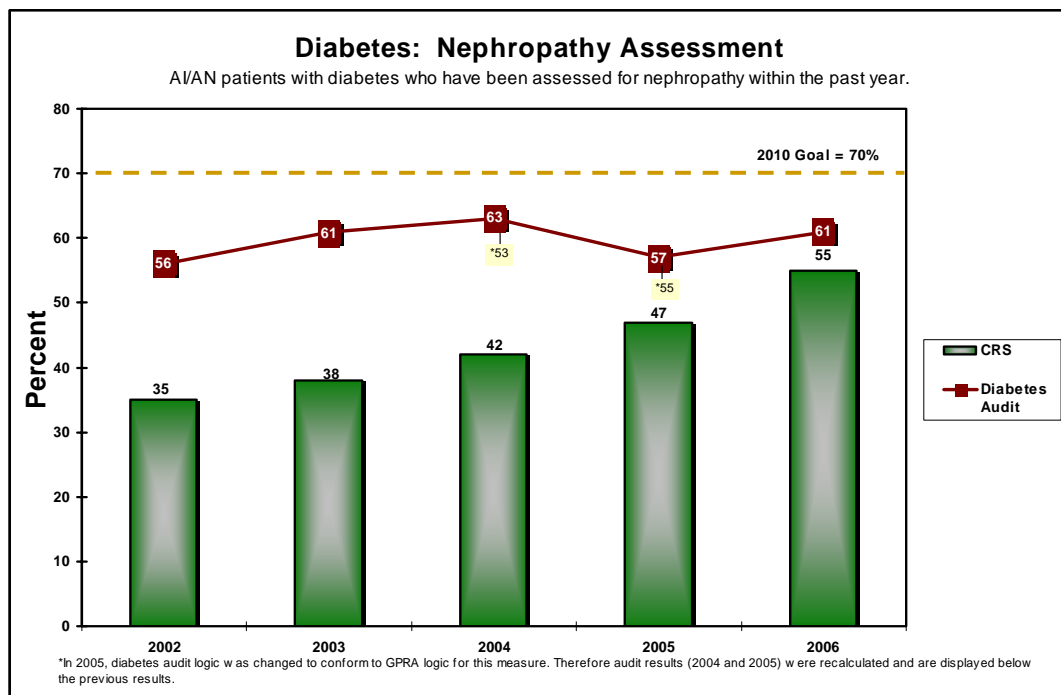
## Diabetes: Nephropathy Assessment

**Measure:** Proportion of patients with diagnosed diabetes assessed for nephropathy.

**Importance:** *Diabetes can cause kidney disease by damaging the parts of the kidneys that filter out wastes. Diabetic nephropathy, or kidney disease, can eventually lead to kidney failure. Diabetes is the leading cause of end stage renal disease (ESRD), which is a significant and growing problem in American Indian communities. Early identification of at risk patients may help prevent or delay the need for costly care such as dialysis or renal transplant.*

*Microalbuminuria (or proteinuria) is measured in the urine with a urinalysis test. Microalbumin in the urine is an early sign of diabetic kidney disease. Proteinuria is also an independent predictor of cardiovascular disease, which is the number one killer of American Indian and Alaska Native adults.*

**2006 Target:** Increase the proportion of patients with diagnosed diabetes assessed for nephropathy by 3% over the FY 2005 level of 47% to 50%.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Diabetes audit data comes from the IHS Diabetes program. Audit data is based on different collection methods and exclusion criteria, but Audit data trends generally mirror CRS data trends.

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the number of diabetic patients assessed for nephropathy by 8% overall, from 47% in FY 2005 to 55% in FY 2006. This significant increase in screening levels helped to identify and prevent kidney disease in patients with diabetes. In FY 2007, this measure will be modified to follow the revised IHS Diabetes Standards of Care, and the target will be to set a new baseline.

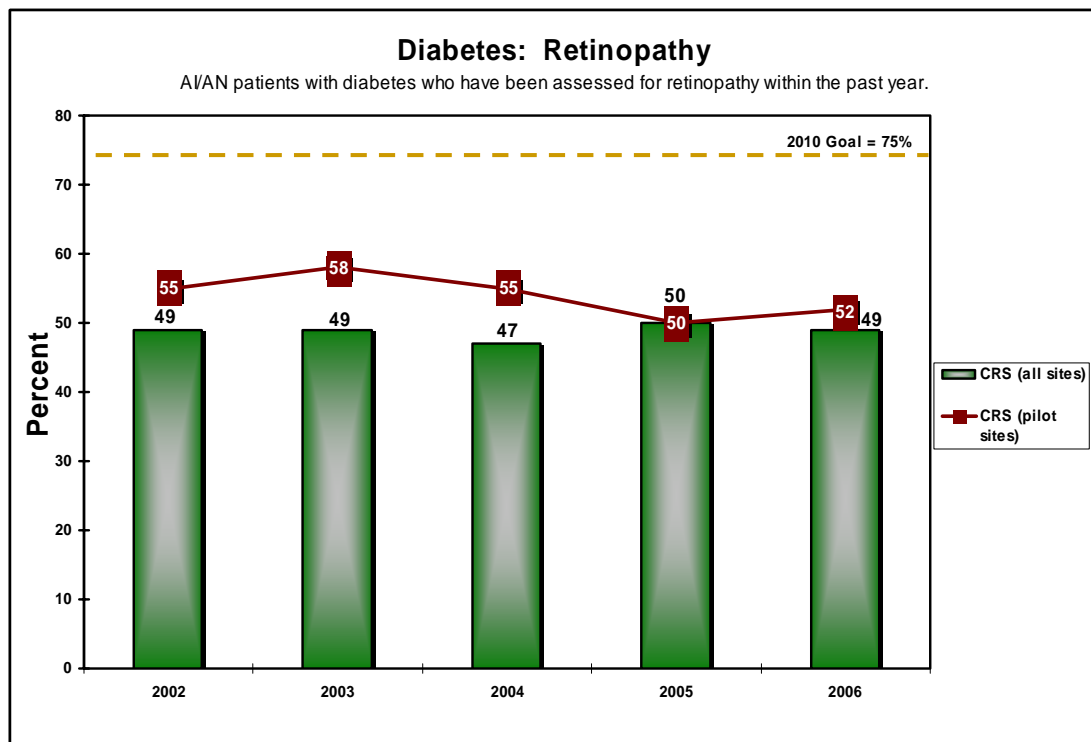
## 2006 Results

### Diabetes: Retinopathy

**Measure:** Proportion of patients with diagnosed diabetes who receive an annual diabetic retinal examination.

**Importance:** *Diabetes can affect sight by damaging the blood vessels inside the eye, a condition known as “diabetic retinopathy.” Diabetic eye disease is a leading cause of blindness in the United States. Early detection of diabetic retinopathy (DR) is a fundamental part of the effort to reduce visual disability in diabetic patients. Clinical trials demonstrated that effective laser photocoagulation treatment of DR could reduce vision loss by 90%. These studies also underscore the need for early identification of DR at a time when laser photocoagulation is most effective.*

**2006 Target:** Maintain the proportion of patients with diagnosed diabetes who receive an annual diabetic retinal examination at designated pilot sites at the FY 2005 level of 50%, and establish a baseline rate at all sites.



**Data source:** CRS 6.1 electronic examination of 91,026 patient records. Pilot site data provided by CRS 6.1 data extraction from designated pilot programs.

**Results and Analysis:** IHS met the target for this measure. The proportion of diabetic patients who received an annual diabetic retinal exam increased from 50% in FY 2005 to 52% in FY 2006 at designated sites. In addition, the baseline exam rate at all sites was established at 49%. Starting in FY 2007 this measure will no longer report designated retinopathy screening pilot site rates and will report rates at all sites.

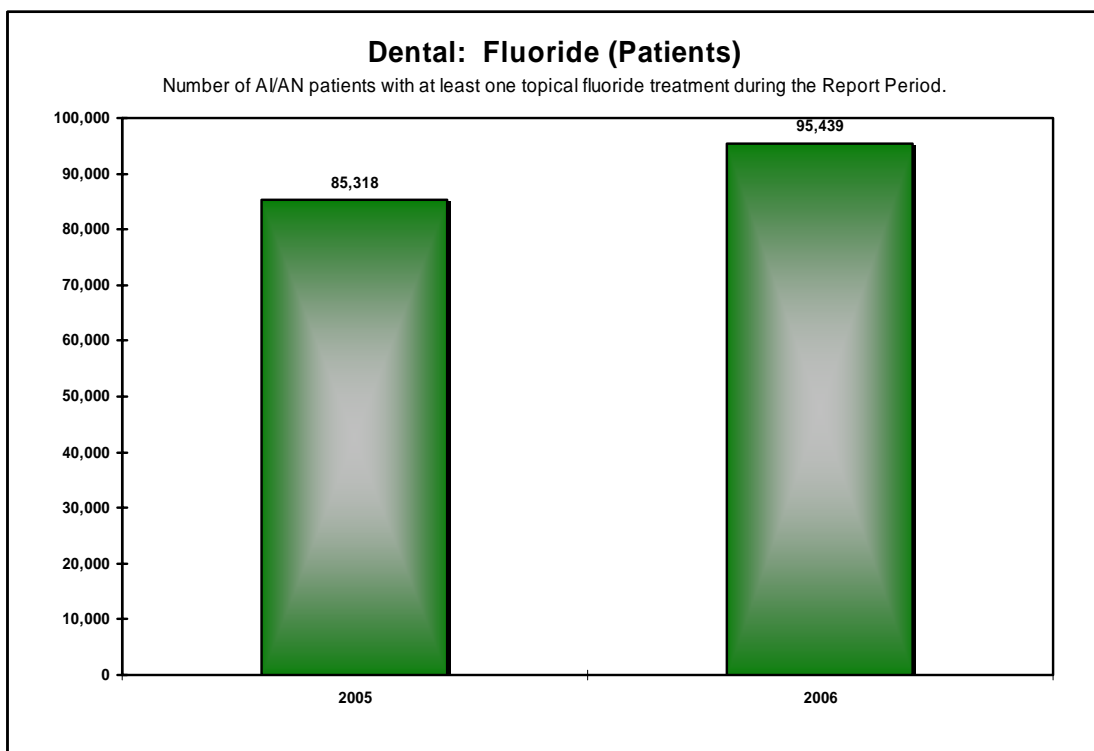
## 2006 Results

### Dental: Fluoride (Patients)

**Measure:** Number of American Indian and Alaska Native patients with one or more topical fluoride treatments.

**Importance:** *The professional topical application of fluoride is an accepted caries-preventive procedure that is appropriate for children, adolescents, and adults. Topical fluorides are also useful when applied to exposed root surfaces. This is especially beneficial for older patients, who are vulnerable to root caries and root sensitivity as a result of the loss of periodontal attachment and/or xerostomia (dry mouth). As a public health measure, targeting those at higher risk for caries is a cost-effective procedure. Criteria for moderate-risk to high-risk children, adolescents, and adults might include the following: more than one active smooth-surface carious lesion; white spot lesions; poor oral hygiene; and/or past history of caries.*

**2006 Target:** Maintain the number of patients who received at least one topical fluoride treatment at the FY 2005 level of 85,318.



**Data source:** CRS 6.1 electronic examination of 1,271,568 patient records.

**Results and Analysis:** IHS met and exceeded the target for this measure. The number of patients who received at least one topical fluoride treatment increased by 10,121 (12%) from 85,318 in FY 2005 to 95,439 in FY 2006.

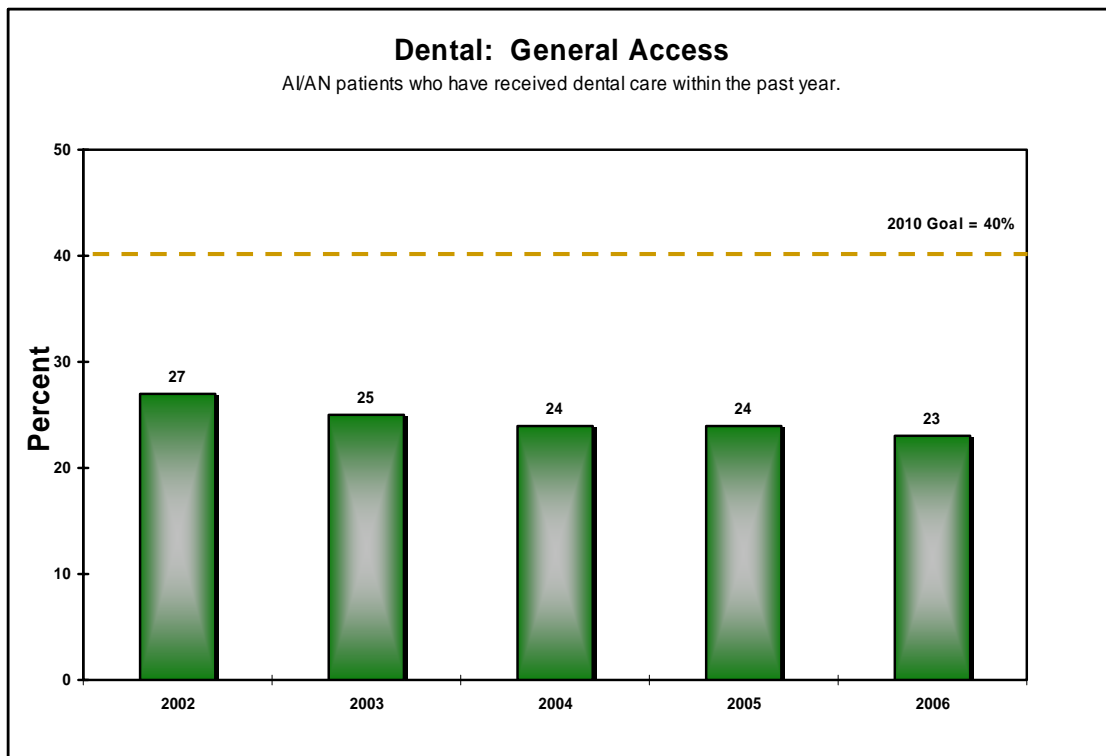
# 2006 Results

## Dental: General Access

**Measure:** Proportion of patients who obtain access to dental services.

**Importance:** *This measure is directed at improving the oral health status of the American Indian and Alaska Native population. American Indians and Alaska Natives report greater unmet dental health needs compared to Non-Hispanic Whites. Untreated tooth decay can cause abscesses and infections, pain, dysfunction and weight loss. Dental problems result in the loss of almost 2.5 million workdays each year. Access to dental care improves oral health as well as the overall health of AI/AN people.*

**2006 Target:** Maintain the proportion of patients that obtain access to dental services at the FY 2005 level of 24%.



**Data source:** CRS 6.1 electronic examination of 1,271,568 patient records.

**Results and Analysis:** IHS did not meet the target for this measure. The proportion of patients that obtained access to dental services dropped by 1% from 24% in FY 2005 to 23% in FY 2006. One key factor contributing to the decline is the continued high vacancy rate in the dental program, which remains around 29%. Access to care is closely tied to vacancy rates.



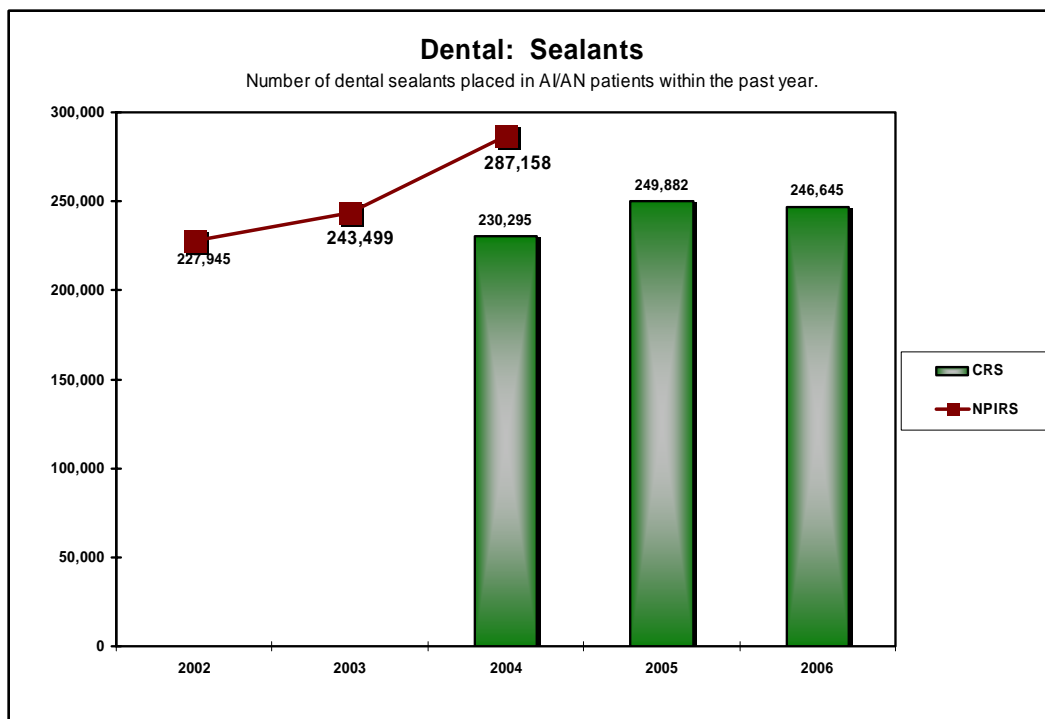
## 2006 Results

### Dental: Sealants

**Measure:** Number of sealants placed per year in American Indian and Alaska Native patients.

**Importance:** *Surveys of American Indian and Alaska Native children have consistently identified them as having significantly higher dental decay rates than the general U.S. population. Dental sealants, a recognized standard in preventive dental care, are an effective measure for reducing dental decay rates and can be effectively applied by dental auxiliaries at relatively low cost. By reducing the incidence of dental decay, sealants improve oral health and represent a cost-effective preventive dental treatment.*

**2006 Target:** Maintain the number of sealants placed in American Indian and Alaska Native patients at the 2005 level of 249,882 sealants.



**Data source:** CRS 6.1 electronic examination of 1,271,568 patient records.

**Results and Analysis:** IHS did not meet the target for this measure. The number of sealants placed in AI/AN patients dropped by 3,237 from 249,882 in FY 2005 to 246,645 in FY 2006. Part of the decline is paradoxically due to the success of the program; some sites have reported that they are “sealed out,” with all eligible patients having received sealants. As with any measure that uses a raw count as opposed to a percentage, some variation is expected.

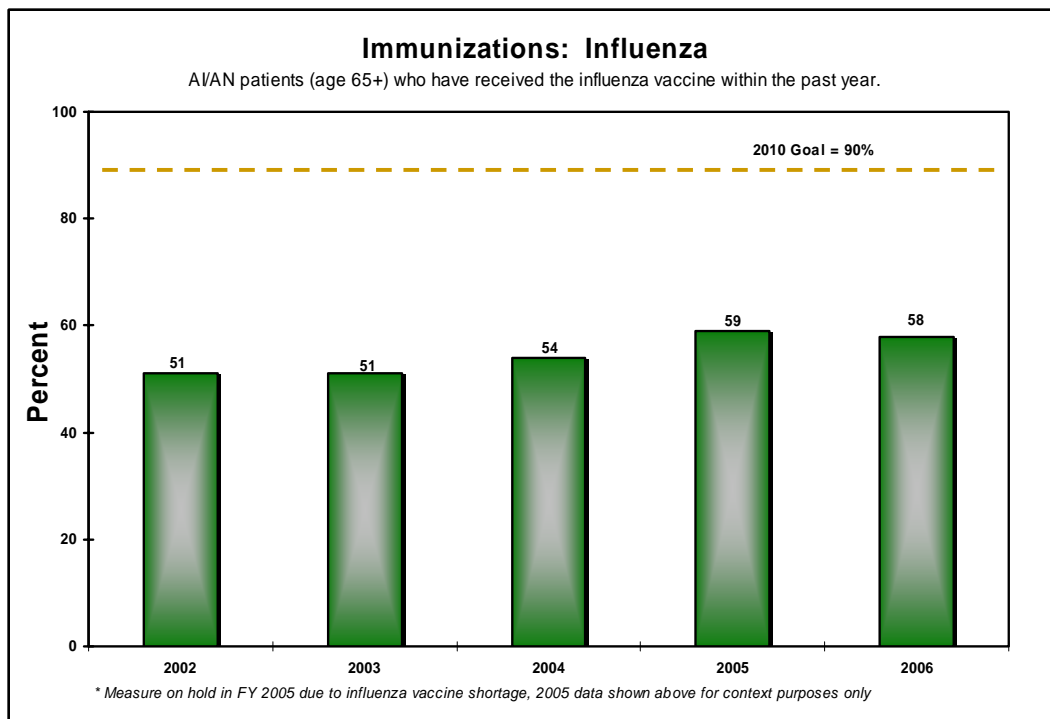
# 2006 Results

## Immunizations: Influenza

**Measure:** Influenza vaccination rates among adult patients age 65 years and older.

**Importance:** *Influenza is a highly contagious respiratory disease that can cause potentially life-threatening secondary infections. Elders who get influenza are also at increased risk of hospitalization and death from heart disease and stroke, and vaccination reduces that risk. In one observational study comparing vaccinated to non-vaccinated persons aged 65 and older in a managed care setting over two influenza seasons, researchers found a 19% and 16-23% reduction in hospitalization for cardiovascular and cerebrovascular events, respectively. In addition they found a 29-32% reduction in hospitalization for influenza or pneumonia and a 48-50% reduction in risk of death from all causes.*

**2006 Target:** Maintain the rate for influenza vaccination at the FY 2005 level of 59%.



**Data source:** CRS 6.1 electronic examination of 56,692 patient records.

**Results and Analysis:** IHS did not meet the target for this measure. The proportion of eligible patients receiving an influenza vaccination dropped by 1% from 59% in FY 2005 to 58% in FY 2006. Although the measure was “on hold” for FY 2005 due to anticipated vaccine shortages, the CRS result of 59% was used to set a target for 2006. The anticipated shortages in FY 2005 were widely reported and may have led to greater public awareness of the need for a flu vaccine, which was not the case in FY 2006. The 2006 rate of 58% still represents a significant increase over prior years’ vaccination rates.

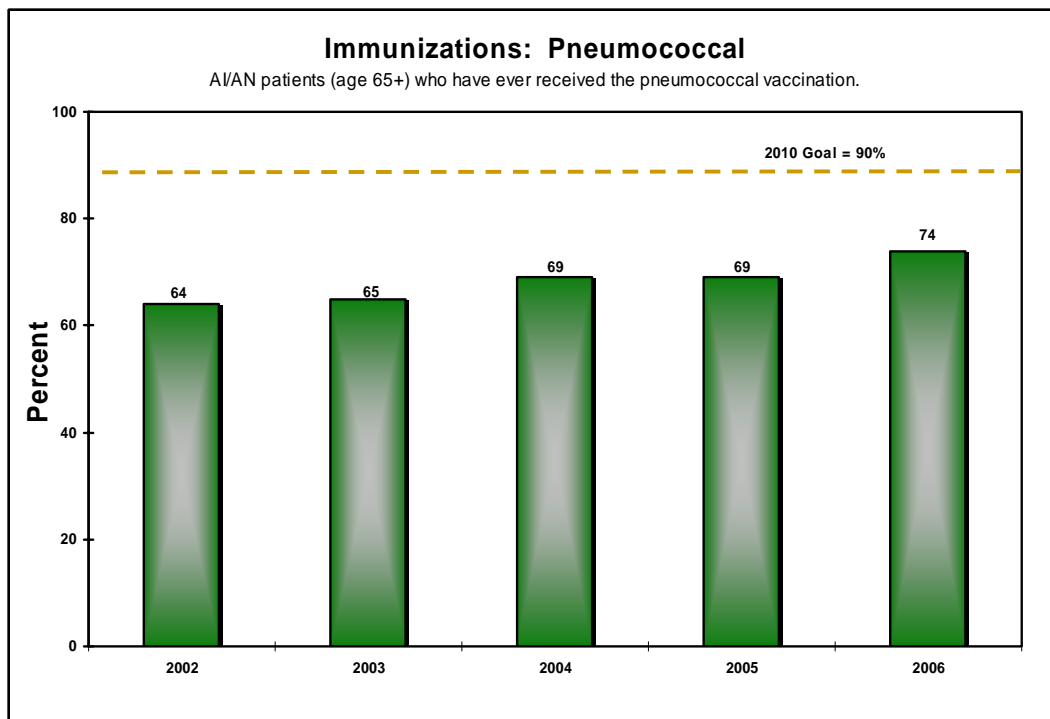
## 2006 Results

### Immunizations: Pneumococcal

**Measure:** Pneumococcal vaccination rates among adult patients aged 65 years and older.

**Importance:** *The purpose of this measure is to reduce morbidity and mortality due to pneumococcal disease among older adults. Elder health is an increasingly important issue as more and more of the population survives beyond the age of 65. Pneumococcal disease includes pneumonia, bacteremia, and meningitis. Pneumococcal disease has the highest death toll from a vaccine-preventable bacterial disease; patients over the age of 65 account for more than 51% of the deaths. In 1998, over 3400 patients over the age of 65 died from pneumonia. Pneumococcal vaccination is a low-cost medical intervention that has been shown to prevent serious health complications among the elderly.*

**2006 Target:** Increase the rate for pneumococcal vaccination by 3% above the FY 2005 level of 69% to 72%.



**Data source:** CRS 6.1 electronic examination of 56,692 patient records.

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the proportion of patients aged 65 and over that received Pneumococcal vaccination by 5% from 69% in FY 2005 to 74% in FY 2006. This measure is included in the “One HHS” 10 Department-wide Management Objectives to attain a 10% relative increase by FY 2007. In order to reach this 10% relative increase, the Agency will need to raise the Pneumococcal vaccination rate by 2% to 76% in FY 2007.

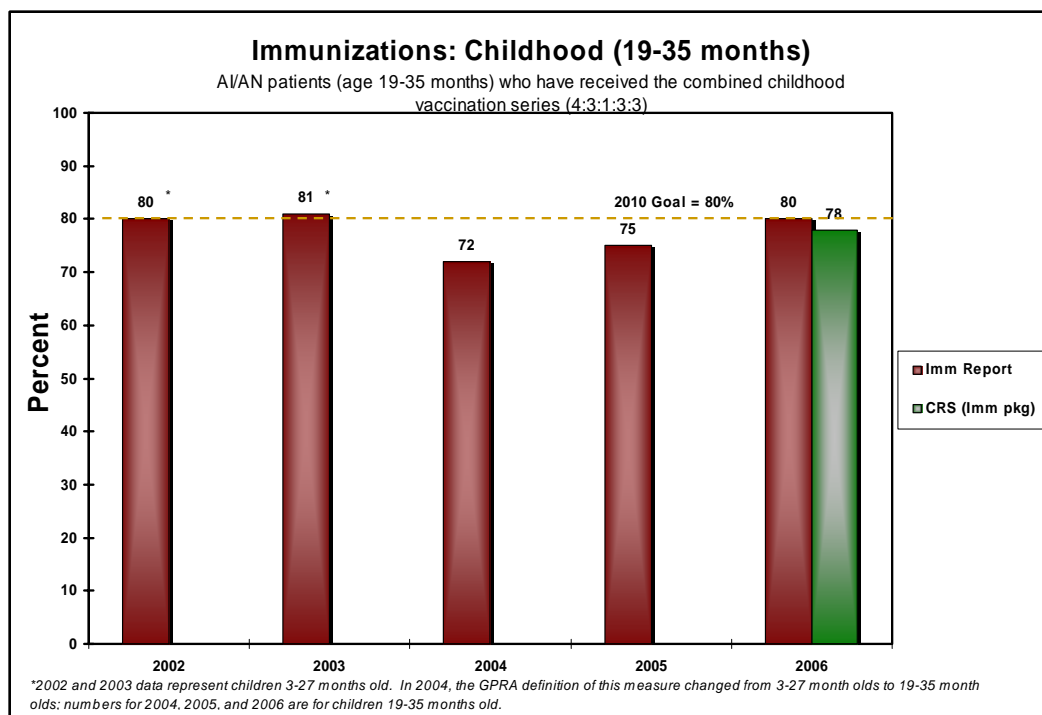
## 2006 Results

### Immunizations: Childhood (19-35 months)

**Measure:** Immunization rates for AI/AN patients aged 19-35 months.

**Importance:** Routine immunizations represent a cost-effective public health measure that significantly improves the health of children. The Healthy People 2010 goal is 90% coverage for all routine immunizations for children aged 19-35 months and 80% coverage for the combined (4:3:1:3:3) series of vaccinations. The combined series includes coverage with 4 doses of DTaP, 3 doses of IPV, 1 dose of MMR, 3 doses of Hep B and 3 doses of Hib.

**2006 Target:** Maintain rates for the combined series of recommended immunizations for American Indian and Alaska Native children aged 19-35 months at the FY 2005 level of 75%.



**Data source:** Immunization Report data are based on IHS patient care records and public health nursing records of children who receive immunizations at an IHS facility. CRS data will be used in future years and reported from the RPMS Immunization package.

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the percentage of children ages 19-35 months receiving recommended vaccines by 5% to from 75% in FY 2005 to 80% in FY 2006. Continued success in increasing vaccination has allowed IHS to reach the HP 2010 goal of an 80% immunization rate for the combined series of childhood immunizations.

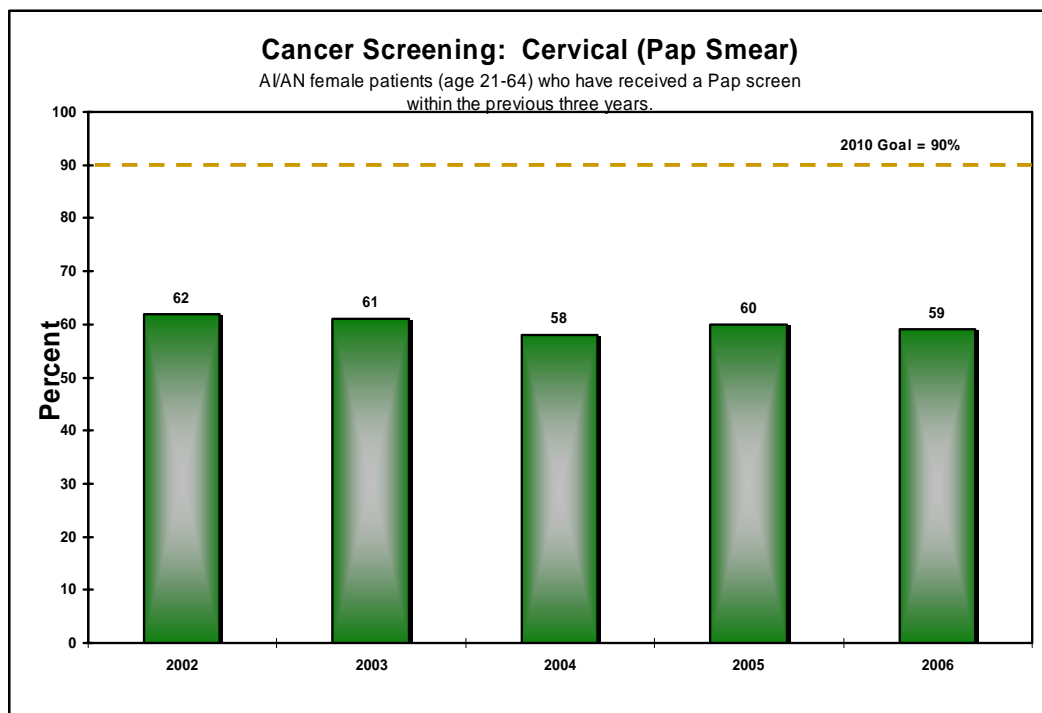
## 2006 Results

### Cancer Screening: Cervical (Pap Smear)

**Measure:** Proportion of eligible women patients who have had a Pap screen within the previous three years.

**Importance:** *More American Indian women report having never had a Pap screen than any other racial or ethnic group. Regular screening with a pap smear lowers the risk of developing invasive cervical Cancer by detecting pre-cancerous cervical lesions that can be treated. If cervical cancer is detected early, the likelihood of survival is almost 100 percent with appropriate treatment and follow-up. Cervical cancer was once the leading cause of cancer death among women, but it has dropped to thirteenth (among US All Races), thanks to the use of Pap screens.*

**2006 Target:** Maintain the proportion of female patients aged 21-64 who have had a Pap screen within the previous three years at the FY 2005 level of 60%.



**Data source:** CRS 6.1 electronic examination of 253,850 patient records.

**Results and Analysis:** IHS did not meet the target for this measure. The proportion of eligible female patients (aged 21-64) with a Pap screen within the previous three years dropped by 1%, from 60% in FY 2005 to 59% in FY 2006. This decline represents the difficulty of raising the Pap screening rate over time without increased resources; since 2002, there has been no significant change in the percentage of patients meeting this measure.

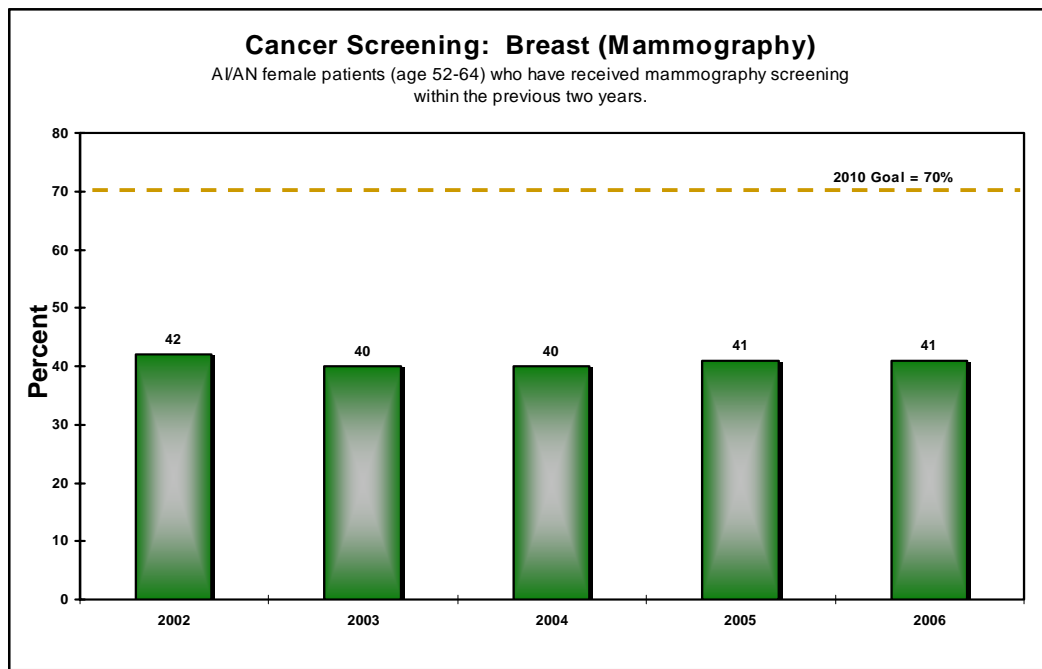
## 2006 Results

### Cancer Screening: Breast (Mammography)

**Measure:** Proportion of eligible women who have had mammography screening within the previous two years.

**Importance:** *Biennial screening of women between the ages of 50 and 69 has been shown to be a cost effective way to decrease the breast cancer mortality rate. Breast cancer is the second leading cause of cancer death among U.S. women (lung cancer is first). Although there has been overall improvement in breast cancer mortality rates since 1990, AI/AN women have not shared these gains. Between 1992 and 2002, breast cancer mortality rates declined for all racial and ethnic groups except American Indian/Alaska Native women, who experienced no decline in mortality rates. Regular mammography screening can reduce breast cancer mortality by 20-25%. AI/AN women diagnosed with breast cancer have lower 5-year survival rates in comparison to whites, mainly because their cancers are less likely to be found in earlier stages. It is because of this disparity that breast cancer screening remains one of the Agency's highest priorities.*

**2006 Target:** Maintain the proportion of female patients aged 52-64 who have had mammography screening within the previous two years at the FY 2005 level of 41%.



**Data source:** CRS 6.1 electronic examination of 47,874 patient records.

**Results and Analysis:** IHS met the target for this measure, maintaining the proportion of eligible patients (aged 52-64) who have had a mammography screening at 41%. As with Pap smears, the mammography screening rate is difficult to increase. Although the Agency managed to maintain the screening rate between FY 2005 and FY 2006, without increased resources for mammography screening, this rate is unlikely to improve.

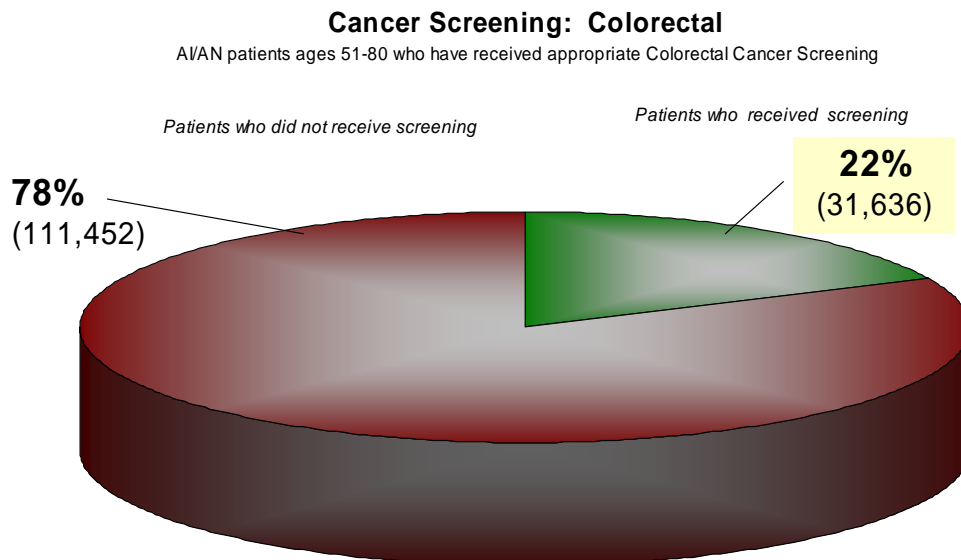
## 2006 Results

### Cancer Screening: Colorectal

**Measure:** Proportion of patients who have had appropriate colorectal cancer screening.

**Importance:** *Colorectal cancer rates among the Alaska Native population are well above the national average. Studies have tracked rates of 69.3 to 79.7 per 100,000 among Alaska Native men, and 67.4 to 71.4 per 100,000 among Alaska Native women. Alaska Native women in particular have colorectal cancer rates of more than twice the US average. Among all Alaska Natives, mortality rates from colorectal cancer are also much higher than the US average. Although colorectal cancer rates among American Indians are low compared to the overall US average, there is strong evidence that the number of colorectal cancer cases has been rising in recent years. American Indians and Alaska Natives are less likely to be diagnosed with colorectal cancer at the earliest, localized stage, and more likely to be diagnosed at the distant stage, compared to whites and Asian Americans. Screening and preventative measures such as removal of polyps have been well proven to reduce the rates and lethality of colorectal cancer. Colorectal cancers have long asymptomatic periods during which they can be diagnosed and treated. Yearly screening has been shown to result in a 33.4 percent reduction in colorectal cancer mortality.*

**2006 Target:** Establish a baseline rate of patients receiving appropriate colorectal cancer screening.



**Data source:** CRS 6.1 electronic examination of 143,088 patient records

**Results and Analysis:** IHS met the target for this measure, establishing a baseline of eligible patients (aged 51-80) who have had appropriate colorectal cancer screening at 22%.

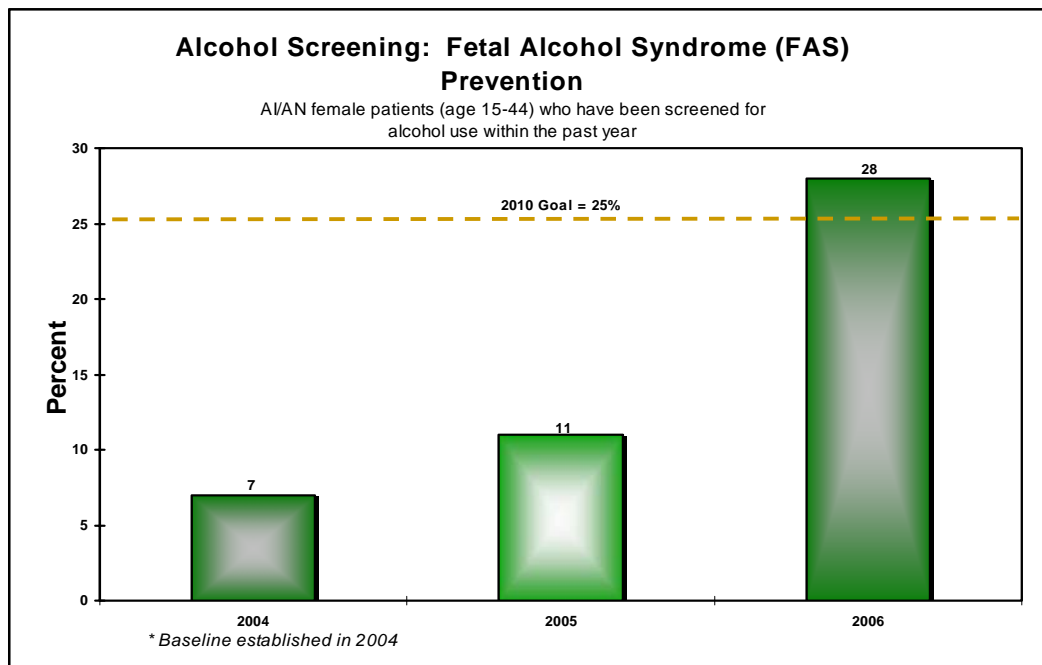
## 2006 Results

### Alcohol Screening: Fetal Alcohol Syndrome (FAS) Prevention

**Measure:** Alcohol use screening (to prevent Fetal Alcohol Syndrome) in appropriate female patients

**Importance:** *Heavy drinking during pregnancy can cause significant birth defects, including Fetal Alcohol Syndrome (FAS). FAS is the leading known, and preventable, cause of mental retardation. Rates of FAS are higher among American Indians and Alaska Natives than the general population. FAS cases have been reported at a rate of 9.8 per 1000 live births among southwestern Indians, 5.6 per 1000 in Alaska, and 2.5 per 1000 in Arizona, well above that of any other race or ethnicity. Studies have found alcohol consumption rates among AI/AN women of childbearing age to be higher than average. The US Preventive Services Task Force recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings. Screening with intervention has been shown to be effective in reducing alcohol misuse in pregnancy and to reduce the incidence of FAS.*

**2006 Target:** Increase the screening rate for alcohol use in female patients ages 15-44 by 1% over the FY 2005 level of 11% to 12%.



**Data source:** CRS 6.1 electronic examination of 238,333 records

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the proportion of eligible patients screened for alcohol use by 17% overall, from 11% in FY 2005 to 28% in FY 2006. This measure is included in the “One HHS” 10 Department-wide Management Objectives to achieve a relative increase 10% increase by FY 2007. The Agency has already met and exceeded the targeted increase. It has also met and exceeded the 2010 goal for the measure.



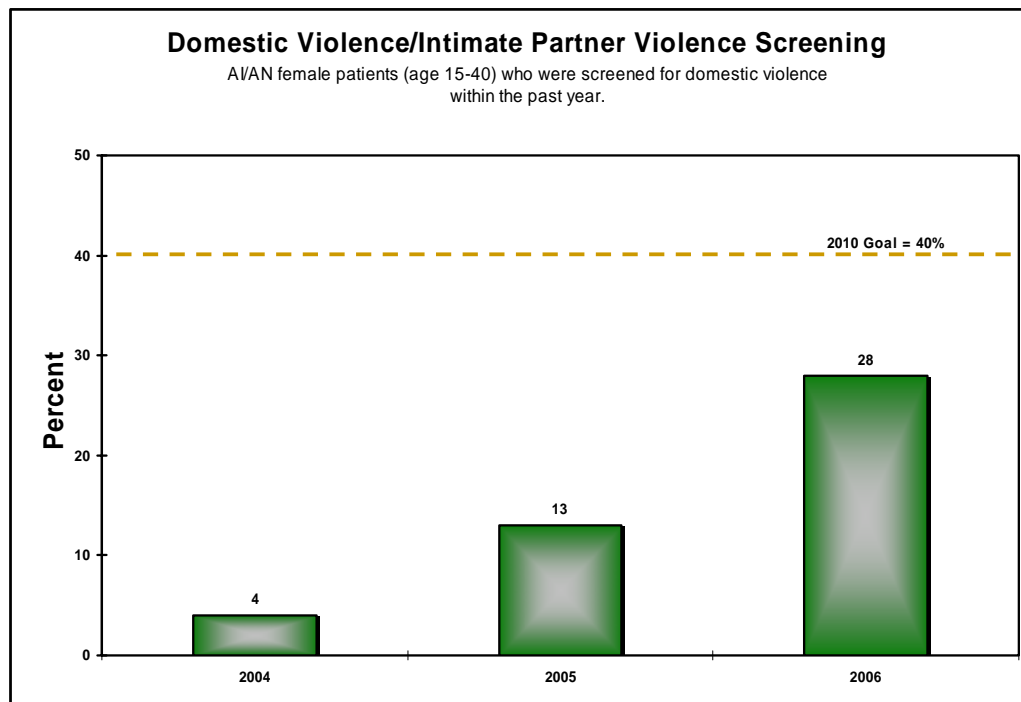
## 2006 Results

### Domestic Violence/Intimate Partner Violence Screening

**Measure:** Proportion of women who are screened for domestic violence at health care facilities.

**Importance:** *This measure is designed to help ascertain, evaluate, and reduce the prevalence of family violence, abuse, and neglect in American Indian and Alaska Native communities. Thirty percent of women in the United States experience domestic violence at some time in their lives. AI/AN women experience domestic violence at rates similar to or higher than the national average. A survey of Navajo women seeking routine care at an IHS facility revealed that 14% had experienced physical abuse in the past year, and 42% had experienced physical abuse from a male partner at least once in their lives. The health consequences of intimate partner violence are numerous. Women who experience domestic violence are more often victims of nonconsensual sex, have higher levels of smoking, chronic pain syndromes, depression, generalized anxiety, substance abuse, and Post-Traumatic Stress Disorder.*

**2006 Target:** Increase the proportion of women aged 15-40 screened for domestic and intimate partner violence by 1% above the FY 2005 level of 13% to 14%.



**Data source:** CRS 6.1 electronic examination of 210,430 patient records.

**Results and Analysis:** IHS met and exceeded the target for this measure, increasing the proportion of eligible patients who have had Intimate Partner/Domestic Violence screening by 15% overall, from 13% in FY 2005 to 28% in FY 2006. This measure is included in the “One HHS” 10 Department-wide Management Objectives to attain a 10% relative increase by FY 2007. The Agency has already met and exceeded the targeted increase.

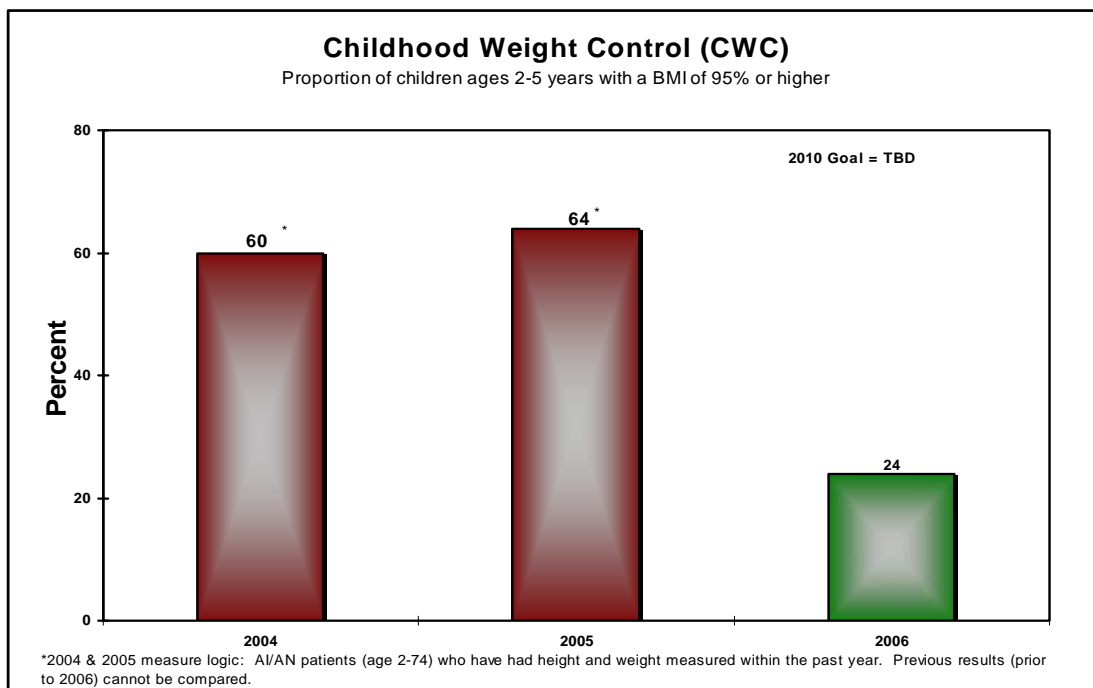
## 2006 Results

### Childhood Weight Control (CWC)

**Measure:** Proportion of children ages 2-5 years with a BMI of 95% or higher.

**Importance:** Rates of overweight among American Indian and Alaska Native children exceed the national averages. Children who are overweight tend to show related signs of morbidity, including elevated blood pressure, cholesterol, triglyceride, and insulin levels. Overweight children also are at risk for psychosocial difficulties arising from being obese, including shame, self-blame, and low self-esteem, all of which may impair academic and social functioning and carry into adulthood. One major result of rising childhood overweight rates is the growing prevalence of type 2 diabetes among children. In some populations, type 2 diabetes is now the dominant form of diabetes in children and adolescents. Excess weight gain in early childhood also has significant effects on later health, including a high risk of being overweight or obese in adulthood, and a higher risk of type 2 diabetes and cardiovascular disease. Children with a BMI at or above 95% are considered overweight.

**2006 Target:** Establish a baseline of the proportion of children ages 2-5 years with a BMI >95%.



**Data source:** CRS 6.1 electronic examination of 38,769 patient records

**Results and Analysis:** IHS met the target for this measure by establishing a baseline of 24% of children ages 2-5 with a BMI of 95% or higher. This exceeds rates found in the general population, and represents a significant health risk factor for the pediatric population. IHS is working on multiple strategies for combating childhood overweight and obesity.

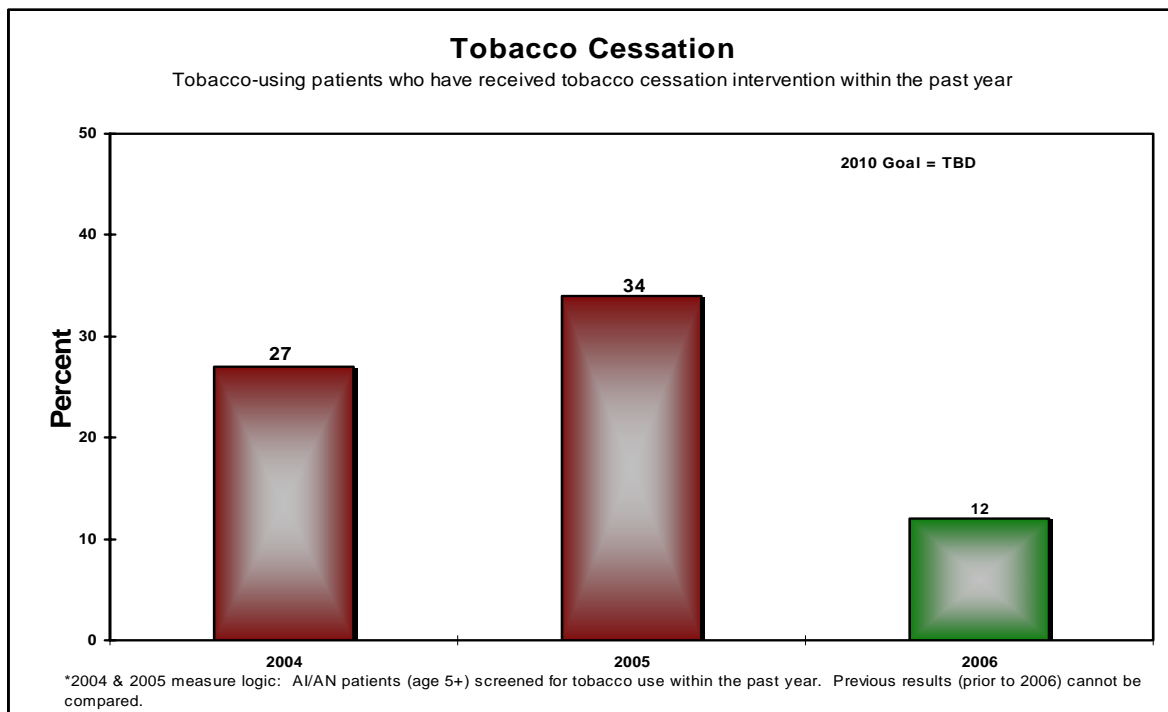
# 2006 Results

## Tobacco Cessation

**Measure:** Proportion of tobacco-using patients that receive tobacco cessation intervention.

**Importance:** *The use of tobacco represents the second largest cause of preventable deaths for American Indian and Alaska Native people. Smoking rates in many communities are almost twice the national average. Tobacco users who quit enjoy longer and healthier lives, on average, than those who do not. Even a long-time smoker can significantly reduce their risk of heart disease and other complications by quitting. Advice from a health care provider and group and individual cessation counseling can help smokers quit. Smoking cessation treatments have been found to be safe and effective. Moreover, tobacco cessation programs are more cost-effective than other common prevention interventions. Cost analyses have shown tobacco cessation programs to be either cost-saving or cost-neutral.*

**2006 Target:** Establish a baseline of the proportion of patients receiving cessation intervention.



**Data source:** CRS 6.1 electronic examination of 197,446 patient records

**Results and Analysis:** IHS met the target for this measure, establishing a baseline of 12% of the proportion of tobacco-using patients who have received cessation intervention. Because tobacco has a unique status among many American Indian and Alaska Native tribes as a sacred plant, any plan for control activities must have significant input from American Indian and Alaska Native community leaders.

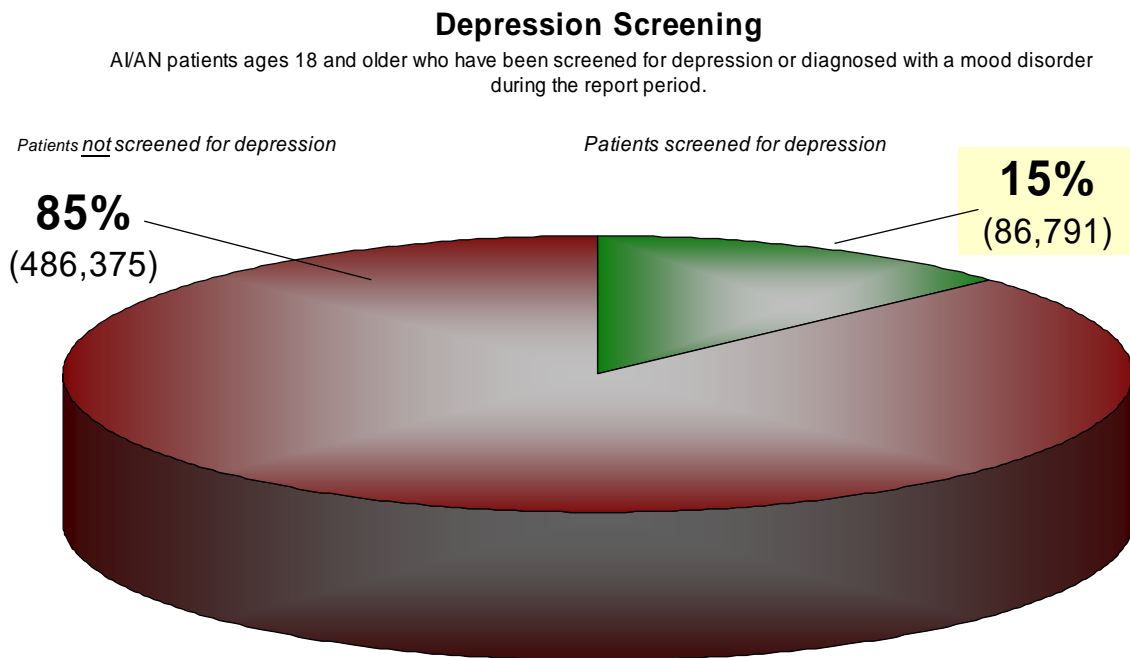
# 2006 Results

## Depression Screening

**Measure:** Proportion of patients ages 18 and older who receive depression screening.

**Importance:** *About 1 in 20 adults experience major depression in a given year. Depression and anxiety disorders may affect heart rhythms, increase blood pressure, and alter blood clotting. Depression can also lead to elevated insulin and cholesterol levels. Depression or anxiety may result in chronically elevated levels of stress hormones such as cortisol and adrenaline. Depression also frequently increases the risk of suicidal behavior. The specific risk for suicide associated with depressive disorders is elevated 12- to 20-fold compared to the general population. Screening for depression is the first step toward identifying patients who need intervention, treatment, and follow up.*

**2006 Target:** Establish the baseline of patients ages 18 and older that receive depression screening.



**Data source:** CRS 6.1 electronic examination of 573,166 patient records

**Results and Analysis:** IHS met the target for this measure by establishing a baseline of 15%. The target for both FY 2007 and FY 2008 is to maintain this rate.

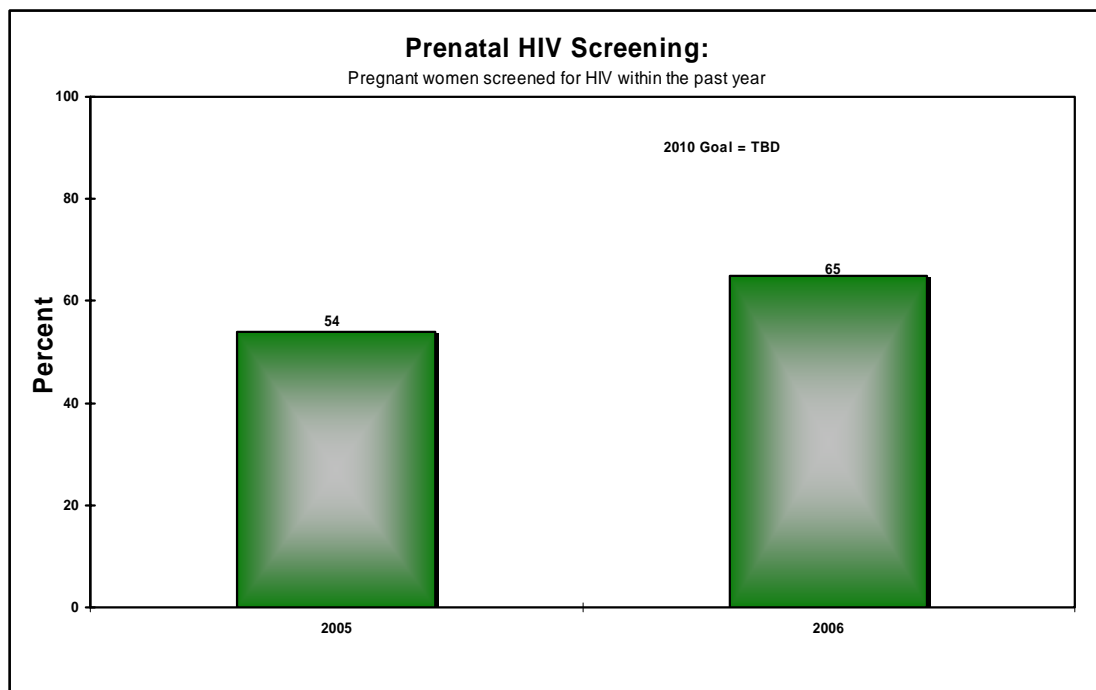
# 2006 Results

## Prenatal HIV Screening

**Measure:** Proportion of pregnant women screened for HIV.

**Importance:** *The HIV/AIDS epidemic represents a growing threat to American women of childbearing age. From 1999 through 2003, the estimated number of AIDS cases increased 15% among women and 1% among men. HIV infections in newborn children are one potential consequence of higher HIV infection rates among women of childbearing age. In 2003, the CDC reported that 92% of HIV and AIDS cases in children and virtually all new HIV infections in children in the United States were the result of perinatal transmission of HIV. Studies have shown transmission rates of less than 2% among HIV infected mothers who started antiretroviral treatment during pregnancy; those who did not begin treatment until labor or after birth had transmission rates of 12-13%, and those who received no treatment had rates of 25%. Routine prenatal HIV testing of all pregnant women is the best way to avoid transmission of HIV from mother to infant.*

**2006 Target:** Increase the proportion of women screened for HIV in pregnancy by 1% over the 2005 level of 54% to 55%.



**Data source:** CRS 6.1 electronic examination of 26,237 patient records.

**Results and Analysis:** IHS met and exceeded the target for this measure. The rate of prenatal HIV screening increased by 11% from 54% in FY 2005 to 65% in FY 2006. The Indian Health Service has issued guidance recommending universal prenatal HIV testing using the “opt-out” approach. As more practitioners adopt opt-out testing, prenatal HIV screening rates should increase even further.

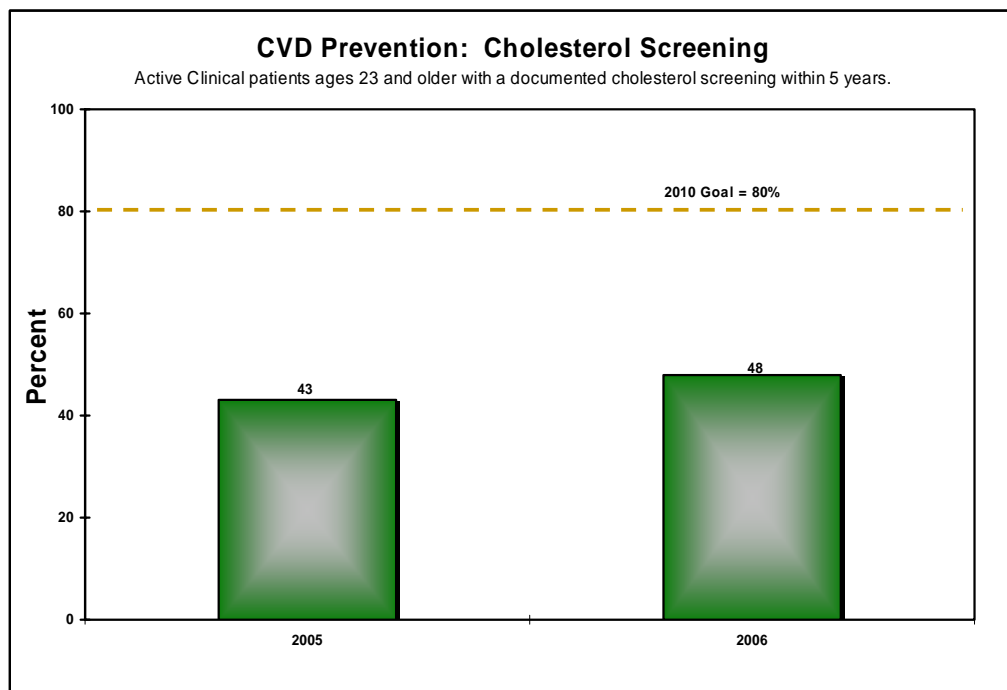
## 2006 Results

### CVD Prevention: Cholesterol Screening

**Measure:** Proportion of patients ages 23 and older who receive blood cholesterol screening.

**Importance:** *Death rates from cardiovascular disease are higher among AI/AN people than other groups. In the late 1990s, heart disease death rates were 20% higher among AI/AN people than the total US population, and stroke death rates were 14% higher. Cardiovascular disease represents the leading cause of death for American Indian and Alaska Native people above 45 years of age. Unlike other racial and ethnic groups, American Indians appear to have an increasing incidence of cardiovascular disease, likely due to the high prevalence of diabetes. Elevated LDL cholesterol is associated with increased risk of cardiovascular disease, heart attacks, and strokes. However, a 10% decrease in total blood cholesterol levels may reduce the incidence of heart disease by as much as 30%.*

**2006 Target:** Increase the proportion of patients ages 23 and older that receive blood cholesterol screening by 1% over the FY 2005 level of 43%.



**Data source:** CRS 6.1 electronic examination of 488,960 patient records

**Results and Analysis:** IHS met and exceeded the target for this measure. The proportion of patients ages 23 and older that received blood cholesterol screening within the past five years increased by 5% from 43% in FY 2005 to 48% in FY 2006. In FY 2007, this measure will change to CVD Prevention: Comprehensive Assessment, focusing on the proportion of at-risk patients who have a comprehensive assessment for all cardiovascular disease-related risk factors. Cholesterol screening will be part of this comprehensive assessment.

# Appendix A

# Summary of Key Findings

Summary Table of 2006 GPRA Measures: CRS

Measure	2006 Results	2005 Results	2006 Target	Measure Status
Diabetes: Poor Glycemic Control	16%	15%	15%	Not Met
Diabetes: Ideal Glycemic Control	31%	30%	32%	Not Met
Diabetes: Blood Pressure Control	37%	37%	37%	Met
Diabetes: Dyslipidemia Assessment	60%	53%	56%	Met
Diabetes: Nephropathy Assessment	55%	47%	50%	Met
Diabetic Retinopathy (All sites/pilots)	49%/52%	NA/50%	baseline /50%	Met/Met
Cervical Cancer (Pap) Screening	59%	60%	60%	Not Met
Breast Cancer (Mammography) Screening	41%	41%	41%	Met
Colorectal Cancer Screening	22%	NA	baseline	Met
Alcohol Screening (FAS Prevention)	28%	11%	12%	Met
Topical Fluorides -Patients	95,439	85,318	85,318	Met
Dental Access	23%	24%	24%	Not Met
Dental Sealants	246,645	249,882	249,822	Not Met
Domestic (Intimate Partner) Violence Screening	28%	13%	14%	Met
Depression Screening	15%	NA	baseline	Met
Childhood Immunizations (*Immunization Report)	<sup>a</sup> 80%/78%	<sup>a</sup> 75%	75%	Met
Adult Immunizations: Influenza	58%	59%	59%	Not Met
Adults Immunizations: Pneumococcal	74%	69%	72%	Met
CVD Prevention: Cholesterol Screening	48%	43%	44%	Met
Childhood Weight Control (*BMI Assessed)	24%	*64%	baseline	Met
Tobacco Cessation (**Tobacco Use Assessed)	12%	**34%	baseline	Met
Prenatal HIV Screening	65%	54%	55%	Met



# Summary of Key Findings

Summary Table of 2006 GPRA Measures: Non-CRS

Measure	2006 Result	2005 Result	2006 Target	Measure Status
<b>RTC Accreditation</b>	100%	100%	100%	<b>Met</b>
<b>Data Quality Improvement</b> <i>Number of clinical measures that can be reported by CRS software.</i>	+1 new measure	+4 new measures	+1 new measure	<b>Met</b>
<b>Accreditation</b>	100%	100%	100%	<b>Met</b>
<b>Medication Error Improvement</b> <i><sup>1</sup>Number of Areas with a medication error reporting system.</i>	3 Areas	<sup>1</sup> All areas using NCCMERP	Implement Medical error reporting system	<b>Met</b>
<b>Scholarships</b> <i>Proportion of Health Professional Scholarship recipients placed in Indian health settings within 90 days of graduation.</i>	37	30	32	<b>Met</b>
<b>Public Health Nursing</b> <i><sup>2</sup>Number of public health nursing services (primary and secondary treatment and preventive services) provided by public health nursing.</i>	Developed	<sup>2</sup> 438,376	Develop Data System	<b>Met</b>
<b>Injury Intervention</b> <i><sup>3</sup>Number of community-based injury prevention programs.</i>	System Implemented	<sup>3</sup> 37 projects	Implement Web System	<b>Met</b>
<b>Unintentional Injury Rates</b>	Results available 12/2010	Results available 12/2009	93.8/100,000	<b>Pending</b>
<b>Suicide Surveillance</b> <i>Increase the incidence of Suicidal behavior reporting.</i>	1603	BHS integrated	Set Baseline	<b>Met</b>
<b>Environmental Surveillance</b>	20 programs	12 programs	18 programs	<b>Met</b>
<b>Sanitation Improvement</b> Number of homes Percent of existing homes at Deficiency Level 4 or above	24,090 35%	24,072 38%	22,000 20%	<b>Met</b>
<b>Facility Construction</b> <i><sup>4</sup>See specific FC report for status</i>	3 projects completed	<sup>4</sup> 15/21	Complete 3 projects	<b>Met</b>

# Indian Health Service Mortality Disparities Table

## American Indian and Alaska Natives (AI/AN) in the IHS Service Area 2000-2002, US All Races 2001

	Rate AI/AN 2000-2002	Rate U.S. All Races 2001	Ratio: AI/AN: U.S. All Races
<b>ALL CAUSES</b>	<b>1039.9</b>	<b>854.5</b>	<b>1.2</b>
ALCOHOL INDUCED	42.1	6.9	6.1
BREAST CANCER	16.5	26.0	0.6
CEREBROVASCULAR DISEASE	59.9	57.9	1.0
CERVICAL CANCER	4.5	1.4	3.2
DIABETES	73.2	25.3	2.9
DISEASES OF THE HEART	236.2	247.8	1.0
HIV INFECTION	2.9	5.0	0.6
HOMICIDE (assault)	11.4	7.1	1.6
INFANT DEATHS (per 1,000 live births)	8.5	6.8	1.3
MALIGNANT NEOPLASMS (ALL)	183.5	196.0	0.9
MATERNAL DEATHS <sup>1/</sup>	12.5	9.9	1.3
MOTOR VEHICLE CRASHES	50.4	15.3	3.3
PNEUMONIA & INFLUENZA	31.1	22.0	1.4
SUICIDE (Intentional self-harm)	17.3	10.7	1.6
TUBERCULOSIS	2.1	0.3	7.0
UNINTENTIONAL INJURIES	90.1	35.7	2.5

<sup>1/</sup>Rate per 100,000 live births. Rate does not meet the standards of reliability due to small numbers. The break in comparability for maternal mortality has not been quantified by NCHS.

Source: Unpublished data: OPHS/Division of Program Statistics (2000-2002 AI/AN rates based on 2000 census with bridged-race categories: Date: January 2006

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