

## **Healthy People 2010 snapshot for the white non-Hispanic population: Progress toward targets, size of disparities, and changes in disparities**

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### **INTRODUCTION**

*Healthy People 2010* is a comprehensive, national agenda for improving the health of the U.S. population by the year 2010. It has two overarching goals: (1) increase quality and years of healthy life and (2) eliminate health disparities. These goals are supported by 955 health objectives and subobjectives organized in 28 different focus areas. Every measurable objective has a target to be achieved by the year 2010. Data from dozens of data systems are assembled for this wide range of health objectives and progress toward these two goals is being monitored for the total population and for specific subgroups (1).

This snapshot is one in a series of five reports, one for each of the following racial and ethnic populations: American Indian or Alaska Native, Asian, Hispanic or Latino, non-Hispanic black, and non-Hispanic white. This series complements the *Healthy People Statistical Note No. 26*, entitled, “Comparing Racial and Ethnic Populations Based on Healthy People 2010 Objectives”. That report compares these five racial and ethnic populations in terms of progress toward *Healthy People 2010* targets, the size of disparities, and changes in disparities over time (2). The purpose of the snapshots is to provide a more detailed look at data for each racial and ethnic population based on the *Healthy People 2010* objectives. These are the first comprehensive population-specific analyses undertaken for Healthy People 2010, available at:

[http://www.cdc.gov/nchs/healthy\\_people/hp2010/hp2010\\_snapshots.htm](http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010_snapshots.htm).

*Healthy People Statistical Note No. 26* is based on specific sets or groups of objectives with data for several racial and ethnic populations. This snapshot is based on *all* of the objectives with data for the white non-Hispanic population and provides detailed information related to:

- *Availability of data* for objectives in each Healthy People 2010 focus area.
- *Progress* toward the target for Healthy People 2010 objectives.
- Number and types of objectives for which the non-Hispanic white population had the “*best*” rate.
- Number and types of objectives for which the non-Hispanic white population had the *largest disparities* relative to the racial and ethnic group with the “best” rate.
- Number and types of objectives for which *disparity is increasing or decreasing* for the non-Hispanic white population, relative to the racial and ethnic group with the “best” rate.
- Relationship between *progress toward targets and changes in disparity* over time.

## METHODS

A detailed description of the methods used to assess progress and disparity for these racial and ethnic populations is provided in *Healthy People Statistical Note No. 26* (2). However, a brief overview is provided below.

### Data

Among the *Healthy People 2010* objectives, there are 504 that call for data by demographic characteristics including race and ethnicity. These “population-based” objectives are measured in terms of the rate, or proportion of individuals with a particular health attribute, such as a health condition or outcome, a known health risk, or utilization of a specific health care service. All of the population-based objectives in *Healthy People 2010* call for tracking data by gender, race and ethnicity, and socio-economic status. However, data for each racial and ethnic group are not available for all objectives.

Most data sources that collect data on race also collect data on Hispanic origin however, some sources do not collect or do not report data on Hispanic origin. There are 42 objectives with data for the black and white populations that do not have information on Hispanic origin. Throughout this report, references to objectives with data for the non-Hispanic black or non-Hispanic white populations may include objectives with data for the black and white populations that include persons of Hispanic origin. For some objectives the categories black and white continue to be used in order to maintain comparability between the baseline and the most recent data point, despite the fact that data on Hispanic origin has become available. When specific objectives are identified in this snapshot, those based on the white population without regard to Hispanic origin are identified. When information on Hispanic origin is not available the objectives are footnoted in the tables in this report that show findings by individual objective.

This report is based on data in the *Healthy People 2010* database (DATA2010) as of August 2007. This cutoff point was consistently employed for *Healthy People Statistical Note No. 26* and for the five racial ethnic snapshots in this series. For some objectives, only a single baseline data point was available. For most objectives, more recent data points were available. There are 400 population-based objectives with at least one data point for the non-Hispanic white or white population.

### Measuring progress toward targets

Two or more data points are needed to evaluate progress toward a *Healthy People 2010* target. As of August 2007, 315 of the 400 population-based objectives that had data for the non-Hispanic white population had two or more data points. Progress toward reaching the 2010 targets was categorized as follows: moving away from the target, no change, moving toward the target, met or exceeded the target, and met the target at baseline. When measures of variability were available, the statistical significance of the change toward or away from the target was tested. However, the results of the significance test did not affect the category to which an objective was assigned. Each category contains some objectives for which the change was

significant, some for which the change was not significant, and some for which the change could not be tested.

### **Measuring the size of disparities**

Disparity was calculated at the baseline and/or at the most recent data point, when data for more than one racial and ethnic group were available. The percent difference between the non-Hispanic white group rate and the “best” group rate among the other racial and ethnic groups, was calculated for each of the 400 population-based objectives at the most recent data point. The “best” group rate is the most favorable racial and ethnic group rate. Having the “best” group rate does not imply that the rate for that racial and ethnic group cannot be improved. When measures of variability were available, the statistical significance of the percent difference was tested. The distribution of objectives by size of disparity at the most recent data point was presented using the following categories: best group rate, less than 10% different from the best group rate or not statistically significant, 10-49%, 50-99%, 100-199%, and 200% or more different from the best group rate. The latter four categories include objectives for which the percent difference was statistically significant and objectives for which the percent difference could not be tested.

### **Measuring changes in disparities**

To assess changes in disparity over time, the percent difference between the non-Hispanic white rate and the best group rate at the baseline was subtracted from the percent difference at the most recent data point. The change is expressed in percentage points. Both disparity and trend data were required to measure changes in disparity over time. This created a subset of objectives that was smaller (271 objectives), than the number of objectives used to measure disparity at a single point in time (400 objectives). When measures of variability were available, the significance of changes in disparity was tested. Increases or decreases in disparity of 10 percentage points or more that were not statistically significant were classified as “no change”. Objectives with increases or decreases of 10 percentage points or more include some for which the change was significant and some for which the change could not be tested.

### **Evaluating the association between progress and changes in disparity**

To evaluate the association between progress and disparity, the number of objectives with increasing disparities, decreasing disparities, and no changes in disparity are shown for each of three categories of progress toward the HP2010 target. There were 271 objectives with the data required to assess both progress toward targets and changes in disparity for the non-Hispanic white population. Objectives where the target was met at the baseline (7 objectives) are excluded from this analysis, decreasing the number of objectives analyzed to 264 objectives. Progress toward the HP2010 target and progress toward eliminating disparities are independent. To illustrate one of the ways in which progress toward a target is independent of change in disparity, we examined progress and changes in disparity in the domestic transmission of primary and secondary syphilis in the United States from 1997 to 2004.

## **Statistical Significance**

Estimates of variability were available for about three-quarters of the population-based objectives in *Healthy People 2010*. When estimates of variability were available, statistical tests were employed to assess the probability that differences or changes occurred by chance. When a percent difference from the best group rate is greater than 10 percent and not statistically significant, it is categorized in the less than 10 percent category. When estimates of variability were not available, statistical tests could not be used to lend confidence to findings concerning differences and changes.

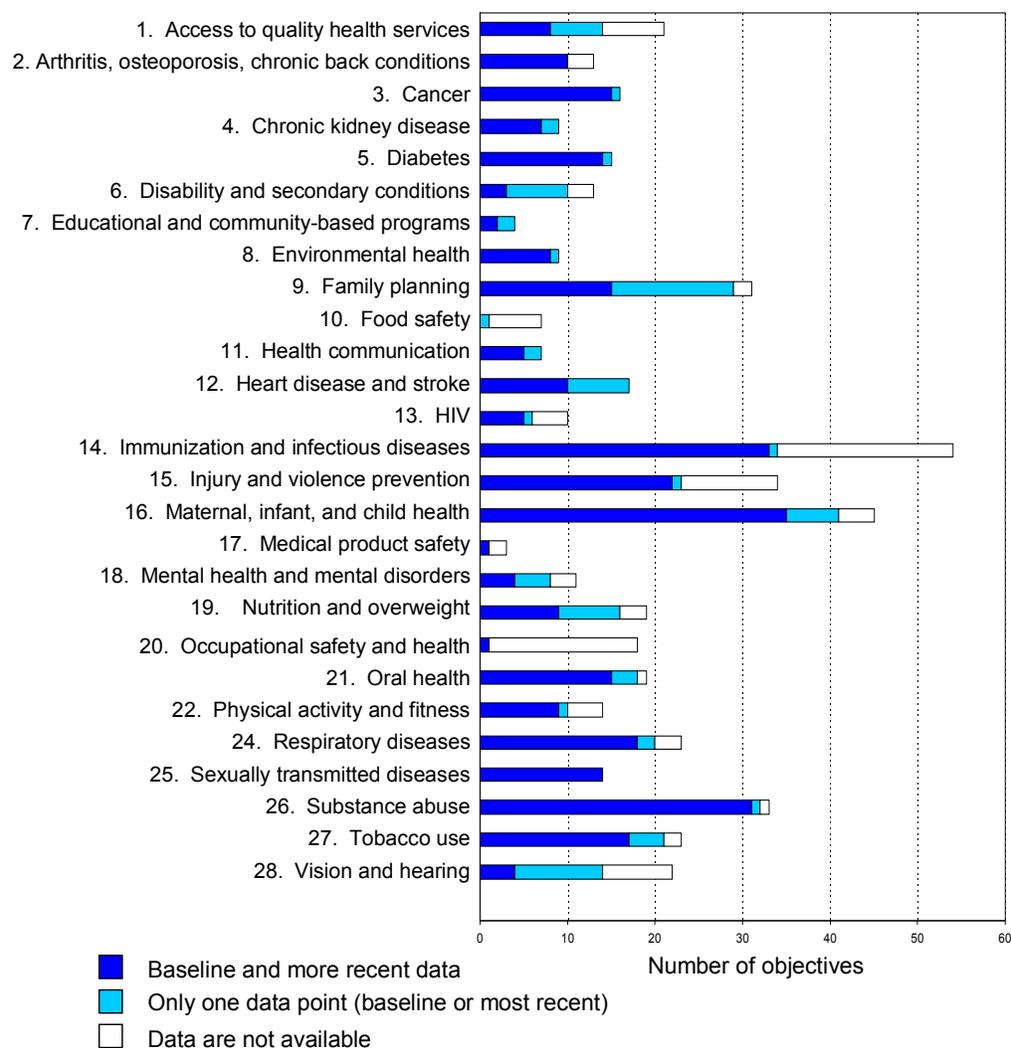
## **Limitations**

There are some limitations to the findings in this report. Data are not available for the white non-Hispanic population for all of the population-based objectives in *Healthy People 2010*. In addition, the validity of the findings in this report depends on the accuracy of data by race and ethnicity. There are differences in racial and ethnic categories because the data are collected in different ways by different data collection systems (4). Additionally, progress toward targets and changes in disparity are measured from the baseline to the most recent data point and intervening values are not considered. Baseline and most recent data years vary among objectives tracked by different data sources, resulting in shorter and longer time intervals for some objectives. Findings shown here may look different if more recent data were examined. Despite these limitations, nearly all of the data analyzed here are routinely disseminated by agencies of the federal government.

## FINDINGS

- *Data for the non-Hispanic white population were available for 79 percent (400) of the 504 Healthy People 2010 population-based objectives.*

**Figure 1. Healthy People 2010 population-based objectives with data for the non-Hispanic white population by focus area<sup>a,b</sup>**



<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

<sup>b</sup> The Public Health Infrastructure focus area 23 does not include any population-based objectives.

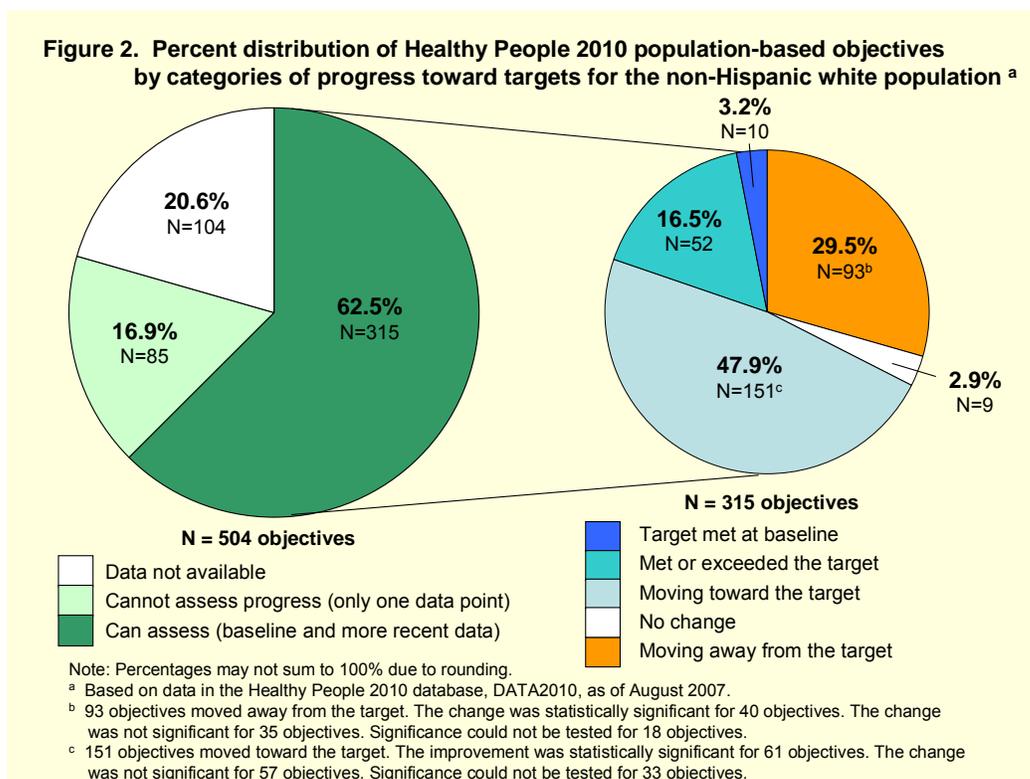
Every Healthy People 2010 focus area containing one or more population-based objectives had at least one objective with data for the non-Hispanic white population. However, the percentage of objectives with data for the non-Hispanic white population varied by focus area.

Eight of the 27 focus areas above had at least a baseline data point available for 100 percent of their population-based objectives: Cancer, Chronic Kidney Disease, Diabetes, Educational and Community Based Programs, Environmental Health, Health Communication, Heart Disease and Stroke, and Sexually Transmitted Diseases.

Three of the 27 focus areas above had data available for the non-Hispanic white population for less than one third of their objectives: Occupational Safety and Health (6%), Food Safety (14%), and Medical Product Safety (33%).

Trend data was available for at least some objectives in 26 of the 27 focus areas above. The Food Safety focus area did not have any objectives that had 2 or more data points available for these analyses. In 22 of the 27 focus areas with population-based objectives, objectives with two or more data points outnumbered objectives with only a single (baseline) data point.

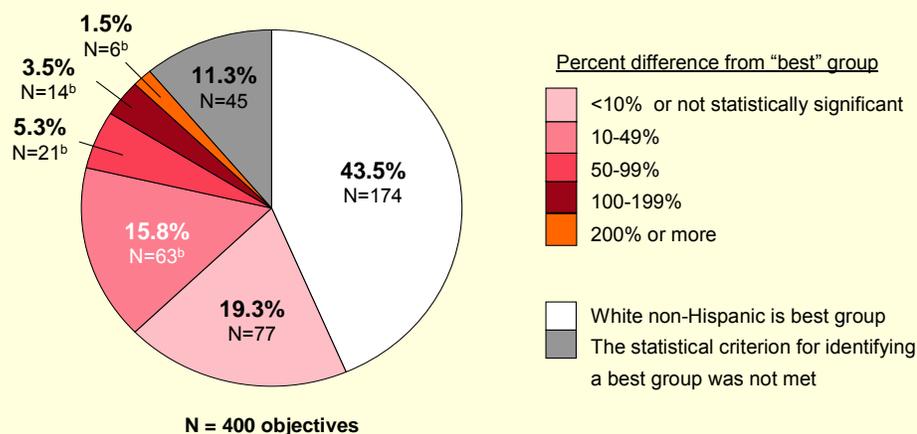
- *More than two-thirds of the population-based objectives with data for the non-Hispanic white population had met or were moving toward their targets at the most recent data point.*



Of the 504 Healthy People 2010 population-based objectives, 315 (63%) had both a baseline and a more recent data point for the non-Hispanic white population. Progress toward the Healthy People 2010 targets could be assessed for these objectives. Nearly half (48%) of these objectives moved toward their target; 17 percent met or exceeded their target at the most recent data point; and a small percentage (3%) met their target at the baseline. Thirty percent were moving away from their targets. For the remaining three percent of the objectives, there was no change from the baseline. The percentage of objectives that have met or are moving toward the target is very similar to the percentage for the other racial and ethnic populations (2).

- *The non-Hispanic white population had the most favorable rate for 44 percent of the population-based objectives.*

**Figure 3. Percent distribution of Healthy People 2010 population-based objectives by size of disparity at most recent data point for the non-Hispanic white population <sup>a</sup>**



<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

<sup>b</sup> Includes objectives for which the disparity is statistically significant and objectives for which the disparity could not be tested. Differences that were  $\geq 10\%$  and not statistically significant are included in the '<10% or not statistically significant' category.

At least one data point was available for the non-Hispanic white population for 400 objectives. The non-Hispanic white population had the best rate at the most recent data point for 44% of these objectives. Objectives for which the non-Hispanic white population had the best rate are identified in Table 1. For approximately 19% of the 400 objectives, the non-Hispanic white population had rates that were *less than 10 percent different* from the best group rate or that were not statistically different from the best group rate. However, at the other extreme, the non-Hispanic white population had rates that were *100 percent or more* different from the best group for 5 percent of the objectives. A 100 percent difference means that the rate for the non-Hispanic white population was two times the best group rate. The 10 largest disparities for the non-Hispanic white population are identified in Table 2. Racial and ethnic disparities could not be assessed for 45 (11%) of the 400 objectives because the statistical criterion for identifying a best group rate was not met (refer to *Healthy People Statistical Note No. 26* methods section).

- *The non-Hispanic white population had the best rate for at least one objective in all 27 focus areas.*

<b>Table 1. <i>Healthy People 2010</i> objectives for which the non-Hispanic white population had the best rate at the most recent data point<sup>a,b</sup></b>		
Objective number	Objective	Most recent data year
01-01	Health Insurance: <65 years	2005
01-03c	Counseled about smoking cessation: 18+ years	2001
01-04a	Source of ongoing care: all ages	2005
01-04b	Source of ongoing care: <18 years	2005
01-04c	Source of ongoing care: 18+ years	2005
01-05	Usual primary care provider	2003
01-06	Delays or difficulties in obtaining needed health care	2001
01-10	Delay or difficulty in getting emergency care	2001
01-16	Pressure ulcers: nursing home residents	2004
02-02	Activity limitations due to arthritis: 18+ years with arthritis	2005
02-05a	Unemployment rate: 18-64 years with arthritis	2003
02-05b	Effect of arthritis on paid work: 18-64 years with arthritis	2003
02-07	Seeing a health care provider: 18+ years with joint symptoms	2005
03-04	Cervical cancer deaths	2004
03-11a	Pap test ever received	2005
03-12a	Fecal occult blood test within past 2 years: 50+ years	2005
03-12b	Sigmoidoscopy ever received: 50+ years	2005
03-13	Mammogram within past 2 years: females 40+ years	2005
03-15	Persons living 5+ years after cancer diagnosis <sup>¶</sup>	1995-2002
04-01	End-stage renal disease - new cases <sup>¶</sup>	2004
04-06	Waiting time for kidney transplantation: kidney patients <70 years	2001
04-07	End-Stage renal disease due to diabetes <sup>¶</sup>	2004
04-08a	Medical evaluation of persons with type 1 or type 2 diabetes and chronic kidney disease <sup>¶</sup>	2004
04-08b	Medical treatment of persons with type 1 or type 2 diabetes and chronic kidney disease <sup>¶</sup>	2000
05-01	Diabetes education: 18+ years	1999
05-02	New cases of diabetes: 18-84 years	2005
05-03	Total cases of diabetes	2005
05-06	Diabetes-related deaths: persons with diabetes	2004
05-10	Lower extremity amputation: Persons with diabetes <sup>¶</sup>	2004
05-12	A1C test at least two times a year: 18+ years with diabetes	2004
05-13	Annual dilated eye exam: 18+ years with diabetes	2003
05-15	Annual dental exam: 2+ years with diabetes	2005
05-16	Aspirin therapy at least 15 times a month: 40+ years with diabetes	1999-2002
05-17	Daily self-blood-glucose-monitoring: 18+ years with diabetes	2004
06-02	Sadness or depression: 4-17 years with disabilities	2005
06-04	Social participation: 18+ years with disabilities	2001
06-05	Sufficient emotional support: 18+ years with disabilities	2005
06-06	Satisfaction with life: 18+ years with disabilities	2005
06-08	Employment parity: 18-64 years with disabilities	2005
06-10	Access to health and wellness programs: 18+ years with disabilities	2002
06-11	No assistive devices and technology: 18+ years with disabilities	2002
06-12a	Environmental barriers at home: 18+ years with disabilities	2002
06-12d	Environmental barriers to community activities: 18+ years with disabilities	2002
07-01	High school completion: 18-24 years	2004
08-01d	Harmful air pollutants: Nitrogen dioxide	2004
08-01f	Harmful air pollutants: Lead	2004

09-01	Intended pregnancies: females 15-44 years <sup>¶</sup>	1995
09-03	Contraceptive use: females 15-44 years at risk of unintended pregnancy	2002
09-04	Contraceptive failure: females 15-44	1995
09-07	Pregnancy: females 15-17 years	2000
09-09a	Abstinence: females 15-17 years	2002
09-10d	Condom plus hormonal use at first intercourse: unmarried males 15-17 years	2002
09-10h	Condom plus hormonal use at last intercourse: unmarried males 15-17 years	2002
09-11c	Formal birth control methods education: females 15-19 years	2002
09-11d	Formal birth control methods education: males 15-19 years	2002
09-11i	Informal abstinence education: females 15-19 years	2002
09-11j	Informal abstinence education: males 15-19 years	2002
09-11k	Informal birth control methods education: females 15-19 years	2002
09-11l	Informal birth control methods education: males 15-19 years	2002
09-11o	Informal sexually transmitted disease education: females 15-19 years	2002
10-05	Food safety practices: consumers 18+ years	2001
11-01	Households with Internet access	2003
11-02b	Below basic health literacy: 16+ years	2003
12-02	Knowledge of heart attack symptoms: 20+ years	2001
12-03b	Receipt of percutaneous intervention (PCI) within 90 minutes of heart attack symptoms <sup>¶</sup>	2000-2004
12-06a	Congestive heart failure hospitalizations: 65 to 74 years <sup>¶</sup>	2005
12-06b	Congestive heart failure hospitalizations: 75 to 84 years <sup>¶</sup>	2005
12-08	Knowledge of stroke symptoms: 20+ years	2001
12-10	Controlled blood pressure: 20+ years with high blood pressure	2004
13-14	HIV-infection deaths	2004
14-03c	Hepatitis B: 40+ years	2005
14-04	Bacterial meningitis: 1-23 months <sup>¶</sup>	2005
14-05a	Invasive pneumococcal infections: <5 years <sup>¶</sup>	2005
14-05b	Invasive pneumococcal infections: 65+ years <sup>¶</sup>	2005
14-05c	Invasive penicillin resistant pneumococcal infections: < 5 years <sup>¶</sup>	2002
14-11	Tuberculosis	2005
14-12	Curative therapy for tuberculosis	2003
14-16	Invasive early onset group B streptococcal disease <sup>¶</sup>	2004
14-17	Peptic ulcer hospitalizations <sup>¶</sup>	2004
14-22a	DTaP immunization, 4 doses: children 19-35 months	2005
14-22b	<i>Haemophilus influenzae</i> type B immunizations, 3 doses: children 19-35 months	2005
14-22c	Hepatitis B immunization, 3 doses: children 19-35 months	2005
14-22d	MMR immunization, 1 dose: children 19-35 months	2005
14-22e	Polio immunization, 3 doses: children 19-35 months	2005
14-22g	PCV immunization, 4 doses: children 19-35 months	2005
14-24a	Fully immunized children: 19-35 months	2005
14-29a	Influenza vaccination in past year: noninstitutionalized, 65+ years	2005
14-29b	Pneumococcal vaccination ever received: noninstitutionalized, 65+ years	2005
14-29d	Pneumococcal vaccination ever received: noninstitutionalized high risk, 18-64 years	2005
14-29e	Influenza vaccination in past year: institutionalized, 18+ years	2004
14-29f	Pneumococcal vaccination ever received: institutionalized, 18+ years	2004
14-29g	Influenza vaccination in past 12 months: health care workers, 18-64 years	2000
15-01	Nonfatal head injury hospitalizations <sup>¶</sup>	2005
15-04	Improper firearm storage in homes	1998
15-05	Nonfatal firearm-related injuries	2001
15-07	Nonfatal poisonings <sup>¶</sup>	2004
15-12	Injury related emergency department visits <sup>¶</sup>	2004
15-26a	Persons in residences with smoke alarms	2003
15-34	Physical assault by intimate partners of persons 12+ years	2005
15-37	Physical assault: 12+ years <sup>¶</sup>	2005
15-38	Physical fighting: grades 9 through 12	2005

16-01g	All Infant deaths due to congenital heart defects	2003
16-04	Maternal deaths	2004
16-5a	Maternal complications during hospitalized labor and delivery <sup>¶</sup>	2002
16-06a	Prenatal care: first trimester	2004
16-06b	Prenatal care: early and adequate	2004
16-07	Pregnant women attending childbirth classes	2000
16-13	Infants put to sleep on their backs	2004
16-14a	Mental retardation: 8 years <sup>¶</sup>	1996
16-14b	Cerebral palsy: 8 years <sup>¶</sup>	1996
16-14c	Autism spectrum disorder: 8 years <sup>¶</sup>	1996
16-16b	Median RBC folate level - Nonpregnant females 15-44 years	1999-2002
16-18	Fetal alcohol syndrome	1995-1997
16-23	Service systems: <18 years with special health care needs	2001
17-06	Blood donations: 18+ years	2005
18-09a	Treatment for serious mental illness: 18+ years	2002
18-09b	Treatment for recognized depression: 18+ years	2002
18-09c	Treatment for schizophrenia: 18+ years	1984
18-09d	Treatment for generalized anxiety disorder: 18+ years	2002
19-01	Healthy weight: 20+ years	1999-2002
19-02	Obesity: 20+ years	1999-2002
19-03a	Overweight or obesity: 6 to 11 years <sup>†</sup>	1999-2002
19-03b	Overweight or obesity: 12 to 19 years	1999-2002
19-03c	Overweight or obesity: 6 to 19 years	1999-2002
19-07	Grain intake: 6+ servings/day with 3+ whole grain, 2+ years	1994-1996
19-11	Calcium intake: ≥ mean requirement, 2+ years	1988-1994
21-01a	Dental caries experience: 2-4 years <sup>†</sup>	1999-2002
21-01b	Dental caries experience: 6-8 years	1999-2002
21-02b	Untreated dental decay: 6-8 years <sup>†</sup>	1999-2002
21-02d	Untreated dental decay: 35-44 years	1999-2002
21-03	No permanent tooth loss: 35-44 years	1999-2002
21-05a	Periodontal diseases, gingivitis: 35-44 years	1988-1994
21-06	Early detection of oral and pharyngeal cancers	1999-2000
21-07	Annual examinations for oral and pharyngeal cancers	1998
21-08a	Dental sealants: 8 years	1999-2002
21-08b	Dental sealants: 14 years	1999-2002
21-10	Annual dental visits	2002
21-12	Annual dental services for low-income youth	2002
22-01	No leisure-time physical activity: 18+ years	2005
22-02	Regular physical activity: moderate or vigorous, 18+ years	2005
22-03	Regular physical activity: vigorous, 18+ years	2005
22-04	Muscular strength and endurance: 18+ years	2005
22-06	Moderate physical activity: grades 9 through 12	2005
22-11	Television viewing: grades 9 through 12	2005
24-01c	Asthma deaths: 15-34 years	2004
24-01d	Asthma deaths: 35-64 years	2004
24-02b	Hospitalizations for asthma: 5-64 years <sup>¶</sup>	2002
24-03b	Hospital ER visits for asthma: 5-64 years <sup>¶</sup>	2001-2003
24-04	Activity limitations: persons with asthma	2005
24-06	Patient education: persons with asthma	2003
24-07d	Asthma care: Appropriate medication regimens	2003
24-07f	Asthma care: assistance in reducing environmental risk	2003
25-01a	Chlamydia: females 15-24 years attending family planning clinics	2004
25-01b	Chlamydia: females 15-24 years attending STD clinics	2004
25-01c	Chlamydia: males 15-24 years attending STD clinics	2004
25-01d	Chlamydia: females <25 years enrolled in National Job Training Program	2004
25-06	Treatment for pelvic inflammatory disease: females 15-44 years	2002
25-09	Congenital syphilis: new cases	2004
25-11a	Never had sexual intercourse: grades 9-12	2005

26-15	Inhalant use in the past year: 12-17 years	2003
26-16a	Disapproval of 1-2 drinks/day: 8th graders	2004
26-16d	Disapproval of trying marijuana: 8th graders	2004
27-04a	Age at first tobacco use: 12-17 years	2002
27-04b	Age at first tobacco use: 18-25 years	2002
27-07	Smoking cessation attempts: grades 9-12	2005
27-09	Exposure to tobacco smoke at home: <7 years	2005
27-16a	Exposure to tobacco advertising on the internet: grades 6-12	2002
27-17a	Disapproval of smoking: 8th graders	2003
28-01	Dilated eye examinations at appropriate intervals: 18+ years	2002
28-03	Uncorrected visual impairment due to refractive errors	1999-2000
28-06	Visual impairment due to glaucoma: 45+ years	2002
28-07	Visual impairment due to cataracts: 65+ years	2002
28-13a	Hearing aid use: 20-69 years	2001
28-14b	Hearing examination in past 5 years: 70+ years	2001-2002

<sup>a</sup>Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

<sup>b</sup> The non-Hispanic white population had the "best" rate among the racial and ethnic population at the most recent data point, which is the baseline if there is only one data point available.

<sup>†</sup>The rate for the non-Hispanic white population was the most favorable but it did not meet the statistical criterion for being the best rate (having a relative standard error less than 10%). The population with the next best rate was chosen as the best rate.

<sup>†</sup>Data for this objective are for the white and black populations including persons of Hispanic origin.

The non-Hispanic white group had the best rate for at least one objective in all 27 focus areas with population based objectives. The most well-represented focus areas were Disability and Secondary Conditions (FA-6), Oral Health (FA-21), and Diabetes (FA-5), where non-Hispanic whites had the best rate for 9 of 10 objectives with data (90%), 12 of 18 objectives (67%), and 10 of 15 objectives (67%), respectively. Focus areas that had one or fewer objectives with the best rate were: Food Safety (FA-10; 1 of 1); Medical Product Safety (FA-17; 1 of 1); Occupational Safety and Health (FA-20; 0 of 1); Educational and Community Based Programs (FA-7; 1 of 4); and HIV (FA-13; 1 of 6).

- *The ten largest disparities for the non-Hispanic white population relative to the best racial and ethnic population were related to substance abuse, tobacco use, cancer and injury.*

**Table 2. Ten largest health disparities for the non-Hispanic white population: *Healthy People 2010* objectives<sup>a</sup>**

Rank	Objective	Most recent data year	Best group rate Population	White non-Hispanic rate	Percent difference from the best group rate	Number of cases in most recent data year	Number of cases if best rate had been attained <sup>b</sup>
1	<b>26-03.</b> Drug-induced deaths (age adjusted per 100,000 population)	2004	1.8 Asian	12.0	566.7*	24,201	3,930
2	<b>16-17c.</b> Women smoking during pregnancy: 15-44 years (Reporting states and D.C., and New York City)	2004	2.2 Asian or Pacific Islander	13.8	527.3*	381,257 <sup>‡</sup>	60,780
3	<b>15-08.</b> Deaths from poisoning (age adjusted per 100,000 population)	2004	2.0 Asian or Pacific Islander	12.0	500.0*	24,359	4,160
4	<b>03-08.</b> Melanoma deaths (age adjusted per 100,000 population)	2004	0.6 Hispanic	3.3	450.0*	7,654	1,400
5	<b>24-10.</b> Chronic Obstructive Pulmonary Disease (COPD) deaths (excluding asthma): 45+ years (age adjusted per 100,000 population)	2004	37.1 Asian or Pacific Islander	124.1	234.5*	105,975	32,500
6	<b>15-03.</b> Firearm-related deaths (age adjusted per 100,000 population)	2004	2.8 Asian or Pacific Islander	8.7	210.7*	18,200	5,650
7	<b>26-11a.</b> Binge drinking in the past 2 weeks: high school seniors	2004	11.4 Non-Hispanic Black	32.5	185.1 <sup>†</sup>	Not available	Cannot be estimated
8	<b>26-02.</b> Cirrhosis deaths (age adjusted per 100,000 population)	2004	3.2 Asian or Pacific Islander	8.7	171.9*	20,144	7,520
9	<b>26-14b.</b> Steroid use in the past year: 10th graders	2004	0.7 Black	1.8	157.1 <sup>†</sup>	Not available	Cannot be estimated
10	<b>03-02.</b> Lung cancer deaths (age adjusted per 100,000 population)	2004	22.4 Hispanic	56.0	150.0*	134,118	54,100

<sup>a</sup>Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

<sup>b</sup>An estimate of the number of events that would have occurred in the most recent data year if the non-Hispanic white population had the best group rate was obtained by multiplying the best group rate times an estimate of the population at risk.

<sup>†</sup>Measures of variability were not available. The statistical significance of the percent difference could not be tested.

\*The percent difference from the best group rate is statistically significant at the 0.05 level.

<sup>‡</sup>Number of women who smoked in the reporting area (40 states, the District of Columbia, and New York City)

The ten largest health disparities in the non-Hispanic white population included objectives from five focus areas: Substance Abuse (FA-26), Injury and Violence Prevention (FA-15), Cancer (FA-3), Maternal, Infant, and Child Health (FA-16), and Respiratory Diseases (FA-24). The Substance abuse focus area had four objectives among the ten largest disparities: Drug induced deaths (26-03); Binge drinking in the past two weeks (26-11a); Cirrhosis deaths (26-02); and Steroid use in the past year (26-14b).

The non-Hispanic white population shares four of its largest disparities with the American Indian or Alaska Native population: Drug induced deaths (26-03); Women smoking during pregnancy (16-17c); Deaths from poisoning (15-08); and Cirrhosis deaths (26-02). The Cirrhosis deaths objective is also one of the largest disparities for the Hispanic population.

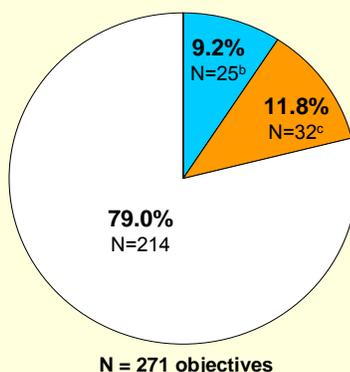
Note that among the objectives with the largest relative disparities, the absolute number of persons affected varies considerably. For example, the rate of drug induced deaths (26-03) was 12 cases per 100,000 population (age adjusted) in the non-Hispanic white population and 1.8 cases per 100,000 population in the Asian population in 2004. This represented a 567 percent difference between the groups, and is the largest disparity listed above. If the non-Hispanic white population had attained the same rate as the best racial and ethnic group (1.8 cases per 100,000),

the total number of cases in the non-Hispanic white population would have been 3,930. In actuality, the total number of cases in the non-Hispanic population white was 24,201. The excess number of drug induced deaths as a result of the disparity was approximately 20,270.

In comparison, there are examples where the percent difference from the best group rate was much lower, but the excess number of cases as a result of the disparity was greater. One example is objective 24-10, Chronic Obstructive Pulmonary Disease (COPD) deaths for persons 45 years and over, where the percent difference from the best group rate was 234.5. The number of COPD deaths for the non-Hispanic white population in 2004 (105,975) greatly exceeded the number of deaths that would have occurred (32,500) if the best rate had been achieved. The excess number of deaths as a result of the disparity between the non-Hispanic white population and the group with the best rate was approximately 73,475.

- The *disparity between the non-Hispanic white population, and the best racial or ethnic population decreased for 25 objectives and increased for 32 objectives.*

**Figure 4. Percent distribution of Healthy People 2010 population-based objectives by categories of change in disparity over time for the non-Hispanic white population <sup>a</sup>**



Categories of change in disparity

- Disparity decreased by 10 percentage points or more
- Disparity increased by 10 percentage points or more
- No change: Disparity did not increase or decrease by 10 percentage points or more; or disparity increased or decreased by 10 percentage points or more but the change was not statistically significant.

<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

<sup>b</sup> Disparity decreased by 10 percentage points or more for 25 objectives. The decrease was statistically significant for 6 objectives. Significance could not be tested for 19 objectives.

<sup>c</sup> Disparity increased by 10 percentage points or more for 32 objectives. The increase was statistically significant for 21 objectives. Significance could not be tested for 11 objectives.

Disparities between the non-Hispanic white population and the population with the best rate decreased for 25 objectives (9%) between the baseline and the most recent data point. The decrease was statistically significant for less than one quarter of these objectives; significance could not be tested for the remainder. For 32 (12%) objectives an increase in disparity from baseline to most recent data point was observed. The increase was statistically significant for nearly two-thirds of these objectives; significance could not be tested for the remainder. There was no change in disparity over time for 214 of the objectives (79%). As, noted in the Methods section above, the statistical significance of changes in disparity could not be tested where measures of variability were not available.

- *Disparities between the non-Hispanic white population and the racial or ethnic population with the best rate decreased for 25 objectives; 10 of these objectives are related to substance abuse or tobacco use.*

**Table 3. Healthy People 2010 objectives with decreasing disparities between the non-Hispanic white population and the group with the best rate<sup>a</sup>**

Objective number	Objective	Baseline data year	Most recent data year
<b>100 percentage point or more decrease in disparity</b>			
26-11d	Binge drinking in the past 30 days: 12 to 17 years*	2002	2003
<b>50-99 percentage point decrease in disparity</b>			
13-01	New AIDS cases: 13+ years <sup>†</sup>	1998	2005
<b>10-49 percentage point decrease in disparity</b>			
03-03	Female breast cancer deaths*	1999	2004
03-05	Colorectal cancer deaths*	1999	2004
05-07	Cardiovascular deaths: persons with diabetes*	1999	2004
13-11	HIV testing: tuberculosis patients 25-44 years <sup>†</sup>	1998	2005
14-12	Curative therapy for tuberculosis <sup>†</sup>	1996	2003
14-22g	PCV immunization, 4 doses: children 19-35 months*	2002	2005
15-34	Physical assault by intimate partners of persons 12+ years	1998	2005
15-37	Physical assault: 12+ years <sup>†¶</sup>	1998	2005
16-19a	Breastfeeding: early postpartum period <sup>†¶</sup>	1998	2003
24-12	Motor vehicle crash deaths caused by excessive sleepiness <sup>†¶</sup>	2000	2004
25-01a	Chlamydia: females 15-24 attending family planning clinics <sup>†</sup>	1997	1999
25-01b	Chlamydia: females 15-24 attending STD clinics <sup>†</sup>	1997	2004
25-03	Primary and secondary syphilis: new cases <sup>†</sup>	1997	2004
25-11c	Used a condom at last intercourse: grades 9-12*	1999	2005
26-11a	Binge drinking in the past 2 weeks: high school seniors <sup>†</sup>	1998	2004
26-13a	Exceeded low-risk drinking guidelines in past year: females 21+ years <sup>†</sup>	1992	2001-2002
26-13b	Exceeded low-risk drinking guidelines in past year: males 21+ years <sup>†</sup>	1992	2001-2002
26-14a	Steroid use in past year: 8th graders <sup>†</sup>	1998	2004
26-16a	Disapproval of 1-2 drinks/day: 8th graders <sup>†</sup>	1998	2004
26-16b	Disapproval of 1-2 drinks/day: 10th graders <sup>†</sup>	1998	2004
26-16e	Disapproval of trying marijuana: 10th graders <sup>†</sup>	1998	2004
27-17b	Disapproval of smoking: 10th graders <sup>†</sup>	1998	2003
27-17c	Disapproval of smoking: 12th graders <sup>†</sup>	1998	2003

<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

\* The decrease in disparity from the baseline to the most recent data value is statistically significant at the 0.05 level.

<sup>†</sup> Measures of variability were not available. The statistical significance of changes in disparity could not be tested.

<sup>¶</sup> Data for this objective are for the white and black populations including persons of Hispanic origin.

Objective is related to substance abuse or tobacco use.

Disparities decreased for the non-Hispanic white population for 25 objectives. The majority of these objectives (23 of 25) demonstrated a decrease in disparity of 10-49 percentage points. Only one objective demonstrated a decrease in disparity of 50-99 percentage points, New AIDS cases for persons 13 years and over (13-01). And only one objective demonstrated a decrease in disparity of 100 percentage points or more, Binge drinking among adolescents (26-11d).

Although disparity decreased for the non-Hispanic white population relative to the best racial and ethnic population for all of the objectives listed in Table 3, it should be noted that this did not always mean that the rate for the non-Hispanic white group was improving (i.e., moving toward the target). In some instances the rate for the non-Hispanic white population was farther away from the target at the most recent data point than it was at the baseline. For example, for steroid use among eighth graders (26-14a), the non-Hispanic white population had a rate of 1.1 percent at the baseline in 1998 and 1.3 percent at the most recent data point in 2004. The best group (Black or African American) had a rate of 0.7 percent at the baseline and 0.9 percent in 2004. The net result was a decrease in disparity for the non-Hispanic white population because the best group rate increased by a greater proportion than the rate for the non-Hispanic white population. In instances like this, where reduction in disparity is accompanied by movement away from the target for both racial and ethnic groups, it is difficult to view the reduction as a “success.”

- *Relative to the best group rate, disparities for the non-Hispanic white population increased for 32 objectives. Disparities increased for six objectives in the Injury and Violence Prevention focus area (FA-15), and six objectives in the Substance Abuse focus area (FA-26).*

**Table 4. Healthy People 2010 objectives with increasing disparities between the non-Hispanic white population and the group with the best rate<sup>a</sup>**

Objective number	Objective	Baseline data year	Most recent data year
<b>100 percentage point or more increase in disparity</b>			
03-08	Melanoma cancer deaths*	1999	2004
15-08	Deaths from poisoning*	1999	2004
16-17c	Women smoking during pregnancy*	1998	2004
26-03	Drug-induced deaths*	1999	2004
26-11c	Binge drinking in the past 30 days: 18+ years*	2002	2003
<b>50-99 percentage point increase in disparity</b>			
14-03a	Hepatitis B: 19-24 years <sup>†</sup>	1997	2005
15-03	Firearm-related deaths*	1999	2004
24-10	Chronic Obstructive Pulmonary Disease (COPD) deaths: 45+ years*	1999	2004
27-02b	Cigarette smoking in past month: grades 9-12*	1999	2005
<b>10-49 percentage point increase in disparity</b>			
03-02	Lung cancer deaths*	1999	2004
03-06	Oropharyngeal cancer deaths*	1999	2004
05-14	Annual foot exam: 18+ years with diabetes*	1998	2004
08-01b	Harmful air pollutants: particulate matter <sup>†</sup>	1997	2004
08-01c	Harmful air pollutants: carbon monoxide <sup>†</sup>	1997	2004
08-22	Pre-1950s homes tested for lead-based paint*	1998	2002
12-01	Coronary heart disease (CHD) death rate*	1999	2004
14-03b	Hepatitis B: 25-39 years <sup>†</sup>	1997	2005
14-05d	Invasive penicillin-resistant pneumococcal infections: 65+ years <sup>†¶</sup>	1997	2002
14-06	Hepatitis A <sup>†</sup>	1997	2005
15-09	Deaths from suffocation*	1999	2004
15-13	Deaths from unintentional injuries*	1999	2004
15-15a	Motor vehicle crash deaths*	1999	2004
15-27	Deaths from falls*	1999	2004
16-01d	Neonatal deaths*	1998	2003
16-01e	Postneonatal deaths*	1998	2003
18-01	Suicide*	1999	2004
25-02a	Gonorrhea: new cases <sup>†</sup>	1997	2004
25-02b	Gonorrhea: new cases females 15-44 years <sup>†</sup>	2002	2004
26-06	Riding in past 30 days with a driver who has been drinking: grades 9-12*	1999	2005
26-14c	Steroid use in the past year: 12th graders <sup>†</sup>	1998	2004
26-16c	Disapproval of 1-2 drinks/day: 12th graders <sup>†</sup>	1998	2004
26-16f	Disapproval of trying marijuana: 12th graders <sup>†</sup>	1998	2004

<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

\* The increase in disparity from the baseline to the most recent data value is statistically significant at the 0.05 level.

<sup>†</sup> Measures of variability were not available. The statistical significance of changes in disparity could not be tested.

<sup>¶</sup> Data for this objective are for the white and black populations including persons of Hispanic origin.

Objective is in the Injury and Violence Prevention focus area.

Objective is in the Substance Abuse focus area.

Disparities increased for the non-Hispanic white population for 32 objectives. More than two-thirds of the increases (72%) fell in the 10-49 percentage point range. Four objectives demonstrated an increase of 50-99 percentage points: Hepatitis B among 19-24 year olds (14-03a); firearm related deaths (15-03); Chronic Obstructive Pulmonary Disease (COPD) deaths among persons 45 years and over (24-10); and cigarette smoking in the past month among high school students (27-02b). Five objectives demonstrated an increase in disparity of 100 percentage points or more: Melanoma deaths (03-08); deaths from poisoning (15-08); pregnant women smoking during pregnancy (16-17c); drug-induced deaths (26-03); and binge drinking in the past 30 days among adults 18 years and over (26-11c). Seven of the objectives that demonstrated an increase in disparity also appear on the list of the ten largest disparities for the non-Hispanic white population (see table 2).

Disparities for the non-Hispanic white population increased for fifteen objectives that relate to mortality: melanoma cancer deaths (03-08); deaths from poisoning (15-08); drug-induced deaths (26-03); firearm related deaths (15-03); COPD deaths among persons 45 years and over (24-10); lung cancer deaths (03-02); oropharyngeal cancer deaths (03-06); coronary heart disease deaths (12-01); deaths from suffocation (15-09); deaths from unintentional injury (15-13); motor vehicle crash deaths (15-15a); deaths from falls (15-27); neonatal deaths (16-01d); postneonatal deaths (16-01e); and suicide (18-01).

Also, a total of six disparities that demonstrated increases for the non-Hispanic white population were from the Injury and Violence Prevention focus area (FA-15), and six were from the Substance Abuse focus area (FA-26).

It is interesting to note that more than half (17 of 32) of the objectives that demonstrated an increase in disparity for the non-Hispanic white population relative to the best racial or ethnic group rate also had rates that improved from the baseline to the most recent data point with respect to the target. In fact, 3 objectives with increasing disparities met their target at the most recent data point: Hepatitis A (14-06), Coronary heart disease death rate (12-01), and Riding in past 30 days with a driver who has been drinking among students in grades 9-12 (26-06). In these instances, relative disparities increased because the best group rates improved by a greater proportion than the rates for the non-Hispanic white population.

- *Although 132 objectives were moving toward their targets, disparities between the non-Hispanic white population and the group with the best rate increased for 14 of these objectives.*

**Table 5. Number of *Healthy People 2010* objectives by progress toward the target and change in disparity for the non-Hispanic white population<sup>a</sup>**

Progress toward the Healthy People 2010 target	Change in Disparity*			Best group at most recent data point <sup>§</sup>	Total
	Decreased 10 percentage points or more	No Change <sup>†</sup>	Increased 10 percentage points or more		
Met or Exceeded	3	8	3	29	<b>43</b>
Moved Toward <sup>¶</sup>	16	55	14	47	<b>132</b>
No change or moved away from target <sup>#</sup>	6	32	15	36	<b>89</b>
<b>Total</b>	<b>25</b>	<b>95</b>	<b>32</b>	<b>112</b>	<b>264</b>

<sup>a</sup> Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

\*Changes in disparity are based on the percentage point change in the percent difference from the best group rate.

<sup>†</sup>The percent difference from the best group rate increased or decreased by less than 10 percentage points or larger changes were not statistically significant.

<sup>§</sup>If the white non-Hispanic population became the best group through a reduction in disparity of 10 percentage points or more, the objective is counted in the first column, Decreased 10 percentage points or more. This occurred for seven objectives.

<sup>¶</sup>The difference between the data value at the baseline and the year 2010 target decreased.

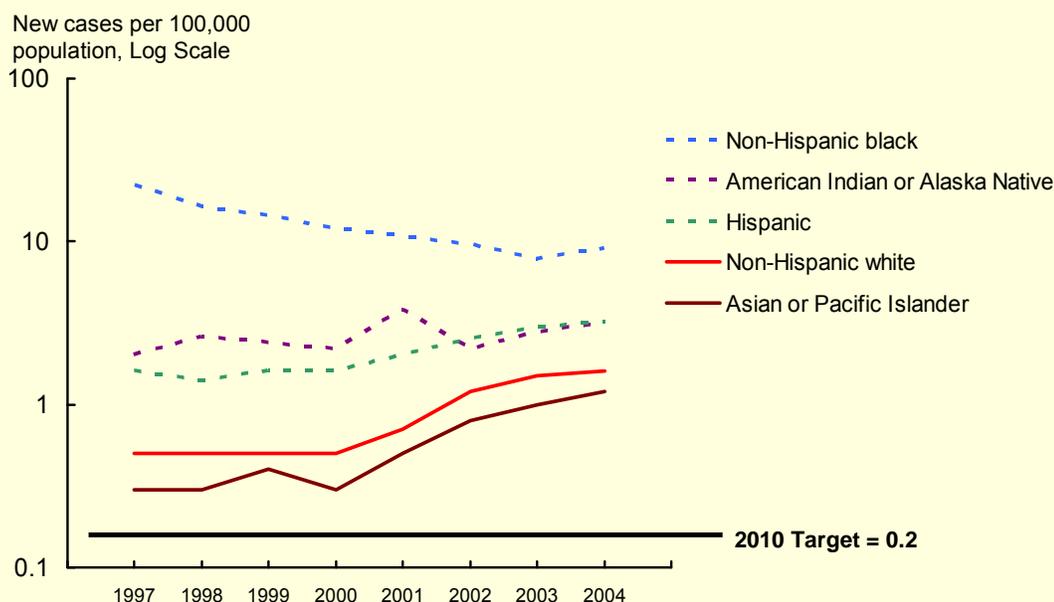
<sup>#</sup>There was no change in rates from the baseline to the most recent data point or the most recent data point is in the opposite direction from the target.

There were 271 objectives with the data required to assess both progress toward targets and changes in disparity. The target was met at baseline for 7 of these objectives; these objectives are excluded from the table above. As table 5 illustrates, progress toward a Healthy People objective is not necessarily associated with a reduction in disparity (3). Although 132 objectives were moving toward their targets, disparities increased for 14 of these (11%) and did not change for 55 (42%). The most frequent combination of progress and disparity was objectives that were moving towards their targets with “no change” in disparity (less than a 10 percentage point change or a larger change that was not statistically significant).

**Example:**

- Although the reported rate of syphilis infections (objective 25-03) has increased for the non-Hispanic white population between the baseline and the most recent data point (thus moving away from the target), the relative disparity between the non-Hispanic white population and the group with the best rate (Asian or Pacific Islanders) decreased during this interval.

**Figure 5. Primary and secondary syphilis –Domestic transmission, 1997-2004<sup>a</sup>**



<sup>a</sup> Based on data in the *Healthy People 2010* database, DATA2010 as of August 2007.

The syphilis infection rate for the non-Hispanic white population increased between 1997 and 2004. This increase represents movement away from the Healthy People 2010 target (0.2 cases per 100,000 population). However, the disparity between the non-Hispanic white population and the best group (Asian or Pacific Islander) decreased during this period. The percent difference between the non-Hispanic white rate and the Asian or Pacific Islander rate was 67 percent at baseline (1997) and 33 percent at the most recent data point (2004). The reason for the decrease in the relative disparity was that the rate for the Asian or Pacific Islander group moved away from the target by a greater proportion than the rate for the non-Hispanic white group. On the other hand, figure 5 shows that the non-Hispanic black population had a decrease in rate AND a decrease in relative disparity for the syphilis infection rate between 1997 and 2004. This example demonstrates that progress toward a Healthy People 2010 target can be independent of reductions in disparity.

## SUMMARY

- Data for the non-Hispanic white population were available for at least one time point for 400 of the 504 Healthy People 2010 population-based objectives (79%). The non-Hispanic white population had the best rate for 44 percent of these objectives (174 of 400 objectives with data for at least one point in time). Trend data based on two points in time were available for 315 of these objectives.
- Over two-thirds of the population-based objectives for the non-Hispanic white population had either met or exceeded their target or moved toward their target since the Healthy People 2010 baseline.
- The non-Hispanic white population had the best rate for a majority of the objectives in three focus areas; Disability and Secondary Conditions, Oral Health and Diabetes.
- Disparity between the non-Hispanic white population and the other racial and ethnic populations could be assessed for 355 population based objectives that had at least one data point available and for which a best group rate could be defined.
- The largest health disparities for the non-Hispanic white population relative to other racial and ethnic populations were related to substance abuse, tobacco use, cancer, and injury.
- The disparity between the non-Hispanic white population and the best racial or ethnic population was categorized as no change (less than 10 percentage points and/or not statistically significant) for more than three quarters of the objectives between the baseline and most recent data point.
- Among the objectives that demonstrated changes in disparity over time for the non-Hispanic white population, increases outnumbered decreases. However, the magnitude of the increases and decreases were small (10-49 percentage points) for the majority of these objectives.
- Progress toward Healthy People 2010 targets and changes in disparity are independent. Most often, objectives for the non-Hispanic white population moved toward the target with no change in disparity.

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