

Healthy People 2010 snapshot for the non-Hispanic black 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: (I.) increase quality and years of healthy life and (II.) 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) and can be accessed at <http://www.cdc.gov/nchs/data/statnt/statnt26.htm>. 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 and can be accessed at 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 non-Hispanic black population and provides detailed information on:

- *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 black population had the “best” rate.
- Number and types of objectives for which the non-Hispanic black 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 black 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 number, 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 without 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. The objectives with data for the black population without regard to Hispanic origin, are footnoted in tables showing findings for specific objectives.

This report is based on data in the *Healthy People 2010* database (DATA2010) as of August 2007. This point in time was consistently employed for *Healthy People Statistical Note No. 26* and for the five 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 394 population-based objectives with at least one data point for the non-Hispanic black or black 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, 304 of the objectives with data for the non-Hispanic black or black 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. Objectives that met the target at baseline remain in that category only if they continued to meet the target at the most recent data point. 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 black group rate and the “best” group rate among the other racial and ethnic groups was calculated for 354 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 black 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. Changes in disparity for the non-Hispanic black population were measured for 268 objectives. When measures of variability were available, the significance of changes in disparity was tested. Increases or decreases in disparity of less than 10 percentage points or of 10 percentage points or more 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 changes in 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 268 objectives with the data required to assess both progress toward targets and changes in disparity. Objectives where the target was met at baseline were excluded from this analysis, reducing the number of objectives analyzed to 263. Progress toward the HP2010 target and progress toward eliminating disparities are independent. To illustrate the independence of change in disparity, progress toward a target and progress toward eliminating disparity, we examined chlamydia infections among females 15-24 years of age attending family planning clinics 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.

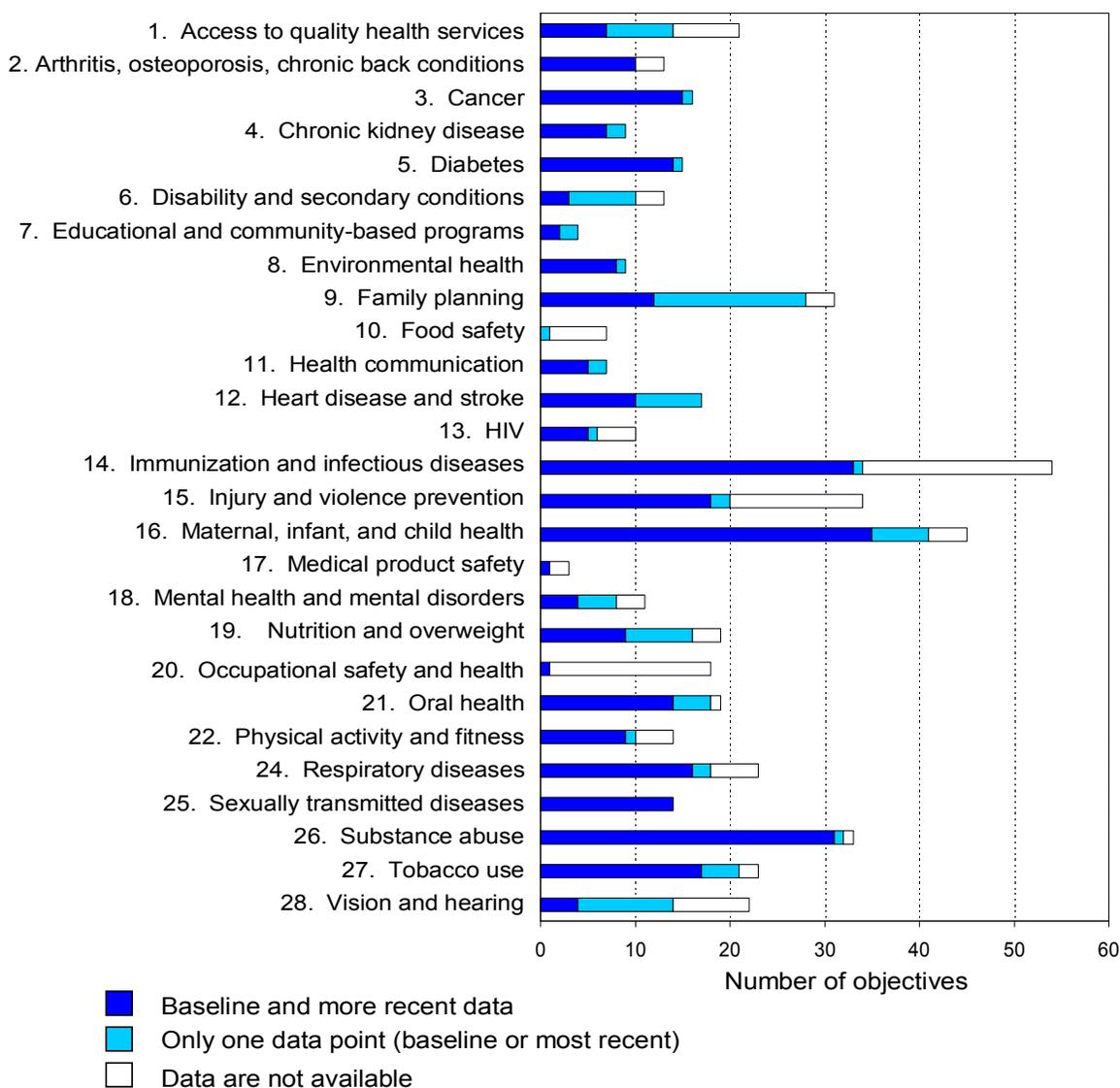
Limitations

There are some limitations to the findings in this report. The validity of the findings in this report depends on the accuracy of information about race and ethnicity. Data are not available for the non-Hispanic black population for all of the population-based objectives in *Healthy People 2010*. There are differences in racial and ethnic categories because the data are collected in different ways by different data collection systems. 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. The baseline and most recent data years vary among objectives tracked by different data sources, resulting in shorter and longer intervals for some objectives. Findings shown here may look different if more recent data were used. Despite these limitations, nearly all of the data analyzed here are routinely disseminated by agencies of the federal government.

FINDINGS

- *There was at least one objective with data for the non-Hispanic black population for 27 focus areas.*

Figure 1. Healthy People 2010 population-based objectives with data for the non-Hispanic black population by focus area^{a,b}



^a Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

^b The Public Health Infrastructure focus area (FA-23) does not include any population-based objectives.

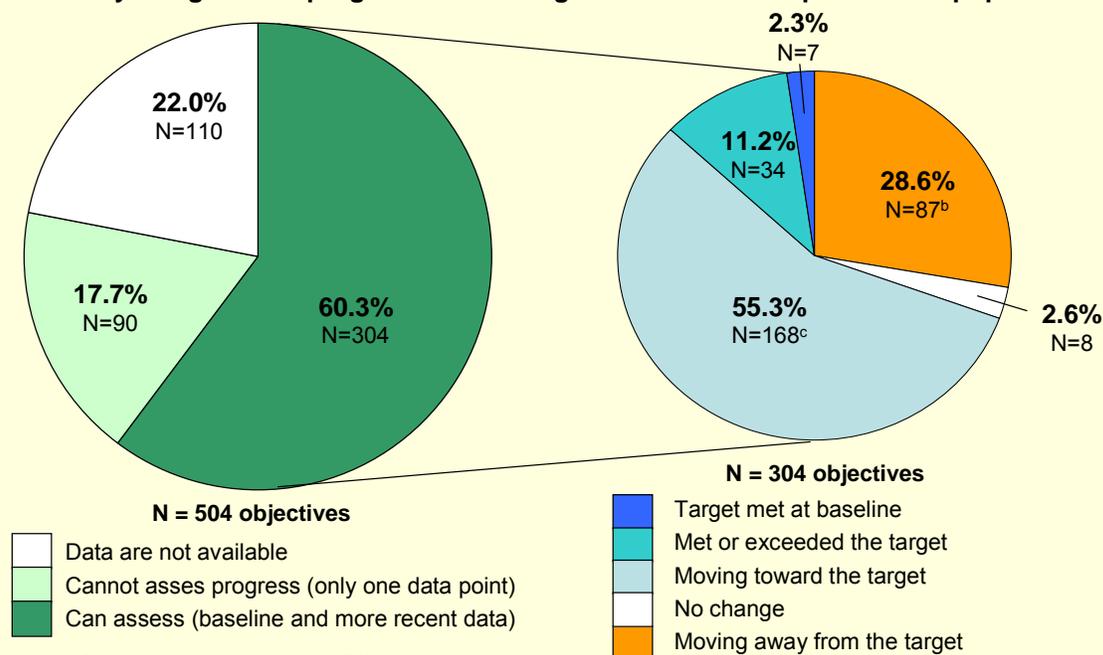
Data for the non-Hispanic black population were available for 78 percent of the Healthy People 2010 population-based objectives. A total of 393 population-based objectives had data for the non-Hispanic black population. Ten of the focus areas above had data available for the non-

Hispanic black population for less than 75 percent of their objectives: Occupational Safety and Health (6%), Food Safety (14%), Access to Quality Health Services (67%), Medical Product Safety (33%), Injury and Violence Prevention (59%), HIV (60%), Immunization and Infectious Diseases (63%), Vision and Hearing (64%), Physical Activity and Fitness (71%), and Mental Health and Mental Disorders (72%).

With the exception of the Food Safety focus area (FA-10), every Healthy People 2010 focus area with population-based data has at least one objective with trend data for the non-Hispanic black population. In 22 focus areas with population-based objectives, objectives with two or more data points outnumber objectives with only a single (baseline) data point.

- More than two-thirds of the population-based objectives with data for the non-Hispanic black population had met or were moving toward their targets.

Figure 2. Percent distribution of Healthy People 2010 population-based objectives by categories of progress toward targets for the non-Hispanic black population ^a



Note: Percentages may not sum to 100% due to rounding.

^a Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

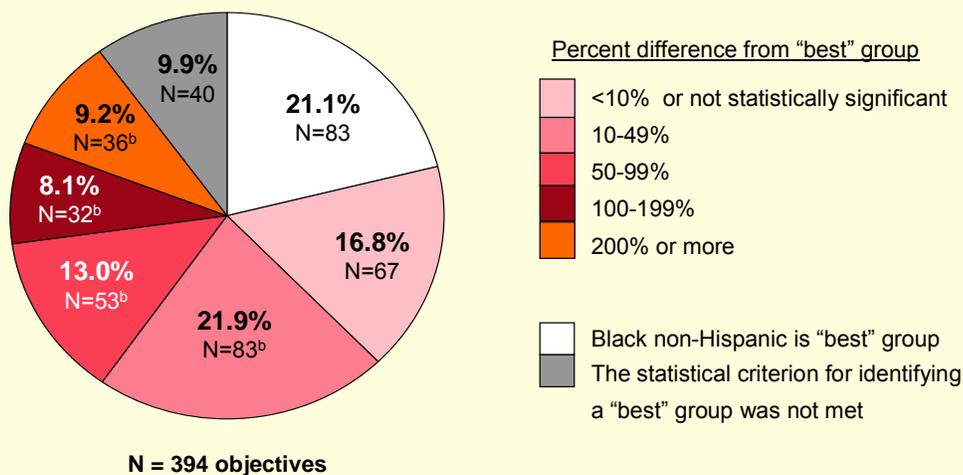
^b 87 objectives moved away from the target. The change was statistically significant for 29 objectives. The change was not significant for 38 objectives. Significance could not be tested for 20 objectives.

^c 168 objectives moved toward the target. The improvement was statistically significant for 59 objectives. The change was not significant for 71 objectives. Significance could not be tested for 38 objectives.

Three-hundred and four HP2010 population-based objectives (60%) had data for the non-Hispanic black population at baseline and a more recent data point. Progress toward the Healthy People 2010 targets could be assessed for these objectives. Over half (55%) of these objectives moved toward their target; a little over 11 percent met or exceeded their target at the most recent data point; and a small percentage (2%) met their target at the baseline. Altogether, 69 percent of the objectives were moving toward their targets and about 29 percent were moving away from their targets. For three percent of the objectives, there was no change from the baseline to the most recent data point. 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 (see *Healthy People Statistical Note No. 26*).

- The non-Hispanic black population had the best rate for 21 percent of the population-based objectives with data.

Figure 3. Percent distribution of Healthy People 2010 population-based objectives by size of disparity at most recent data point for the non-Hispanic black population ^a



^a Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

^b 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.

Data to assess disparities between the non-Hispanic black population rate and the best group rate, were available for 394 objectives. The non-Hispanic black population had the best rate at the most recent data point for 21 percent of the 394 objectives. Objectives for which the non-Hispanic black population had the best rate are identified in Table 1. Approximately 17 percent of the objectives had rates that were less than 10 percent different from the best group rate or the difference from the best group rate was not statistically significant. On the other hand, there was a *100 percent or greater* difference between the non-Hispanic black group rate and the best group rate for 17 percent of these objectives. A 100 percent difference means that the rate for the non-Hispanic black population was two times the best group rate. The 10 largest disparities for the non-Hispanic black population are identified in Table 2. Racial and ethnic disparities could not be assessed for 40 (10%) of the objectives because no best group could be identified for comparison.

- *The non-Hispanic black population had the best rate for a majority of the objectives in the Substance Abuse focus area (FA- 26) and the Tobacco Use focus area (FA- 27).*

Table 1. Healthy People 2010 objectives for which the non-Hispanic black population had the 'best' rate at the most recent data point^{a,b}		
Objective number	Objective	Most recent data year
1-3a.	Counseled about physical activity: 18+ years	2001
1-3b.	Counseled about diet and nutrition: 18+ years	2001
1-3d.	Counseled about reduced alcohol consumption: 18+ years	2001
1-6.	Difficulties or delays in obtaining needed health care	2001
2-4a.	Counseled about overweight and obesity: 18+ years with arthritis	2003
2-4b.	Counseled about physical activity or exercise: 18+ years with arthritis	2003
3-8.	Melanoma cancer deaths [†]	2004
3-11b.	Pap test within past 3 years: females 18+ years	2005
5-13.	Annual dilated eye exam: 18+ years with diabetes [†]	2003
5-14.	Annual foot exam: 18+ years with diabetes	2004
6-3.	Negative feelings interfering with activities: 18+ years with disabilities	2005
6-11.	No assistive devices and technology: 18+ years with disabilities [†]	2002
7-3.	Health-risk behavior information for college and university students	1995
8-1b.	Harmful air pollutants: Particulate matter (<=10 um)	2004
8-1c.	Harmful air pollutants: Carbon monoxide	2004
8-1d.	Harmful air pollutants: Nitrogen dioxide	2004
8-1f.	Harmful air pollutants: Lead	2004
8-22.	Pre-1950s homes tested for lead-based paint	2002
9-6b.	Received birth control counseling from a family planning clinic: unmarried males 15-24 years	2002
9-6c.	Received advice and counseling from doctor on birth control: unmarried males 15-24 years	2002
9-10c.	Condom + hormonal method use at first intercourse: unmarried females aged 15-17 years	2002
9-11i.	Informal abstinence education: females 15-19 years [†]	2002
9-11o.	Informal sexually transmitted disease education: females 15-19 years [†]	2002
9-11p.	Informal sexually transmitted disease education: males 15-19 years	2002
9-12.	Problems in conceiving or maintaining a pregnancy: wives 15-44 years [†]	2002
11-6a.	Patients reporting that health providers always listen carefully to them: 18+ years	2004
11-6b.	Patients reporting that health providers always explain things: 18+ years	2004
11-6c.	Patients reporting that health providers always show respect for what they say: 18+ years	2004
11-6d.	Patients reporting that health providers always spend enough time with them: 18+ years	2004
12-12.	Blood pressure monitoring: 18+ years with high blood pressure	2003
12-13.	Mean total blood cholesterol levels: 20+ years	2004
12-14.	High blood cholesterol levels: 20+ years	2004
13-6a.	Condom use: partners of unmarried females 18-44 years	2002
13-6b.	Condom use: males 18-44 years	2002
13-11.	HIV testing: tuberculosis patients 25-44 years	2005

14-18.	Antibiotics prescribed for ear infections: < 5 years ¶	2005
14-19.	Antibiotics prescribed for the common cold ¶	2005
14-22d.	MMR immunization; 1 dose: children 19-35 months†	2005
14-22f.	Varicella immunization; 1 dose: children 19-35 months	2005
15-27.	Deaths from falls	2004
18-1.	Suicide	2004
18-5.	Disordered eating behaviors: grades 9-12	2005
19-3a.	Overweight or obesity: 6-11 years	1999-02
19-10.	Sodium intake: < 2,400 mg/day, 2+ years	1988-94
19-17.	Nutrition counseling for medical conditions during physician office visits: 20+ years ¶	2004
20-1a.	Work-related injury deaths: workers 16+ years	2003
21-1a.	Dental caries experience: 2-4 years	1999-02
21-2a.	Untreated dental decay: 2-4 years†	1999-02
21-2b.	Untreated dental decay: 6-8 years	1999-02
21-4.	Complete tooth loss: 65-74 years	2004
21-11.	Annual use of oral health care system by residents in long-term care facilities	1997
24-7c.	Asthma care: education on early signs of asthma	2003
24-12.	Motor vehicle crash deaths caused by excessive sleepiness ¶	2004
25-11c.	Used a condom at last intercourse: grades 9-12	2005
26-6.	Riding in past 30 days with a driver who has been drinking: grades 9-12	2005
26-9c.	Never used alcohol: high school seniors	2004
26-9d.	Never used illicit drugs: high school seniors	2004
26-10a.	No alcohol or illicit drugs in past 30 days: 12-17 years	2003
26-10b.	Used marijuana in past 30 days: 12-17 years	2003
26-11a.	Binge drinking in the past 2 weeks: high school seniors	2004
26-11d.	Binge drinking in the past 30 days: 12-17 years†	2003
26-14a.	Steroid use in the past year: 8th graders	2004
26-14b.	Steroid use in the past year: 10th graders	2004
26-14c.	Steroid use in the past year: 12th graders	2004
26-15.	Inhalant use in the past year: 12-17 years†	2003
26-16b.	Disapproval of 1-2 drinks/day: 10th graders	2004
26-16c.	Disapproval of 1-2 drinks/day: 12th graders	2004
26-16f.	Disapproval of trying marijuana: 12th graders	2004
26-17a.	Perception of risk of 5+ alcoholic drinks 1-2 times/week: 12-17 years ¶	2003
26-17c.	Perception of risk of using cocaine once a month: 12-17 years ¶	2003
26-18a.	Treatment for illicit drug problems in the past year	2003
26-18b.	Treatment for alcohol and/or illicit drug problems in the past year	2003
26-21.	Treatment for alcohol abuse	2002

27-2a.	Use of any tobacco products in past month: grades 9-12	2005
27-2b.	Cigarette smoking in past month: grades 9-12	2005
27-2d.	Cigar smoking in past month: grades 9-12	2005
27-3a.	Initiation of cigarette use: 12-17 years	2002
27-4a.	Age at first tobacco use: 12-17 years	2002
27-4b.	Age at first tobacco use: 18-25 years	2002
27-5.	Smoking cessation attempts: 18+ years	2005
27-7.	Smoking cessation attempts: grades 9-12 [†]	2005
27-17b.	Disapproval of smoking: 10th graders	2003
28-14a.	Hearing examination in past 5 years: 20-69 years	2001-02

^a Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

^b The black non-Hispanic population had the best rate among the racial and ethnic populations at the most recent data point, which is the baseline if there is only one data point available.

[†] The rate for the black non-Hispanic 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.

[¶] Data for this objective are for the black and white populations including persons of Hispanic origin.

The non-Hispanic black population had the best rate for 83 (21%) Healthy People 2010 objectives at the most recent data point. The most well-represented focus areas were Substance Abuse and Tobacco Use, where non-Hispanic blacks had the best rate for 19 of 32 objectives (59%) and 9 of 14 objectives (64%), respectively. Focus areas that had one or fewer objectives with the best rate were: Chronic Kidney Disease (0 of 9); Injury and Violence Prevention (1 of 20); Maternal, Infant, and Child Health (0 of 41); Physical Activity and Fitness (0 of 10); Sexually Transmitted Diseases (1 of 14); and Vision and Hearing (1 of 20). These objectives are not based on the same period of time; baseline and most recent data years vary among objectives with different sources.

- *The ten objectives with the largest disparities between the non-Hispanic black population and the group with the best rate were related to infectious diseases and violence.*

Table 2. Ten largest health disparities for the non-Hispanic black population: *Healthy People 2010* objectives^a

Rank	Objective	Most recent data year	Best group rate Population	Black 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 [§]
1	25-2a. Gonorrhea (new cases per 100,000 population)	2004	21.0 Asian	630	2900 †	229,843	7,660
2	25-2b. Gonorrhea: females 15-44 yrs (new cases per 100,000 population)	2004	43.0 Asian	1261	2833 †	108,766	3,700
3	13-1. AIDS: 13+ years (new cases per 100,000 population)	2005	4.3 Asian	68.7	1498 †	20,187	1,260
4	25-9. Congenital syphilis (per 100,000 live births)	2004	2.0 White non-Hispanic	27.0	1250 †	168	12
5	13-14. HIV-infection deaths (age adjusted, per 100,000 population)	2004	1.9 White non-Hispanic	20.9	1000 *	7,163	640
6	15-5. Nonfatal firearm-related injuries (per 100,000 population)	2001	8.6 White non-Hispanic	83.3	869 †	30,738	3,070
7	14-11. Tuberculosis (new cases per 100,000 population)	2005	1.3 White non-Hispanic	10.9	739 †	3,954	470
8	15-32. Homicides (age adjusted, per 100,000 population)	2004	2.5 Asian	20.7	728 *	8,000	922
9	25-3. Primary and secondary syphilis (per 100,000 population)	2004	1.2 Asian	9.0	650 †	3,266	435
10	15-3. Firearm related deaths (age adjusted, per 100,000 population)	2004	2.8 Asian	19.0	579 *	7,347	1,025

^a Based on data in Healthy People 2010 database, DATA2010, as of August 2007.

[§] An estimate of the number of events that would have occurred in the most recent data year if the black non-Hispanic population had the best group rate was obtained by multiplying the best group rate times an estimate of the population at risk.

[†] 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.

The ten largest health disparities between the non-Hispanic black population and the group with the best rate included four objectives from the Sexually Transmitted Diseases focus area (FA-25), three from the Injury and Violence Prevention focus area (FA-15), two from the HIV focus area (FA-13), and one from the Immunization and Infectious Disease focus area (FA-14). The non-Hispanic black population shares three of its largest disparities with the American Indian or Alaska Native population: New cases of gonorrhea (25-2a), Gonorrhea among females 15-44 years (25-2b), and New cases of tuberculosis (14-11). The results presented here should be interpreted with some caution because some of these data are based on voluntary reporting by health professionals. It is possible that some of the differences noted here are due to chance and/or clinical reporting practices.

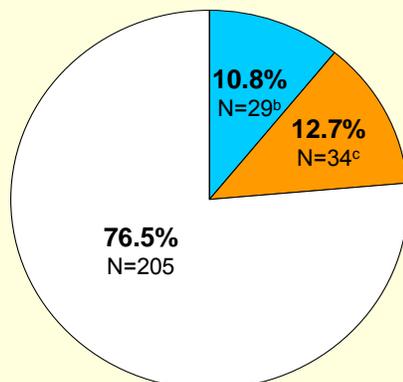
Note that among the objectives with the largest relative disparities, the actual burden that they represent in the population may be quite small. For example, congenital syphilis has a rate of 27 cases per 100,000 live births in the non-Hispanic black population and a rate of 2 cases per

100,000 live births in the non-Hispanic white population. This results in a 1,250 percent difference between these groups. If the non-Hispanic black population had a rate of two cases per 100,000, the total number of cases in the population in 2004 would be 12. With the observed rate in 2004, the total number of cases is 156. The excess number of infants affected as a result of the disparity equals approximately 144 infants. One might assume that such a large disparity would result in more excess cases. This demonstrates that the size of the relative disparity is not always related to the number of persons affected.

On the other hand, there are many examples where the number of cases in the most recent data year substantially exceeds the number of cases that would have occurred if the best rate had been attained. One such example is non-fatal firearm-related injuries per 100,000 population, where the actual number of cases (7,347) greatly exceeds the number that would have occurred (1,025) if the non-Hispanic black population had achieved the same rate as the group with the best rate (Asians).

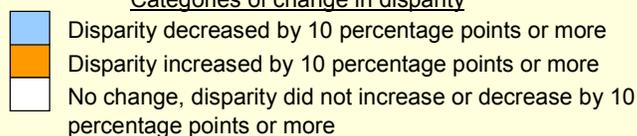
- *Disparity between the non-Hispanic black population, and the best racial or ethnic population rate decreased for 29 objectives and increased for 34 objectives.*

Figure 4. Percent distribution of Healthy People 2010 population-based objectives by categories of change in disparity over time for the non-Hispanic black population ^a



N = 268 objectives

Categories of change in disparity



^a Based on data in the Healthy People 2010 database, DATA2010, as of August 2007.

^b Disparity decreased by 10 percentage points or more for 29 objectives. The decrease was statistically significant for 11 objectives. Significance could not be tested for 18 objectives.

^c Disparity increased by 10 percentage points or more for 34 objectives, The increase was statistically significant for 18 objectives. Significance could not be tested for 16 objectives.

Disparities between the non-Hispanic black population and the population with the best rate increased for 34 objectives (13%) between the baseline and the most recent data point. There was no change in disparity over time for 205 of the objectives (77%). A decrease in disparity was observed for 29 of the objectives (11%). For about one-third of the objectives with decreasing disparities, the change was statistically significant; significance could not be tested for the remainder. Among objectives with increasing disparities, the change was statistically significant for more than half of them; significance could not be tested for the remainder. The statistical significance of changes in disparity could not be tested where measures of variability were not available.

- *Disparities between the non-Hispanic black population and the racial or ethnic population with the best rate were reduced for 29 objectives, including 7 objectives related to sexually transmitted diseases.*

Table 3. Healthy People 2010 objectives with decreasing disparities between the non-Hispanic black population and the group with the best rate^a

Objective	Baseline data year	Most recent data year
100 percentage point or more decrease in disparity		
13-1. New AIDS cases: 13+ years †	1998	2005
25-2a. Gonorrhea †	1997	2004
25-2b. Gonorrhea: females 15-44 years †	2002	2004
25-3. Primary and secondary syphilis: domestic transmission †	1997	2004
25-9. Congenital syphilis †	1997	2004
50-99 percentage point decrease in disparity		
04-7. End-stage renal disease due to diabetes *¶	1997	2004
14-3c. Hepatitis B: 40+ years †	1997	2005
14-5a. Invasive pneumococcal infections: < 5 years †¶	1997	2005
14-22e. Polio immunizations; 3 doses: children 19-35 months *	1998	2005
15-5. Nonfatal firearm-related injuries †	1997	2001
16-2a. Child deaths: 1-4 years *	1998	2004
16-3c. Young adult deaths: 20-24 years *	1998	2004
19-3a. Overweight or obesity: 6-11 years *	1988-94	1999-02
25-1a. Chlamydia: females 15-24 years attending family planning clinics †	1999	2004
10-49 percentage point decrease in disparity		
04-1. End-stage renal disease *¶	1997	2004
08-1c. Harmful air pollutants: Carbon monoxide †	1997	2004
14-3b. Hepatitis B: 25-39 years †	1997	2005
14-4. Bacterial meningitis: 1-23 months †¶	1998	2005
14-12. Curative therapy for tuberculosis †	1996	2003
14-22d. Universally recommended vaccination, 1 dose MMR: children 19-35 months *	1998	2005
15-13. Deaths from unintentional injuries *	1999	2004
15-37. Physical assaults †	1998	2005
16-11c. Preterm births: live births at less than 32 weeks of gestation *		
16-19a. Breastfeeding: early post partum period †¶	1998	2003
25-1b. Chlamydia: females 15-24 years attending STD clinics †	1999	2004
26-10c. Used illicit drugs in the past 30 days: 18+ years *	2002	2003
26-13a. Exceeded low-risk drinking guidelines in past year: females 21+ years †	1992	2001-02
26-13b. Exceeded low-risk drinking guidelines in past year: males 21+ years †	1992	2001-02
27-7. Smoking cessation attempts, students grades 9-12 *	2001	2005

^a Based on data in the Healthy People 2010 database, DATA 2010, 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.

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

¶ Estimates for this objective are for the black and white populations, including persons of Hispanic origin

Objectives in focus area 13 - HIV and focus area 25 - Sexually Transmitted Diseases.

Disparities decreased for the non-Hispanic black population for 29 objectives. Five of those objectives demonstrated a decrease in disparity of 100 percentage points or more. Of those 5 objectives, 4 were from the Sexually Transmitted Diseases focus area (FA-25) and one was from the HIV focus area (FA-13). All five of those objectives are among the ten largest disparities for the non-Hispanic black population at the most recent data point (Table 2).

Nine objectives demonstrated a decrease in disparity of 50-99 percentage points, while 15 objectives demonstrated a decrease in disparity of 10-49 percentage points. Although disparities were decreasing for these objectives, in some instances the rate was further away from the target at the most recent data point than at the baseline. For example, new cases of end-stage renal disease (ESRD) per 100,000 (objective 4-01) had a baseline rate of 936 per 100,000 for the black population, while the most recent rate is 968 per 100,000. The estimates include persons of Hispanic origin. This statistically significant increase in the rate of ESRD was accompanied by a decrease in disparity over time for the black population. The best group rate for ESRD increased by a greater proportion than the ESRD rate for the black population. This resulted in a decrease in the relative difference between the black rate and the best group rate from baseline to the most recent data point. This decrease in disparity was associated with movement away from the *Healthy People 2010* target.

- *Relative to the best group rate, disparities between the non-Hispanic black population and the group with the best rate increased for seven objectives in the Maternal, Infant, and Child Health focus area and seven objectives for specific causes of death.*

Table 4. Healthy People 2010 objectives with increasing disparities between the non-Hispanic black population and the group with the best rate^a

Objective	Baseline data year	Most recent data year
100 percentage point or more increase in disparity		
15-3. Firearm-related deaths *	1999	2004
15-32. Homicides *	1999	2004
16-17c. Women abstaining from cigarette smoking during pregnancy *	1998	2004
50-99 percentage point increase in disparity		
01-4b. Source of ongoing care: < 18 years *	1999	2005
08-1e. Harmful air pollutants: Sulfur dioxide †	1997	2004
13-14. HIV-infection deaths *	1999	2004
14-3a. Hepatitis B: 19-24 years †	1997	2005
14-5c. Invasive penicillin-resistant pneumococcal infections: < 5 years †¶	1997	2002
14-11. Tuberculosis †	1998	2005
14-16. Invasive early onset group B streptococcal disease †¶	1996	2004
26-11c. Binge drinking in the past 30 days: 18+ years *	2002	2003
27-10. Exposure to environmental tobacco smoke: nonsmokers 4+ years *	1988-94	1999-00
10-49 percentage point increase in disparity		
01-5. Usual primary care provider *	1996	2003
04-2. Cardiovascular disease deaths: persons with chronic kidney failure *	1997	2004
05-5. Diabetes-related deaths *	1999	2004
09-7. Pregnancy: females 15-17 years †	1996	2000
12-1. Coronary heart disease (CHD) death rate *	1999	2004
12-7. Stroke death rate *	1999	2004
13-16. Surviving 3+ years after AIDS diagnosis: HIV-infected persons †	1998	2001
14-6. Hepatitis A †	1997	2005
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
16-1c. Infant deaths (within 1 year) *	1998	2003
16-1d. Neonatal deaths (within first 28 days of life) *	1998	2003
16-1e. Postneonatal deaths (between 28 days and 1 year) *	1998	2003
16-3a. Adolescent deaths: 10-14 years *	1998	2004
16-14a. Mental retardation: 8 years †¶	1991-94	1996
16-14b. Cerebral palsy: 8 years †¶	1991-94	1996
24-10. Chronic obstructive pulmonary disease (COPD) deaths: 45+ years *	1999	2004
25-1c. Chlamydia: males 15-24 years attending STD clinics †	1999	2004
25-1d. Chlamydia: females < 25 years enrolled in National Job Training Program †	2002	2004
26-16a. Disapproval of 1-2 drinks per day: 8th graders †	1998	2004
26-16d. Disapproval of trying marijuana: 8th graders †	1998	2004
27-17a. Disapproval of smoking: 8th graders †	1998	2003

^a 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.

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

¶ Estimates for this objective are for the black and white populations, including persons of Hispanic origin

Objectives related to specific causes of death in five focus areas (FA - 4, 5, 12, 13 and 15).

Seven objectives in the Maternal, Infant, and Child Health focus area (FA - 16).

Disparities increased for the non-Hispanic black population for 34 objectives. Ten of those objectives were for death rates: both neonatal and postneonatal deaths, adolescent deaths, firearm-related deaths and homicides, diabetes-related deaths, and deaths due to HIV-infection, coronary heart disease, stroke, and cardiovascular disease among persons with chronic kidney disease. Six of the objectives with increasing disparities were from the Immunization and Infectious Disease focus area (FA-14) and seven were from the Maternal, Infant, and Child Health focus area (FA-16).

For three objectives, disparity increased by 100 percentage points or more. Nine objectives demonstrated an increase in disparity of 50-99 percentage points, while 22 objectives demonstrated an increase in disparity of 10-49 percentage points. Eighteen of the objectives showed a change in disparity from the baseline to the most recent data point that was statistically significant and statistical significance could not be assessed for the other 16 objectives. Although gaps between the best group rate and the non-Hispanic black rate increased for 34 objectives, the rates for the non-Hispanic black population moved toward the target or met or exceeded the HP2010 target for 24 of these objectives from the baseline to the most recent data point. Relative disparities increased because the best group rates improved by a greater proportion than the rates for the non-Hispanic black population.

- *Although 146 objectives were moving toward their targets, disparities between the non-Hispanic black population and the group with the best rate increased for 22 of these objectives.*

Table 5. Number of Healthy People 2010 objectives by progress toward the target and change in disparity for the non-Hispanic black population^a

Progress toward the Healthy People 2010 target	Change in disparity*			Best group rate at most recent data point [§]	Total
	Decreased 10 percentage points or more	No change [†]	Increased 10 percentage points or more		
Met or exceeded target	3	6	2	20	31
Moved toward target [¶]	21	81	22	22	146
No change or moved away from target [#]	5	56	10	15	86
Total	29	143	34	57	263

Note: Five objectives met or exceeded the Healthy People 2010 target at baseline, they are not included in this table.

^a 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.

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

[§] If the black non-Hispanic population became the best group rate 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 four objectives.

[¶] The difference between the data value at the baseline and the year 2010 target decreased.

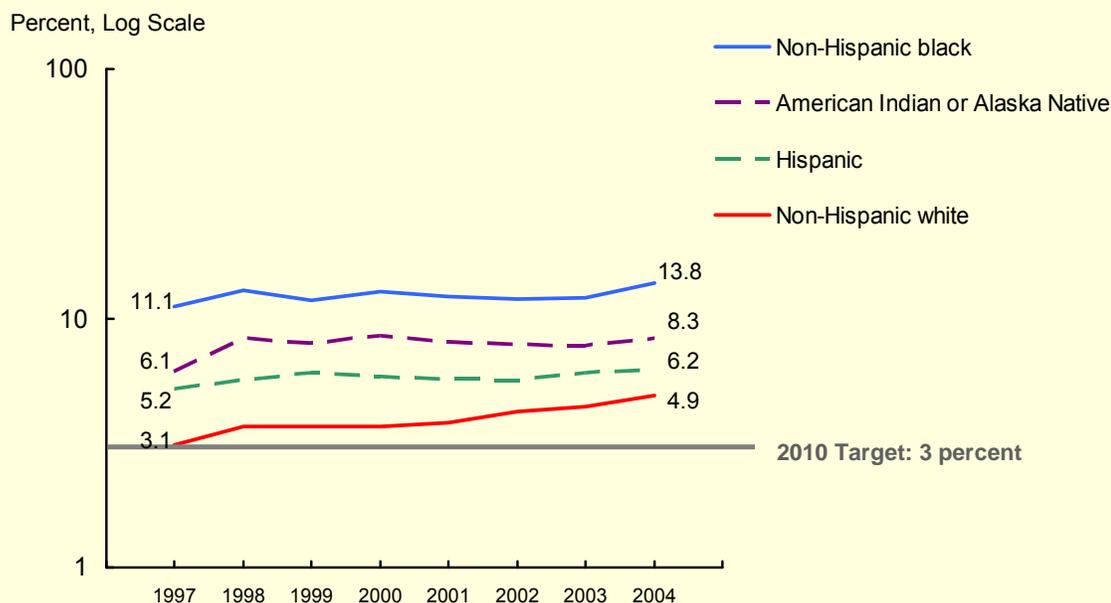
[#] There was no change in rates from the baseline to the most recent data point or the most recent data point is in the opposite direction from the target.

There were 263 objectives with the data required to assess both progress toward targets and changes in disparity. Progress toward a Healthy People 2010 target does not necessarily entail a reduction in disparity (3). Among objectives moving toward the target, disparities decreased for 20 objectives and increased for 22 objectives. Objectives moving toward their targets without a change in disparity of 10 percentage points or more were the most frequent combination of progress and disparity in Table 5.

Example:

- Although the rate of chlamydia infections among women attending family planning clinics has increased since the baseline, thus moving away from the target, the relative disparity between non-Hispanic black women and the best group, non-Hispanic white women, decreased (obj. 25-1a).

Figure 5. Chlamydia infections among females 15-24 years of age, attending family planning clinics: United States, 1997- 2004^a



^a Based on data in the *Healthy People 2010* database, DATA2010, as of August 2007.

The chlamydia infection rate among females 15-24 years of age attending family planning clinics increased between 1997 and 2004. The *Healthy People 2010* target of 3.0 percent has not been achieved with the most recent data point reaching 13.8 percent. However, the disparity between the non-Hispanic black population and the best group decreased during this period. The percent difference between the non-Hispanic black rate and the best group rate was 93 percent at baseline (1997) and 56 percent at the most recent data point (2004). In this example, the best group rate moved away from the target by a greater proportion than the rate for the non-Hispanic black population. Overall, the rate moved away from the target but the *relative disparity* was lower at the most recent data point than it was at baseline. This example demonstrates that reductions in disparity can occur when rates are increasing.

SUMMARY

- Data for at least one point in time were available for the non-Hispanic black population for 393 (78%) of the Healthy People 2010 population-based objectives. Trend data for at least two points in time were available for 304 of these objectives.
- Over two-thirds of the population-based objectives with trend data for the non-Hispanic black population had either met or exceeded their target or moved toward their target since the Healthy People 2010 baseline.
- The non-Hispanic black population had the best rate for a majority of the objectives in two focus areas, Substance Abuse (FA- 26) and Tobacco Use (FA-27).
- Data to measure disparity between the non-Hispanic black population and the group with the best rate were available for 354 population-based objectives. The non-Hispanic black population had the best rate for 21% of these objectives. On the other hand, the non-Hispanic black population had rates that were different from the best group rate by 100 percent or more for 17% of these objectives.
- The largest health disparities between the non-Hispanic black population and the group with the best rate were related to infectious diseases and violence.
- The number of objectives with an increase in disparity between the non-Hispanic black population and the group with the best rate exceeded the number of objectives with a decrease in disparity.
- Disparities between the non-Hispanic black population, and the racial and ethnic population with the best rate, are increasing for 10 objectives related to specific death rates.
- Progress toward Healthy People 2010 targets and changes in disparity are independent. Most often, objectives for the non-Hispanic black population moved toward the target with no change in disparity.

REFERENCES

1. Office of Disease Prevention and Health Promotion. *Healthy People 2010* Midcourse Review. December 2006. <http://www.healthypeople.gov/data/midcourse/default.htm#pubs> (accessed 16 February 2007).
2. Keppel K, Garcia T, Hallquist S, Ryskulova A, Agress L. Comparing racial and ethnic populations based on Healthy People 2010 objectives. (In preparation). Hyattsville, Maryland: National Center for Health Statistics. January 2008.
3. Keppel K, Bilheimer L, Gurley L. Improving population health and reducing health care disparities. *Health Affairs*. 26 (5):1281 - 92. 2007.

