Midcourse Review

HEALTHY PEOPLE 2010

# Cancer 3

## Co-Lead Agencies:

Centers for Disease Control and Prevention
National Institutes of Health

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# Goal: Reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer.

## Introduction*

Focus Area 3 has objectives to reduce cancer death rates, limit sun exposure, increase provider counseling for cancer preventive behaviors, increase the use of effective cancer screening tests, improve cancer surveillance, and increase survival after diagnosis. Since the publication of *Healthy People 2010*, progress has been made toward achieving many of these objectives.

Death rates from all cancers combined and from the four leading causes of cancer deaths (lung, colorectal, female breast, and prostate) declined, and the prostate cancer death rate exceeded its target. The cervical cancer death rate also decreased. Overall, survival from cancer increased. These reductions in cancer death rates contributed toward the overarching Healthy People 2010 goal to increase quality and years of healthy life. Although changes in years of life are relatively easy to monitor, how to measure and monitor improvements in quality of healthy life among cancer survivors remains a challenge.

More people received some recommended cancer screening tests. Mammography use increased, meeting its target, and increases occurred in colorectal cancer endoscopic screening and in the proportion of women ever having received Pap tests. In addition, the number of States with data on 95 percent of their cancer cases diagnosed within a year increased, improving national capacity to monitor trends in cancer rates.

Progress was not made on all objectives. Death rates from oropharyngeal cancer and melanoma, Pap test use within the recommended 3-year interval, primary care provider counseling for exercise, and the proportion of adults practicing skin cancer prevention remained unchanged from the baseline year. Use of the fecal occult blood test (FOBT) home kit for colorectal cancer screening decreased.

The elimination of health disparities in cancer prevention and control remains a challenge. Data sources for 15 cancer objectives and subobjectives collect information that allows for monitoring of disparities among 19 population groups. Of the 16 population characteristics displaying any change, 12 showed increases in disparities.

Progress was facilitated by the efforts of a wide variety of national, State, and local organizations, both governmental and nongovernmental, to promote the adoption of evidence-based interventions to improve the prevention, screening, diagnosis, and treatment of cancer.

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* Unless otherwise noted, data referenced in this focus area come from Healthy People 2010 and can be located at http://wonder.cdc.gov/data2010. See the section on DATA2010 in the Technical Appendix for more information.

## Modifications to Objectives and Subobjectives

The following discussion highlights the modifications, including changes, additions, and deletions, to this focus area's objectives and subobjectives as a result of the midcourse review.

During the Healthy People 2010 Midcourse Review, new baseline measures were identified for objectives 3-1 through 3-8, 3-9b, 3-10h, 3-12a, and 3-14. Targets were adjusted for objectives 3-1, 3-2, 3-3, 3-5 through 3-8, 3-9b, and 3-12a. The target setting method for objective 3-14, to increase the number of States with population-based cancer registries, was modified due to changes in data collection methods; however, the target did not change. Measurement of subobjective 3-12b was modified to include proctoscopy and colonoscopy, as well as sigmoidoscopy, as a measure of lower endoscopic colorectal cancer screening.

## Progress Toward Healthy People 2010 Targets

The following discussion highlights objectives that met or exceeded their 2010 targets; moved toward the targets, demonstrated no change, or moved away from the targets; and those that lacked data to assess progress. Progress is illustrated in the Progress Quotient bar chart (see Figure 3-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress.

Progress was mixed for this focus area. Two objectives met or exceeded their targets, several objectives or subobjectives moved toward their targets, one moved away, and five showed no change. Several subobjectives could not be assessed.

**Objectives that met or exceeded their targets.** Two objectives met or exceeded their targets: mammography screening (3-13) met its target, and the prostate cancer death rate (3-7) exceeded its target. Many efforts to increase the use of mammography during the 1990s and early 2000s included new Medicare coverage; endorsement of screening by professional associations and health plans; inclusion of mammography as a quality of care measure in managed care; new State laws requiring health insurance coverage; new programs to provide screening services to uninsured, low-income women; and promotion of mammography by health agencies and cancer advocacy groups.[1, 2, 3, 4]

Reasons for having achieved the prostate cancer target are uncertain. The U.S. Preventive Services Task Force (USPSTF) has found inconclusive evidence that prostate cancer screening improves health outcomes and has reported the balance of benefits and harms as uncertain.[5, 6] Researchers have hypothesized that the reduction in the prostate cancer death rate could be due to increased screening, increased use of androgen deprivation therapy, and/or increased use of surgery or radiation.[7] Ongoing clinical trials in the United States and Europe may help explain the reduction.[8, 9, 10]

**Objectives that moved toward their targets.** Death rates for many other cancers also decreased, including lung, female breast, cervical, and colorectal (3-2 through 3-5). Efforts to control tobacco use during the 1980s and 1990s were responsible for much of the declines in lung and all-site cancer death rates (3-1) since 2000.[11, 12, 13] Due to the time lag between tobacco interventions and reductions in death rates,[11, 12, 13] current tobacco control activities are unlikely to contribute to achieving death-rate objectives before 2010. However, previously recorded declines in tobacco use are likely to produce further reductions in death rates by 2010. Although screening for lung cancer is of unknown benefit,[6] screening

for colorectal, cervical, and breast cancers is effective.[6] Increases in screening during the 1990s[14] and improvements in treatment have contributed to the declines in death rates from those cancers.[6, 15, 16, 17]

Increased delivery of high-quality screening and treatment services is likely to lead to further declines by 2010.[6, 15, 16, 18, 19] Increases in survival (3-15) were likely due to both increased and earlier detection of cancers and improved care.[16, 17, 20]

Progress was made toward two cancer screening targets—Pap test ever received (3-11a) and colorectal cancer endoscopic screening (3-12b)—and cancer registries (3-14). The progress in screening was due to the same kinds of efforts that contributed to attainment of the mammography objective.[1, 2, 3, 4] The increase in the number of statewide cancer registries with 95 percent data was due to the efforts of those registries established by the Centers for Disease Control and Prevention (CDC), the North American Association of Central Cancer Registries, and the National Cancer Institute (NCI).[21]

Continued progress toward the targets depends on implementation of effective interventions[6, 18, 22] by a wide range of organizations, including Comprehensive Cancer Control (CCC) coalitions (see Opportunities and Challenges), and progress in related Healthy People 2010 focus areas. In the coming years, focusing on interventions that increase colorectal cancer screening will be particularly important.[6, 14, 18, 22] Since the lowest levels of screening for colorectal, cervical, and breast cancers are among uninsured persons and adults with limited access to health care,[14] improvements will depend in part on increasing access to quality health services.

**Objectives that moved away from their targets.** One objective moved away from its target: the FOBT home kit screening rate among adults aged 50 years and older (3-12a). This decline appeared to relate to changes in choices of colorectal cancer screening tests rather than a decrease in overall colorectal cancer screening. Between 1996 and 2003, the USPSTF and other organizations changed screening guidelines to recommend not just FOBT and sigmoidoscopy but also colonoscopy and double-contrast barium enema or a combination of the tests.[6] The choice of screening method depends on availability, insurance coverage, and patient and provider preferences. Findings from cancer surveillance sources indicate that the use of other recommended tests increased more than FOBT declined.[23] A number of organizations have adopted colorectal cancer screening as a priority (see Opportunities and Challenges). Broader implementation of effective interventions should result in increased screening using one or more of the recommended tests within their recommended time intervals.[18, 22, 24, 25]

**Objectives that demonstrated no change.** Oropharyngeal cancer (3-6) and death rates from melanoma (3-8) were unchanged. Also unchanged was the proportion of adults practicing skin cancer prevention (3-9b), the proportion of primary care providers providing counseling for exercise (3-10h), and the use of Pap tests within the previous 3 years by women over age 18 years (3-11b). Screenings for oropharyngeal cancer and melanoma are of unknown benefit.[6] Because tobacco use and alcohol abuse increase risk of oropharyngeal cancer,[13, 26] future progress will depend in part on efforts to address tobacco use (Focus Area 27) and alcohol abuse (Focus Area 26) (see Opportunities and Challenges). Many State CCC coalitions[4] are promoting skin cancer prevention. Given the known effectiveness of interventions in school settings,[22, 27] many organizations, including CDC, are working with school systems. To increase physician counseling for physical activity, reimbursement for counseling may be effective.[22, 28] To achieve the Pap test target, CCC and other partners will need to implement effective interventions[22] that have demonstrated success in the past,[1, 2, 3, 4] particularly for populations having the least access.[14, 29] Because about 60 percent of cervical cancers occur in women not screened in the

previous 5 years,[29] programs focused on providing services for women who are rarely screened are particularly important.

**Objectives that could not be assessed.** Sun protective behaviors in adolescents (3-9a) remained developmental because only one behavior, the use of SPF 15 sunscreen, was measured. The objective became measurable with the addition of a question on other sun protective behaviors (for example, seeking shade) to the Youth Risk Behavior Surveillance System in 2005.

Although baseline data were available for primary care provider counseling (3-10h), progress could not be measured for subobjectives 3-10a through g. With completion of an NCI primary care provider survey in 2006–07, tracking data for all subobjectives are anticipated by the end of the decade.

## Progress Toward Elimination of Health Disparities

The following discussion highlights progress toward the elimination of health disparities. The disparities are illustrated in the Disparities Table (see Figure 3-2), which displays information about disparities among select populations for which data were available for assessment.

**Death rate (3-1 through 3-8).** Little progress was observed in reducing cancer health disparities. Among racial and ethnic populations, the Asian or Pacific Islander group had the best rates for five of the eight death rate objectives (3-1, 3-3, 3-4, 3-5, and 3-7), and the Hispanic population had the best rates for the other three population-based cancer objectives (3-2, 3-6, and 3-8).

Between 1999 and 2002, disparities in prostate cancer death rates (3-7) increased between 10 to 49 percentage points for the Hispanic and white non-Hispanic populations and 100 percentage points or more for the black non-Hispanic population, compared with the Asian or Pacific Islander population. For lung (3-2), cervical (3-4), and oropharyngeal (3-6) cancer death rates, disparities were 100 percent greater than the best rates for the black non-Hispanic population and persons with a high school education or less. For seven out of the eight cancer sites, death rates for the black non-Hispanic population were more than twice those of the best population group.

The American Indian or Alaska Native population experienced cancer death rates that were 10 percent to 49 percent higher than the best rates for all cancers combined (3-1), lung cancer (3-2), and oropharyngeal cancer (3-6) and 50 percent to 99 percent higher for prostate cancer (3-7).

For cancers occurring in men and women (3-1, 3-2, 3-5, 3-6, and 3-8), females always had better (that is, lower) group death rates. Some progress occurred in reducing gender differences in lung cancer death rates, but an increase in the gender difference in oropharyngeal cancer was noted.

Finally, with respect to disparities in cancer death rates regarding education level, for six of the eight cancer death rates, persons with at least some college had the best rates (that is, lowest death rate). Persons with less than a high school education had the best rates for female breast cancer (3-3) and melanoma (3-8). Disparities in death rates for lung cancer, oropharyngeal cancer, and melanoma grew for high school graduates, compared with persons with at least some college. Disparities in lung cancer also increased for persons with less than a high school education in comparison with persons with at least some college.

**Preventive health behaviors and screening (3-9b, 3-11, 3-12, and 3-13).** Women, persons with at least some college education, and middle/high-income persons had the best group rates for sun safety behaviors (3-9b). Disparity in sun safety behavior among adults without disabilities compared with adults with disabilities decreased by 10 to 49 percentage points between 2000 and 2003. No other progress occurred in reducing disparities in cancer screening behaviors from the baseline year.

For cancer screening behaviors, persons with at least some college and with middle/high income had the best rates across all five cancer screening objectives and subobjectives. The only observed change was an increase in disparity for persons with less than a high school education who received colorectal cancer endoscopic screening (3-12b). Ever having received a Pap test (3-11a) had the most population groups with large disparities than any other screening behavior. Disparities of 100 percent or more from the best group rate were present for Asian and Hispanic populations, as well as for persons with less than a high school education. The black non-Hispanic population had the best rate for Pap tests received within the past 3 years (3-11b), and persons of two or more racial and ethnic backgrounds had the best rates for sun safety behaviors (3-9b) and FOBT home kit (3-12a).

Reducing or eliminating cancer health disparities remains a critical scientific challenge,[30] as well as a moral and an ethical dilemma for the Nation. In January 2003, at the request of the U.S. Department of Health and Human Services (HHS), NCI established a Trans-HHS Cancer Health Disparities Progress Review Group (PRG) consisting of 27 outside experts to assist HHS to define and describe the cancer health disparity issues; identify strengths, gaps, opportunities, and priorities to address cancer health disparities; facilitate the adoption and implementation of research, policy, community-based, and clinical interventions and evaluate their impact on specific cancer health disparities; and ensure unbiased and continuous access to quality preventive and treatment services for every American.[31]

The PRG report identified 14 priority actions that involve planning and coordination across HHS and other Federal agencies with programs that impact cancer health disparities, research discovery, intervention development, and service delivery. The report[31] acknowledged that the underlying causes of cancer disparities are linked to persistent inequities in health[32] and health services, including unequal access to healthy environments, as well as unequal access to evidence-based cancer prevention, screening, diagnostic, treatment, and survivorship support services.

HHS has formed a cancer health disparities subcommittee within the HHS Health Disparities Council. This subcommittee is reviewing the recommendations in the PRG report to identify priorities for action. If reductions in cancer health disparities are to be achieved, new and expanded activities specifically addressing the underlying causes of cancer health disparities need to be undertaken.

## Opportunities and Challenges

Current progress has been the result of activities implemented by a wide range of public- and private-sector organizations at the national, State, and local levels. Further progress depends on increasing coordination of these activities and implementation of evidence-based cancer prevention and control strategies nationwide.

In 1998, CDC initiated a program that provides Federal support to State health departments for CCC coalitions. These coalitions of community groups, research centers, and other organizations working against cancer develop and implement plans for risk reduction, early detection, better treatment, and improved survival at the State and local levels. By sharing expertise and integrating their efforts, CCC

coalitions reduce duplication of efforts and maximize the use of limited resources. All 50 States, the District of Columbia, 6 Tribal organizations, and 6 U.S. Territories have active CCC coalitions that collaborate with Federal agencies, the American Cancer Society, the Intercultural Council, the Lance Armstrong Foundation, C-Change, and other organizations.

By sharing their expertise and integrating their efforts, national and State coalition partners increase the effectiveness of their cancer prevention and control efforts by reducing duplication and maximizing the use of limited resources. For example, in one State, coalition efforts to implement a plan led to the passage of legislation to fund colorectal cancer screening, and in another State, coalition efforts resulted in a legislation amendment, which generated additional funding allocated for prevention, early detection, and treatment of cancer and cardiovascular, pulmonary, and other chronic diseases.[4, 26]

Cancer prevention and control efforts have benefited from the guidance on evidence-based practice from USPSTF[6] and the Task Force on Community Preventive Services (TFCPS).[22] USPSTF conducts systematic reviews of evidence on the effectiveness of cancer screening, chemoprevention, and provider counseling services and makes recommendations for clinical practitioners.[6] TFCPS conducts evidence-based reviews and reports recommendations on the effectiveness of community interventions related to cancer prevention and control, including interventions for cancer screening, tobacco use, and physical activity.[22] These independent task forces provide critical guidance to CCC coalitions, health professionals, health plans, and other organizations on effective services and programs to prevent and control cancer.

A number of other collaborative efforts are important in attaining the targets. Several Federal agencies, State and local health departments, primary care associations, and other organizations are working to implement Health Disparities Collaboratives to improve cancer care in underserved communities and to reduce disparities.[33] Opportunities for progress are created by continued collaboration among large employers, health care companies, benefits consultants, vendors, and Federal agencies to promote business support for cancer-related clinical preventive services recommended by USPSTF.[34] Most health care profession associations have cancer prevention guidelines for their members, and an increasingly large number of well-organized community organizations and cancer advocacy groups promote prevention and control.[4] For example, the National Committee for Quality Assurance cooperates with employers and insurers to monitor performance of cancer screening in managed care organizations, thereby increasing the screening of enrolled members.[35] C-Change, which comprises many of the Nation's leaders from government, business, and nonprofit organizations, has a number of efforts to increase prevention and improve cancer treatment.[36]

Success in reaching breast and cervical cancer screening targets increasingly depends on Federal and State partnerships, such as the National Breast and Cervical Cancer Early Detection Program,[3] to increase screening among women who are least likely to be screened, including low-income, uninsured women.[4] All 50 States, the District of Columbia, 13 Tribal organizations, and 4 Territories are collaborating with a range of partners to implement this program. Since 2000, the program has provided 2.7 million screening examinations to almost 1.5 million women who otherwise would unlikely be screened.[14] However, the program reaches only a small proportion of women needing the services.[37]

To help support organizations active in cancer prevention and control, several HHS agencies, led by NCI and in collaboration with the American Cancer Society developed the Cancer Control PLANET Web portal.[25, 38] The PLANET, launched in 2003, is an interactive five-step "lens" to help cancer prevention and control professionals and organizations find a comprehensive set of evidence-based cancer control program

planning, implementation, and evaluation resources, such as those developed by USPSTF. PLANET provides a "one-stop shop" for research-tested intervention approaches, evidence-based guidelines, national and State data, and other resources. Achieving the cancer targets requires increased use of PLANET and similar efforts to better disseminate evidence-based resources.[25, 38]

Attaining the cancer targets also depends on progress in other focus areas, including Access to Quality Health Services (Focus Area 1), Educational and Community-Based Programs (Focus Area 7), Health Communication (Focus Area 11), Nutrition and Overweight (Focus Area 19), Physical Activity and Fitness (Focus Area 22), Public Health Infrastructure (Focus Area 23), and Tobacco Use (Focus Area 27).[6, 18, 22] Many cancer prevention activities also contribute to the reduction of the risk of heart disease and stroke (Focus Area 12) and other chronic diseases (Focus Areas 4, 5, 24, and 26).[6, 22] An ongoing challenge, particularly for CCC coalitions, is how to integrate related objectives and improve coordination with organizations working on them.

## Emerging Issues

Occasionally, survey questions are refined to allow for more specific and accurate collection of data. The questions on the National Health Interview Survey used to produce the baseline estimates of mammography and Pap smear were revised in the 1999, 2000, and 2005 questionnaires. The questions for estimating use of FOBT home kit were revised in 2005 from the baseline of 2000. For example, in 1999, 2000, and 2003, women who responded that their most recent mammogram was "2 years ago" were considered to have received the screening within the recommended 2-year interval. In 2005, women who responded similarly were further asked whether the mammogram was "more than 1 year but not more than 2 years" or "more than 2 years" ago.

Therefore, the proportions of adults receiving breast and cervical cancer screenings within the recommended interval may be overestimated for 1999, 2000, and 2003. The proportion of adults receiving colorectal cancer screening with an FOBT home kit may be overestimated for 2000 and 2003. The change in the survey methodology implemented in 2005 is expected to lead to lower, more accurate estimates for that year and subsequent data years.

Since the publication of the Healthy People 2010 objectives, both USPSTF and TFCPS have provided new guidance on evidence-based practices in cancer prevention and control.[6, 22] USPSTF has revised several of its earlier recommendations, added recommendations for new services (for example, in colorectal cancer screening), and initiated a new round of reviews for future additional updates. TFCPS continues to add to its recommendations on community interventions related to cancer. Future efforts to achieve the cancer targets will need to incorporate updated recommendations from these sources.

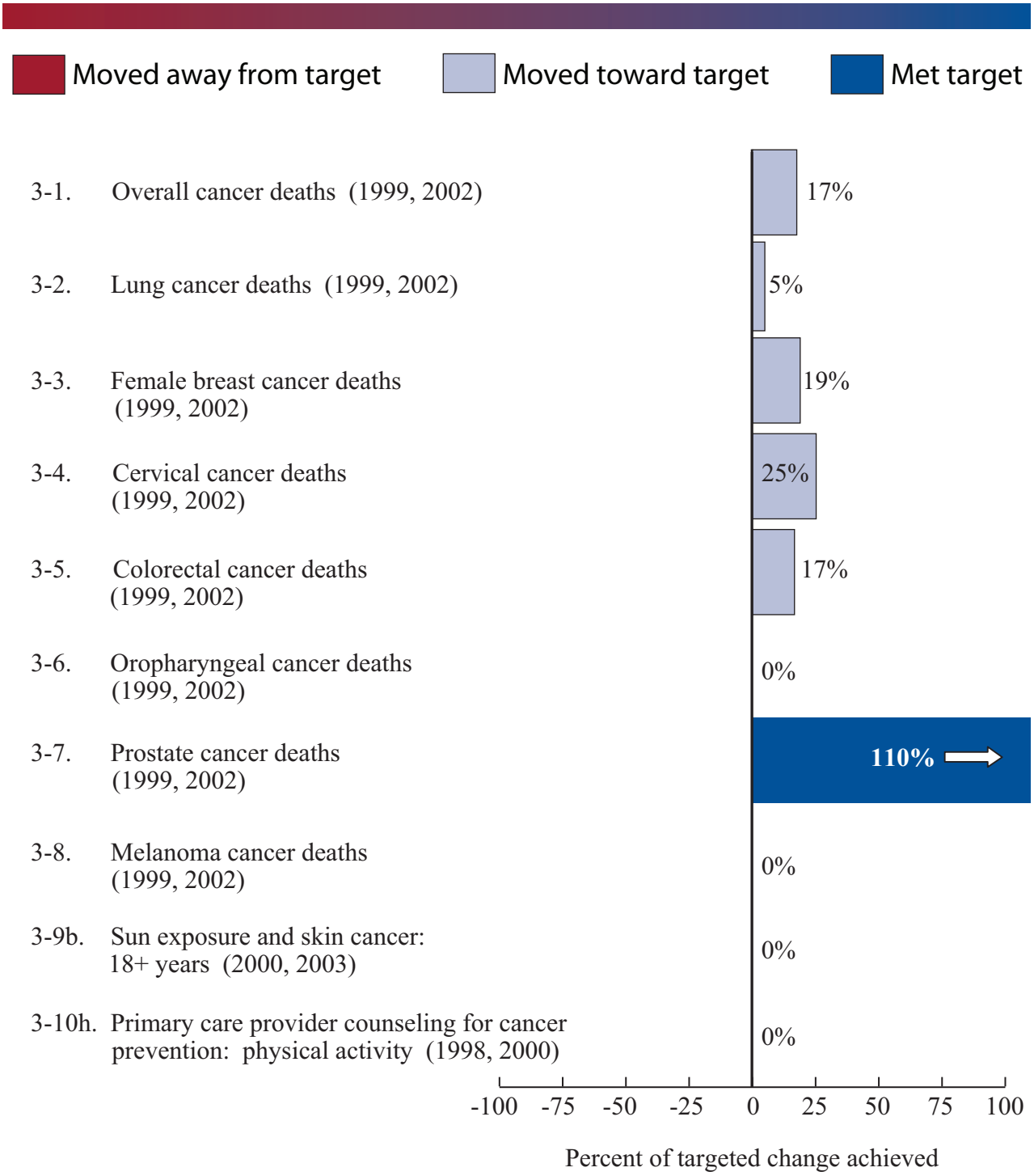
A key question for attaining reductions in death rates is which investments made now will reap the greatest reduction in cancer deaths in the next 5 years. The NCI-sponsored Cancer Intervention and Surveillance Modeling Network[15, 16] has modeled the effects of differing interventions on death rates. For example, investigators have found that the biggest impact for reducing the colorectal cancer death rate (3-5) in the short term is to rapidly increase the use of the current USPSTF-recommended cancer screening tests.[15] Investigators have also estimated that approximately 50 percent of the reduction in the breast cancer death rate in recent years is due to increased use of new treatments.[16]

Although no treatment objectives are included in the cancer focus area, death rates are affected by changing treatment practices.[15, 16, 17] The Institute of Medicine has noted substantial gaps between what is known about quality care and what is practiced in many communities.[11] The National Quality Forum (NQF) has initiated a process to develop national consensus performance measures for monitoring the use of recommended cancer treatments.[39] The resulting changes in treatment performance will need to be noted when interpreting progress toward the cancer death rate objectives. NQF performance measures may also be considered in the future as national cancer control objectives.

To address the challenge of measuring perceived quality of life in cancer and other chronic diseases, the National Institutes of Health (NIH) has funded the Patient-Reported Outcomes Measurement Information System initiative. Under this initiative, a collaborative relationship between NIH and individual research teams has been established to develop and test a large bank of items measuring patient-reported outcomes, design a computerized system that allows for efficient assessment of patient-reported outcomes in clinical research involving a wide range of chronic diseases, and create a publicly available system that can be added to and modified periodically and that allows clinical researchers to access a common repository of items and computerized adaptive tests. Once these measures are validated, their use in future disease surveillance efforts can provide new ways to measure changes in quality of life.

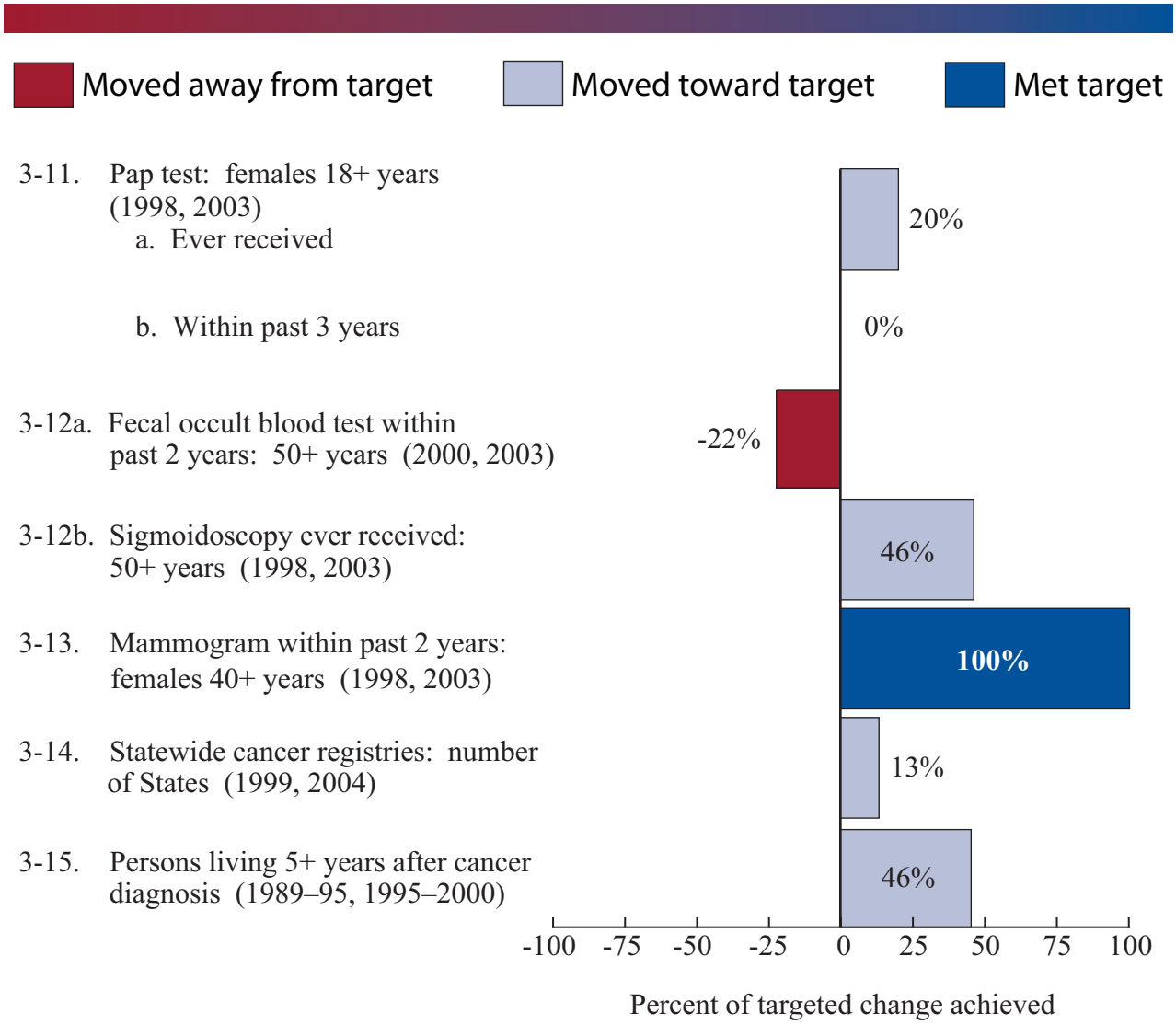
Progress toward the Healthy People 2010 cancer objectives has been facilitated by the Nation's investment in research to identify and deliver new research-tested interventions for cancer prevention and control. In addition to this investment, progress also has been aided by improved coordination of a wide range of efforts to promote the adoption of evidence-based interventions for the prevention, screening, diagnosis, and treatment of cancer.

**Figure 3-1. Progress Quotient Chart for Focus Area 3: Cancer**




See notes at end of chart. *(continued)*

**Figure 3-1.** *(continued)*



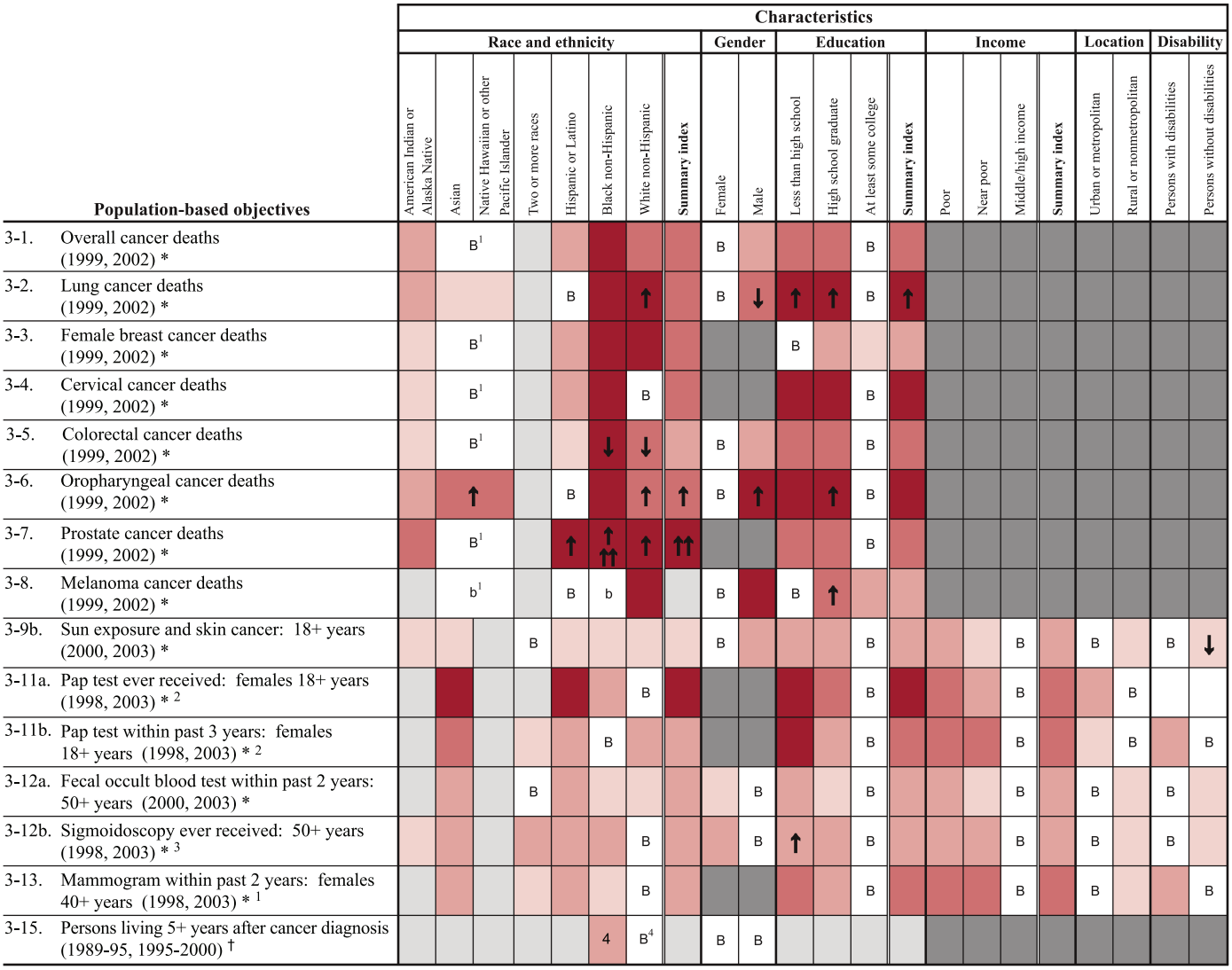

**Notes:** Tracking data for objectives 3-9a and 3-10a through g are unavailable.

Years in parentheses represent the baseline data year and the most recent data year used to compute the percent of the Healthy People 2010 target achieved.

$$\text{Percent of targeted change achieved} = \left(\frac{\text{Most recent value} - \text{baseline value}}{\text{Year 2010 target} - \text{baseline value}}\right) \times 100$$

## Figure 3-2. Disparities Table for Focus Area 3: Cancer

Disparities from the best group rate for each characteristic at the most recent data point and changes in disparity from the baseline to the most recent data point.



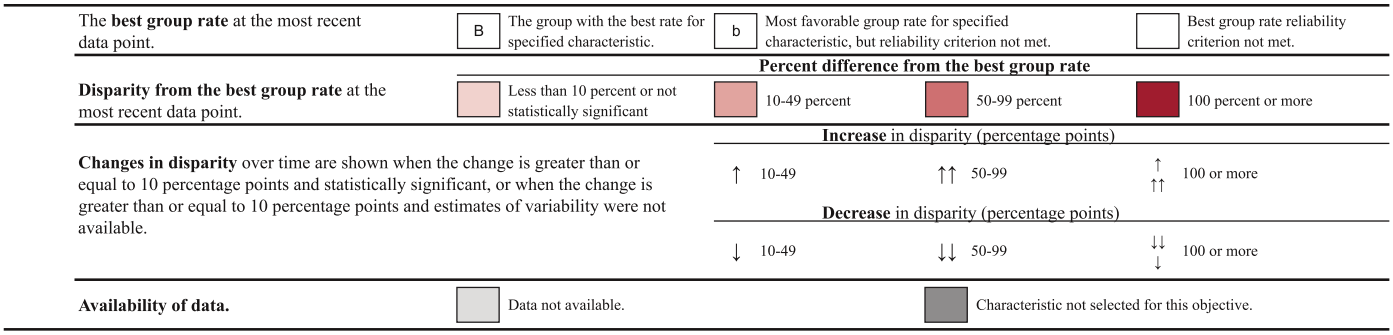

**Notes:** Data for objectives 3-9a and 3-10a through h are unavailable or not applicable.

Years in parentheses represent the baseline data year and the most recent data year (if available).

Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic (for example, race and ethnicity). The summary index is the average of these percent differences for a characteristic. Change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point. Change in the summary index is estimated by subtracting the summary index at baseline from the summary index at the most recent data point. See Technical Appendix for more information.

*(continued)*

## Figure 3-2. *(continued)*




* The variability of best group rates was assessed, and disparities of ≥ 10% are statistically significant at the 0.05 level. Changes in disparity over time, noted with arrows, are statistically significant at the 0.05 level. See Technical Appendix.

† Measures of variability were not available. Thus, the variability of best group rates was not assessed, and the statistical significance of disparities and changes in disparity over time could not be tested. See Technical Appendix.

[1] Data are for Asians or Pacific Islanders.

[2] Baseline data by race and ethnicity are for 1999.

[3] Baseline data by race and ethnicity are for 2000.

[4] Data include persons of Hispanic origin.

# Objectives and Subobjectives for Focus Area 3: Cancer

**Goal:** Reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer.

As a result of the Healthy People 2010 Midcourse Review, changes were made to the Healthy People 2010 objectives and subobjectives. These changes are specific to the following situations:

- Changes in the wording of an objective to more accurately describe what is being measured.
- Changes to reflect a different data source or new science.
- Changes resulting from the establishment of a baseline and a target (that is, when a formerly developmental objective or subobjective became measurable).
- Deletion of an objective or subobjective that lacked a data source.
- Correction of errors and omissions in *Healthy People 2010.*

Revised baselines and targets for measurable objectives and subobjectives do not fall into any of the above categories and, thus, are not considered a midcourse review change.[1]

When changes were made to an objective, three sections are displayed:

1. In the Original Objective section, the objective as published in *Healthy People 2010* in 2000 is shown.
2. In the Objective With Revisions section, strikethrough indicates text deleted, and underlining is used to show new text.
3. In the Revised Objective section, the objective appears as revised as a result of the midcourse review.

Details of the objectives and subobjectives in this focus area, including any changes made at the midcourse, appear on the following pages.

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[1] See Technical Appendix for more information on baseline and target revisions.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-1. Reduce the overall cancer death rate.**

**Target:** 158.6[1] deaths per 100,000 population.

**Baseline:** 200.8[2] cancer deaths per 100,000 population occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 21 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 159.9 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 202.4 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-2. Reduce the lung cancer death rate.**

**Target:** 43.3[1] deaths per 100,000 population.

**Baseline:** 55.5[2] lung cancer deaths per 100,000 population occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 22 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 44.9 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 57.6 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-3. Reduce the breast cancer death rate.**

**Target:** 21.3[1] deaths per 100,000 females.

**Baseline:** 26.6[2] breast cancer deaths per 100,000 females occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 20 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 22.3 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 27.9 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-4. Reduce the death rate from cancer of the uterine cervix.**

**Target:** 2.0[1] deaths per 100,000 females.

**Baseline:** 2.8[2] cervical cancer deaths per 100,000 females occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 2.0 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 3.0 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-5. Reduce the colorectal cancer death rate.**

**Target:** 13.7[1] deaths per 100,000 population.

**Baseline:** 20.9[2] colorectal cancer deaths per 100,000 population occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 34 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 13.9 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 21.2 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-6. Reduce the oropharyngeal cancer death rate.**

**Target:** 2.4[1] deaths per 100,000 population.

**Baseline:** 2.7[2] oropharyngeal cancer deaths per 100,000 population occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 10 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 2.7 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 3.0 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-7. Reduce the prostate cancer death rate.**

**Target:** 28.2[1] deaths per 100,000 males.

**Baseline:** 31.3[2] prostate cancer deaths per 100,000 males occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 10 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 28.8 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 32.0 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-8. Reduce the rate of melanoma cancer deaths.**

**Target:** 2.3[1] deaths per 100,000 population.

**Baseline:** 2.6[2] melanoma cancer deaths per 100,000 population occurred in 1999[2] (age adjusted to the year 2000 standard population).

**Target setting method:** 11 percent improvement.

**Data source:** National Vital Statistics System (NVSS), CDC, NCHS.

[1] Target revised from 2.5 because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 2.8 and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-9. Increase the proportion of persons who use at least one of the following protective measures that may reduce the risk of skin cancer: avoid the sun between 10 a.m. and 4 p.m., wear sun-protective clothing when exposed to sunlight, use sunscreen with a sun-protective factor (SPF) of 15 or higher, and avoid artificial sources of ultraviolet light.**

**3-9a.** (Developmental) Increase the proportion of adolescents in grades 9 through 12 who follow protective measures that may reduce the risk of skin cancer.

**Potential data source:** Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

**NO CHANGE IN OBJECTIVE *(continued)***
**(Data updated and footnoted)**

**3-9b.** Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer.

**Target:** 85[1] percent of adults aged 18 years and older use at least one of the identified protective measures.

**Baseline:** 59[2] percent of adults aged 18 years and older regularly used at least one protective measure in 2000[2] (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS. Data on artificial ultraviolet light source are developmental.

[1] Target revised from 75 percent because of baseline revision after November 2000 publication.
[2] Baseline and baseline year revised from 47 percent and 1998 after November 2000 publication.

**NO CHANGE IN OBJECTIVE**
**(Data updated and footnoted)**

**3-10. Increase the proportion of physicians and dentists who counsel their at-risk patients about tobacco use cessation, physical activity, and cancer screening.**

**Target and baseline:**

| Objective | Increase in Counseling About Tobacco Use Cessation, Physical Activity, and Cancer Screening | 1988 Baseline (unless noted) | 2010 Target |
|---|---|---|---|
| | | *Percent* | |
| **3-10a.** | Internists who counsel about smoking cessation | 50 | 85 |
| **3-10b.** | Family physicians who counsel about smoking cessation | 43 | 85 |
| **3-10c.** | Dentists who counsel about smoking cessation | 59 (1997) | 85 |
| **3-10d.** | Primary care providers who counsel about blood stool tests | 56 | 85 |
| **3-10e.** | Primary care providers who counsel about proctoscopic examinations | 23 | 85 |
| **3-10f.** | Primary care providers who counsel about mammograms | 37 | 85 |
| **3-10g.** | Primary care providers who counsel about Pap tests | 55 | 85 |

## NO CHANGE IN OBJECTIVE *(continued)*
## (Data updated and footnoted)

| | | | |
|---|---|---|---|
| **3-10h.** | Primary care providers who counsel about physical activity | 12 (1998)[1] | 85 |

**Target setting method:** Better than the best.

**Data sources:** Survey of Physicians' Attitudes and Practices in Early Cancer Detection, NIH, NCI; National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; Survey of Current Issues in Dentistry, American Dental Association.

[1] Baseline and baseline year revised from 22 percent and 1995 after November 2000 publication.

## NO CHANGE IN OBJECTIVE

**3-11. Increase the proportion of women who receive a Pap test.**

**Target and baseline:**

| Objective | Increase in Pap Testing | 1998 Baseline* | 2010 Target |
|---|---|---|---|
| | | *Percent* | |
| **3-11a.** | Women aged 18 years and older who have ever received a Pap test | 92 | 97 |
| **3-11b.** | Women aged 18 years and older who received a Pap test within the preceding 3 years | 79 | 90 |

* Age adjusted to the year 2000 standard population. Includes women without a uterine cervix.

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

## NO CHANGE IN OBJECTIVE
## (Data updated and footnoted)

**3-12. Increase the proportion of adults who receive a colorectal cancer screening examination.**

**Target and baseline:**

| Objective | Increase in Colorectal Cancer Screening | 2000 Baseline* (unless noted) | 2010 Target |
|---|---|---|---|

## NO CHANGE IN OBJECTIVE *(continued)*
## (Data updated and footnoted)

| | | *Percent* | |
|---|---|---|---|
| **3-12a.** | Adults aged 50 years and older who have received a fecal occult blood test (FOBT) within the preceding 2 years | 24[1] | 33[2] |
| **3-12b.** | Adults aged 50 years and older who have ever received a sigmoidoscopy | 37 (1998) | 50 |

* Age adjusted to the year 2000 standard population.

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

[1] Baseline and baseline year revised from 35 and 1998 after November 2000 publication
[2] Target revised from 50 because of baseline revision after November 2000 publication

## NO CHANGE IN OBJECTIVE
## (Data updated and footnoted)

**3-13. Increase the proportion of women aged 40 years and older who have received a mammogram within the preceding 2 years.**

**Target:** 70 percent.

**Baseline:** 67 percent of women aged 40 years and older received a mammogram within the preceding 2 years in 1998 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

## ORIGINAL OBJECTIVE

**3-14. Increase the number of States that have a statewide population-based cancer registry that captures case information on at least 95 percent of the expected number of reportable cancers.**

**Target:** 45.

**Baseline:** 21 States had a statewide population-based cancer registry that captured case information on at least 95 percent of the expected number of reportable cancers in 1999.

## ORIGINAL OBJECTIVE *(continued)*

**Target setting method:** 114 percent improvement.

**Data source:** National Program of Cancer Registries, CDC.

## OBJECTIVE WITH REVISIONS

**3-14. Increase the number of States that have a statewide population-based cancer registry that captures case information on at least 95 percent of the expected number of reportable cancers.**

**Target:** 45.

**Baseline:** ~~21~~30 States had a statewide population-based cancer registry that captured case information on at least 95 percent of the expected number of reportable cancers in 1999.

**Target setting method:** ~~114~~50 percent improvement.

**Data source:** National Program of Cancer Registries, CDC.

## REVISED OBJECTIVE

**3-14. Increase the number of States that have a statewide population-based cancer registry that captures case information on at least 95 percent of the expected number of reportable cancers.**

**Target:** 45.

**Baseline:** 30 States had a statewide population-based cancer registry that captured case information on at least 95 percent of the expected number of reportable cancers in 1999.

**Target setting method:** 50 percent improvement.

**Data source:** National Program of Cancer Registries, CDC.

## NO CHANGE IN OBJECTIVE

**3-15. Increase the proportion of cancer survivors who are living 5 years or longer after diagnosis.**

**Target:** 70 percent.

**Baseline:** 59 percent of persons with invasive cancer of any type were living 5 years or longer after diagnosis in 1989–95.

**NO CHANGE IN OBJECTIVE *(continued)***

**Target setting method:** 19 percent improvement.

**Data source:** Surveillance, Epidemiology, and End Results (SEER) Program, NIH, NCI.

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## Related Objectives From Other Focus Areas

### 19. Nutrition and Overweight

19-5. Fruit intake
19-6. Vegetable intake
19-8. Saturated fat intake
19-9. Total fat intake

### 21. Oral Health

21-6. Early detection of oral and pharyngeal cancers
21-7. Annual examinations for oral and pharyngeal cancers

### 27. Tobacco Use

27-1. Adult tobacco use
27-2. Adolescent tobacco use
27-5. Smoking cessation by adults
27-7. Smoking cessation by adolescents
27-8. Insurance coverage of cessation treatment