

CHAPTER VIII  
LUNG AND ORAL CANCER AND  
TOBACCO CONTROL

## LUNG AND ORAL CANCER AND TOBACCO CONTROL

### GOALS

By 2010, accelerate significantly the rate of decline of lung and oral cancer mortality by preventing tobacco use, helping smokers and users of spit tobacco to quit, and diagnosing lung and oral cancer at an earlier, potentially more curative stage.

### OBJECTIVES

1. By 2010, decrease the smoking prevalence rate in adults ages 18 and older from 16.6 percent in 2000 to 10 percent.
2. By 2010, decrease the smoking prevalence rate in youth ages 12 to 17 years from seven percent to four percent.
3. By 2010, decrease exposure to secondhand smoke to 10 percent or less of the California population.
4. By 2010, double the percentage of lung cancer diagnosed in California at Stage 1A.

## Background and Barriers to Achieving Goals and Objectives

### Lung Cancer Burden in California

Lung cancer is by far the leading cause of cancer deaths in California and is the most preventable. Smoking is responsible for approximately

85 percent of lung cancer deaths and 30 percent of all cancer-related deaths (1, 19, 48). Lung cancer alone kills about 14,000 Californians each year, more than prostate, breast, and colorectal cancers combined.



One-year survival rates for lung cancer increased from 34 percent in 1975 to 41 percent in 1996, largely due to improvements in surgical treatments. The five-year survival rate for all stages of the cancer combined, however, is only 15 percent. If the cancer is caught while still localized, the five-year survival rate is 48 percent, but few cases are discovered that early (1). This fact underscores the need to identify lung cancer at a much earlier stage.

Fortunately, fewer men are dying than in earlier years. From 1988 to 1999, lung cancer mortality dropped 30 percent for males in California (48). Though the mortality rate for women is also now beginning to decline, this delay is an unfortunate reflection of the historical gender difference in the uptake of smoking.

Women, for example, started smoking in the 1930s and 1940s, about 20 to 30 years later than men. Declines in lung cancer mortality among both men and women are expected to continue along with declines in smoking prevalence.

Overall, lung cancer incidence in California declined 22.3 percent from 1988 to 1999. This decline may likely be a good predictor of future potential reductions in lung cancer incidence and mortality elsewhere in the U.S. During that same time period, the U.S. lung cancer incidence rates declined by only 4.7 percent (1).

In 2002, 16.6 percent of California adults still smoked. However, 18 to 24 year olds are smoking at increasing rates and are now recognized as the growing age group using tobacco. Tobacco companies target them in earnest as the "Smokers of the Future (19)."

Efforts to decrease lung cancer mortality must also include protection of non-smokers from secondhand smoke (SHS). Cancers causally associated with exposure to SHS include lung and nasal-sinus cancer, and also breast cancer to a lesser extent (61).

## Early Detection of Lung Cancer

Although there are no Food and Drug Administration (FDA) approved screening tests for lung cancer at this time, the spiral CT scan is under investigation by the NCI in a large clinical trial to determine its efficacy. The spiral CT scan involves a process by which a sensitive imaging device rotates around the body to detect small tumors that can be missed by chest x-rays.

Many questions exist about the spiral CT scan such as its cost-effectiveness, its use as a population-based screening tool, and its benefit in treatment outcomes, particularly when programs to prevent or stop smoking yield better results in lowering lung cancer mortality. The National Cancer Institute trial will hopefully answer important questions about this test.

## Lung Cancer Treatment and Quality of Life

Symptoms of lung cancer include persistent cough, sputum streaked with blood, chest pain, and recurring pneumonia or bronchitis. Treatment is determined by the type and stage of the cancer and includes surgery, radiation therapy, and chemotherapy. Surgery is often the treatment of choice for many localized tumors. If the cancer has spread by time it is detected, then radiation therapy and chemotherapy are often used in combination with surgery. Each treatment may have adverse effects that can last a short time or be permanent. Before treatment, health care providers can help patients be aware of side effects so that steps can be taken to prevent or ease the effects and/or shorten their duration (7).

Quality of life issues associated with lung cancer treatment include not only a relief of side effects, but that all patients receive appropriate quality treatment and follow-up with no disparities in treatment outcomes. Patients and their families should receive help to navigate their health care system, to find the resources and services that match their needs, and to receive accurate, complete, and culturally competent information. Education and compassionate support must go hand-in-hand with treatment to reduce fear and enlist the patient as a partner in his or her own care (4).

Other factors affecting quality of life can positively affect how the patient copes with the cancer. These include the health of the patient's immune system, a history of good nutrition, strong family support, and spiritual faith. Counseling regarding nutrition, exercise and rest, psychosocial issues, estate planning, and any other patient and family concerns is also critical to the patient's quality of life, as are local support groups for emotional support, friendship, and understanding.

Finally, relief from pain and dyspnea must also be managed as much as possible in patients' treatment, follow-up, and palliative care so that they have greater physical comfort in dealing with the balance of their lives (4, 7).

## Oral Cancer Burden in California

In 2004, oral or pharyngeal cancers will be diagnosed in an estimated 3,150 Californians and are expected to cause about 830 deaths. More than 90 percent of these cancers are squamous cell carcinomas - cancers of the epithelial cells. The most common oral sites are on the tongue, lips, and floor of the mouth. Oral cancer is the seventh most common cancer in California males and takes a disproportionate toll on minorities.

The life of each person with oral or pharyngeal cancer is shortened by an average of 16.5 years. The median age at diagnosis is 64, and the rate of occurrence increases with age. More than 95 percent of oral cancers occur in individuals aged 35 and older.

According to the CDC, only about half of people with oral or pharyngeal cancer survive more than five years. If oral cancer is detected early, the five-year survival rate is 81.3 percent; however, only 35 percent of persons with oral and pharyngeal cancers are diagnosed at an early stage. The five-year survival rate drops to 21.6 percent among people diagnosed with advanced stage cancer. Compared to persons with other types of cancer, oral and pharyngeal cancer survivors have the highest rate of developing new cancers in the mouth or other parts of the body (55).

## Early Detection of Oral Cancer

At present, the principal diagnostic test for oral and pharyngeal cancer is a comprehensive

clinical examination that includes a visual/tactile examination of the mouth, full protrusion of the tongue with the aid of a gauze wipe, and palpation of the tongue, floor of the mouth, and lymph nodes in the neck. The U.S. Preventive Services Task Force concluded that there was insufficient evidence to recommend for or against routine screening for oral cancers, but noted that clinicians should remain vigilant for signs and symptoms of oral cancer and premalignancy in people who use tobacco or regularly use alcohol.

The Canadian Task Force on Periodic Health Examination states that although there is insufficient evidence to include or exclude screening for oral cancers from the periodic health examination of the general public, those at high risk - smokers and heavy drinkers over 60 years of age, warrant an annual oral cancer examination by a physician or dentist (31).

A relatively new diagnostic procedure in dentistry is the use of the oral brush biopsy to identify oral lesions that may need further evaluation. The oral brush biopsy is minimally invasive, requires no anesthesia, and definitively distinguishes benign from pre-cancerous and cancerous lesions (31).

## Oral and Pharyngeal Cancer and Tobacco Use

Smoking and the use of chew or spit tobacco are devastating to the mouth and throat and combined with alcohol are particularly deadly. Tobacco and alcohol, working in tandem, are thought to account for 75 to 90 percent of all oral and pharyngeal cancers in the U.S. This combination damages cells in the lining of the mouth and throat - cells that must now grow rapidly to repair the damage. Not only do the chemicals in tobacco damage DNA, but alcohol also helps this process by aiding chemical penetration (6).

Use of chew or spit tobacco puts one at high risk for lip, tongue, and other oral cavity cancers. In California in 2001, 10.5 percent of middle and high school students under the age of 18 were current users of chewing tobacco (19). Tobacco industry marketing practices and poor role modeling by sports figures have particularly had their impact on teen males. In California, however, the state's Tobacco Control Program appears to have had an effect on spit tobacco use among adolescent boys. In 1999, their spit tobacco use was at only one-third of the level seen in 1993.

## Treatment of Oral Cancer and Quality of Life

Although a number of treatment and quality of life issues for oral cancer patients are comparable to those discussed for lung cancer patients, the effects of surgical treatment of oral cancer may have uniquely adverse impacts on quality of life in terms of facial disfigurement and interference with speech and mastication. At the same time, treatments have improved. Patients who once would have been left with difficulty speaking, eating, and swallowing now are candidates for reconstructive surgery that leaves them less visibly scarred and more able to function normally. Most mortality due to oral cancer today is due to either a second primary cancer or to a spread of the cancer (31).

Palliative care with relief from pain and suffering and comprehensive support to address the needs of oral cancer patients, their families, and their culture are essential to maintain a good quality of life. Patients dealing with disfigurement associated with radical surgical procedures also require support such as prosthetics and cosmetic enhancements as well as support groups.

California's Tobacco Control Program  
Cigarette addiction is extremely powerful. In 1999, 61.5 percent of adult California smokers

reported that they had tried to quit in the previous 12 months (19). Over the years, tobacco companies have cleverly engineered the cigarette to achieve its highly addictive properties (61). Tobacco companies and their allies continue their work as agents of lung cancer through predatory marketing practices and relentless efforts to thwart California's highly acclaimed anti-tobacco program. These efforts include time-consuming lawsuits that question the ability of the Tobacco Control Program to implement the programs that have been the will of the people of California and are required by legislation.

Californians have worked hard to achieve the lowest cigarette smoking prevalence rate in the nation next to Utah, reaching a low of 16.6 percent of adults who smoked in 2002 (19).

A vast network of partnerships and programs across the state from local and state level public health, government, business, labor, managed care, media, and academic sectors are a potent force to counter tobacco industry efforts and to decrease tobacco use. California's tobacco control efforts have been immensely successful. Two crowning achievements have been smoke-free environments in all California indoor worksites, including bars, and the unacceptability or denormalization of tobacco use throughout the state (22, 23).

California's smoke-free environments, a model for the nation, have had a multi-pronged impact. They not only protect adults and children from a highly carcinogenic substance, but also protect workers, reduce cigarette consumption, and provide a supporting environment for smokers trying to quit. Adult per capita consumption alone has decreased over 50 percent since the passage of Proposition 99 to a low of about 48 packs per capita in Fiscal Year 2001-2002.

Many challenges still remain. Adult tobacco use rates still must come down sharply to curtail thousands of preventable tobacco-related deaths. Currently, there is great hope for youth as their smoking prevalence rates have fallen significantly, helped by the 50-cent tobacco tax increase in 1999. From 1991-1999, California's youth smoking rates have fallen faster than anywhere else in the nation (21).

However, there is another side to this coin. CDC estimates that in the U.S., the average 14-year-old has been exposed to more than \$20 billion in imagery advertising and promotions since age six, creating a "friendly familiarity for tobacco products (62)." In addition, there are still priority populations, including youth and adults, that are still being targeted by the tobacco industry and whose smoking rates are still high.

This is what California is up against.

## Costs of Smoking

Smoking costs Californians dearly. Besides shortening the average smoker's life by over 15 years or more, smoking costs the state \$15.8 billion per year or \$475 per man, woman, and child in California (42). Over half that amount - \$8.6 billion - goes toward annual smoking-health care costs. Previous research suggests 43 percent of direct costs are borne by publicly funded health care programs. The remaining costs are attributed to lost productivity associated with illness and premature death. If these figures are compared to the \$3.8 billion Californians spent on cigarettes in 1998-1999, the tobacco industry wins and California loses.

## Disparity of Burden and Addiction to Tobacco

The state's diverse populations have not escaped Big Tobacco. Despite significant decreases in

smoking among Californians overall, new data show smoking prevalence remains high among California's ethnic and gay and lesbian communities. During much of the 1990s, the percentage of adult smokers was highest for African Americans, particularly men.

Many of the state's immigrant populations, especially males from Asian countries, have brought their tobacco addiction with them, adding to California's prevalence rates. Lung cancer is the most common cancer among Cambodian and Vietnamese males living in California (1). Considering the States' many ethnic groups and particularly the diversity among Asian/Pacific Islanders, a great deal more data are needed to track smoking prevalence successes and failures among these specific populations.

Until recently little data were available on American Indians. The continuing collection and analysis of data on an American Indians will help to build successful programs. We do know that lung cancer is the most common cancer among American Indian males who have high smoking rates.

Additionally, little data have historically been collected on smoking prevalence for gay, lesbian, bisexual, and transgender (GLBT) populations, as they are increasingly victimized by tobacco industry marketing. Low socio-economic status (SES) and education are also a concern as the uninsured and Medi-Cal recipients have smoking rates twice that of the privately insured (31).

According to the 2001 California Health Interview Survey (CHIS), conducted by the Center for Health Policy Research at the University of California, Los Angeles, gays and lesbians had a combined smoking prevalence of 30.8 percent, followed by American Indians (30.3 percent), African Americans (20.6 percent) and

non-Hispanic whites (18.1 percent). Smoking prevalence was 21.4 percent among Asian males and 19.5 percent among Hispanic/Latino males. According to the survey, smoking prevalence was 14.6 percent for Asians, but there was a major difference between males and females. Smoking prevalence was 21.4 percent for Asian males compared to 7.8 percent for females. Among Pacific Islanders, smoking prevalence was 32.3 percent for males and 21.4 percent for females (31).

Culturally-specific tobacco use prevention services are critical to reduce smoking prevalence in these communities. A one-size-fits-all approach is not an effective means to create behavior change. Over 52 percent of California's residents are represented in our state's non-white communities, and are at risk for being negatively impacted by tobacco use. California needs to continue to conduct surveillance activities on major population groups and determine which interventions are the most effective at decreasing tobacco use in these groups.

## Cigars

Cigars are definitely not a safe alternative to cigarettes. Cigar smokers have a four to ten times higher risk of dying from laryngeal, oral, and esophageal cancers than non-smokers. In addition, men who smoke five or more cigars a day are three times more likely to die of lung cancer than non-smokers. Deeper inhalation can increase that risk (20).

Cigars are not overlooked in California's Tobacco Control Program. Cigars pack a terrific nicotine wallop - one cigar can deliver up to 70 times more nicotine than a cigarette. Young white adult males aged 18 to 24 years are the most common users of cigars. Their cigar smoking prevalence rate in 1998 was as high as 17.2 percent. Consequently, California launched its

cigar campaign mainly targeting this group on college campuses, in cities, clubs, and events where young, more affluent men congregate. In 2002, current cigar use prevalence among adult men was 8.2 percent and among women was 1.3 percent. The overall prevalence rate of cigar smoking in 2002 was 4.7 percent of California adults (20).

## Lung and Oral Cancer - Strategies and Tactics

### Top Strategies to Achieve Goals and Objectives:

1. Prevent or control tobacco use by funding and implementing the Tobacco Education and Research Oversight Committee Master Plan to strengthen the California Tobacco Control Program structure (community-based and school-based programs and tobacco-related disease research).
2. Integrate evidence-based and efficacious smoking and smokeless tobacco cessation services into the state's school systems, community-based organizations, public health programs, and health care plans and institutions.
3. Improve current and develop new technologies for screening, early diagnosis, and treatment of lung, oral cancer, and other tobacco-related cancers (e.g. cervical, stomach, pancreatic), and improve the quality of life measures at all stages of the patient's health care and balance of life.

### Additional Strategy:

- › Prevent or stop the use of spit tobacco through a public education campaign that shows the dangerous link between use of tobacco with alcohol and an increase in public demand for oral cancer examinations.

### Tactics for Implementing the Top Strategies:

#### Strategy 1

Prevent tobacco use by funding and implementing the Tobacco Education and Research Oversight Committee Master Plan to strengthen the California Tobacco Control Program structure.

- › By January 1, 2006, augment the Tobacco Control Program's budget by \$200 million.
- › By January 1, 2006, recommend that the California Legislature increase the tobacco tax with an earmark for California's Tobacco Control Program to increase the cost of tobacco products and generate funds for tobacco-use prevention and control programs and tobacco-related cancer research. Educate the Legislature that even though consumption may be declining, more resources are needed to prevent and control tobacco use due to the tobacco industry's continuing marketing and promotion efforts.
- › By January 1, 2006, strive to eliminate disparities in tobacco control by funding more programs, surveillance, and research for California's varied racial and ethnic groups and other priority populations (GLBT, low-SES, etc.)
- › Increase surveillance capacity by increasing funding of the CCR from non-Proposition 99 sources to compile and track tobacco-related data on Asian/Pacific Islander and American Indian populations.
- › Decrease exposure to SHS in all enclosed workplaces, outdoor working environments, entertainment venues, and homes by continuing to educate Californians about the dangers of SHS and by implementing progressive policies that protect all Californians where they live, work, and play.

- ▶ Initiate policy efforts to regulate the tobacco industry and the sellers of tobacco products and their influence. Policies should include:
    1. Requiring tobacco retailers to obtain a license to sell tobacco that can be suspended or revoked if they sell tobacco to children,
    2. Prohibiting tobacco industry sponsorship and advertising at community entertainment, and sporting events, and
    3. Asking elected officials not to accept tobacco industry campaign contributions and publicize those who do.
  - ▶ Increase the enforcement of tobacco control laws (i.e., sales to minors, smoke-free workplaces) by specifically earmarking funding for local law enforcement agencies and providing training and technical assistance.
  - ▶ Encourage more professional organizations to make tobacco control a priority.
  - ▶ Hold state and county First Five Commissions accountable for their mission by allocating substantial resources to programs in conjunction at DHS Tobacco Control Section.
- ▶ tobacco users in diverse communities and in a variety of languages and methods.
  - ▶ By January 1, 2006, encourage health care providers to assess patient tobacco use and exposure to second hand smoke status routinely and to provide assistance and referral to evidence-based and efficacious cessation services.
  - ▶ By January 1, 2006, advocate for evidence-based and culturally linguistically appropriate cessation counseling coverage as a core benefit of health insurance plans.
  - ▶ Fully implement “Tobacco as a Vital Sign” in all patient visits.
  - ▶ Continue to publicize the services provided by the California Smokers’ Helpline and encourage tobacco users to use its free services.
  - ▶ Require the California Department of Managed Health Care to make evidence-based best practices for tobacco use services a required component of managed health care plans.
  - ▶ Increase funding for research on tobacco-use cessation strategies for priority populations that include racial and ethnic groups, GLBT, teens, hard-core smokers and other tobacco users, and those individuals with low SES, and Medi-Cal and Healthy Families enrollees.
  - ▶ Support research to uncover the barrier to cessation counseling and services by health care providers. Support the provision of cessation facilitator trainings in health and social service organizations.
  - ▶ Support programs that strive to engage health care providers in cessation counseling and referrals.
  - ▶ Assure that tobacco use cessation is included in the Health Plan Employer Data and Information Set.

## Strategy 2

Integrate evidence-based and efficacious smoking and smokeless tobacco cessation services into the state’s school systems, community-based organizations, public health programs, and health care plans and institutions.

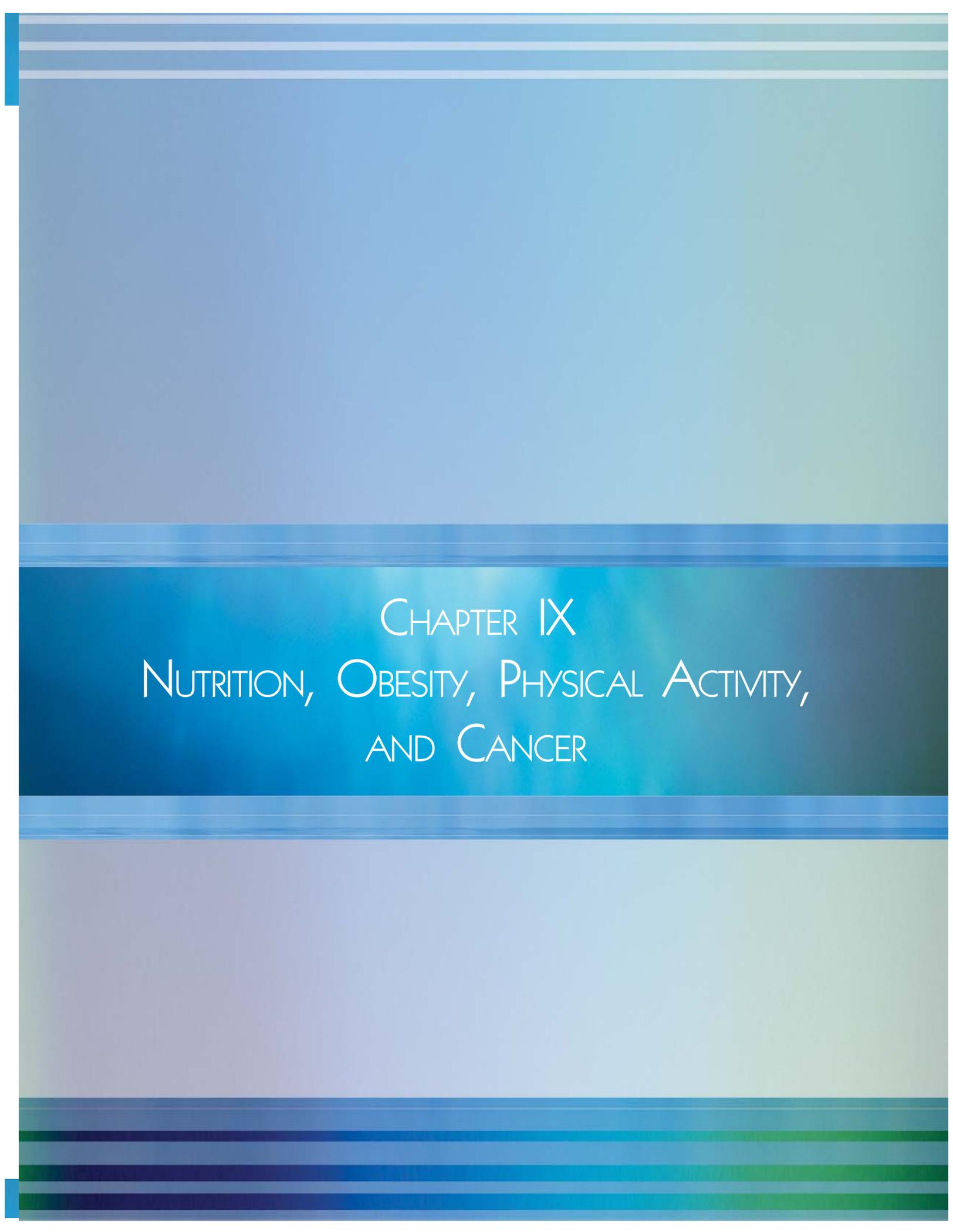
- ▶ By January 1, 2006, increase funding of diverse community-based organizations to address cessation in a culturally and linguistically appropriate manner.
- ▶ By January 1, 2006, increase the level and capacity of cessation services to assist

## Strategy 3

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Improve current and develop new technologies for screening, early diagnosis, and treatment of lung, oral cancer, and other tobacco-related cancers (e.g. cervical, stomach, pancreatic), and improve the quality of life measures at all stages of the patient's health care and balance of life.

- › By January 1, 2006, improve access to quality lung and oral cancer treatment and palliative care for all patients.
- › By January 1, 2006, increase research to improve and expand upon quality of life for lung and oral cancer patients.
- › Identify and bring together national and California organizations and researchers who perform or otherwise have an interest in spiral CT scans as an efficient community screening methodology in California. Determine screening and infrastructure guidelines based on results of the NCI spiral CT scan clinical trial when it is completed.
- › Advocate for insurers to cover lung cancer screening methods that are recommended by the ACS.
- › Encourage participation of diverse populations in clinical trials dealing with lung and oral cancer.
- › Encourage additional studies within the National Institutes of Health that look at biomarkers as cancer detection tools.
- › Encourage research and clinical trials to improve treatments for oral and lung cancers.
- › Increase health care coverage of experimental treatments.
- › Encourage increased sampling of the environment for radon and asbestos exposure, where appropriate.



CHAPTER IX  
NUTRITION, OBESITY, PHYSICAL ACTIVITY,  
AND CANCER

## NUTRITION, OBESITY, PHYSICAL ACTIVITY, AND CANCER

### GOALS

1. By 2010, change the environmental and societal norms in California to those of healthy eating and physical activity.
2. By 2010, arrest the upward obesity and overweight trends by increasing physical activity, consumption of fruits and vegetables and reducing caloric intake among Californians.
3. By 2010, reduce the 2001-2002 prevalence rate of obesity among California adults from 19.9 percent to 14 percent.
4. Reduce the 2001-2002 prevalence rate of overweight among California adults from 54.4 percent to 40 percent.
5. By 2010, reduce the prevalence rate of overweight and obese children from 34 percent in 1999 to 14 percent.
6. By 2010, reduce the prevalence rate of at-risk and overweight teens from 25 percent in 2000 to 17 percent.

### OBJECTIVES

1. By 2010, increase the proportion of adults who consume at least 5 servings per day of fruits and vegetables from 32 percent in 2001 to 45 percent.
2. By 2010, increase the proportion of all teens, ages 12 to 17 years, who consume at least 5 servings of fruits and vegetables from 44 percent in 2000 to 58 percent.
3. By 2010, increase the proportion of children, ages 9 to 11 years, who consume at least 5 servings of fruits and vegetables from 20 percent in 1999 to 30 percent.
4. By 2010, decrease the consumption among children, teens, and adults of high calorie, low nutrient foods (soft drinks, fried snacks, and sweet desserts) by 30 percent, 15 percent, and 30 percent respectively.

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## OBJECTIVES

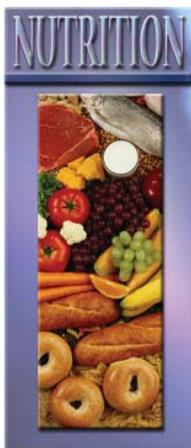
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5. By 2010, increase the prevalence rate of adults who do physical activity for 30 minutes at least five days a week from 22 percent in 2001 to 35 percent.
6. By 2010, increase the prevalence rate of children and youth who do physical activity for 60 minutes daily from 61 percent in 1999 to 80 percent in children ages 9 to 11 years, and 40 percent in 2000 to 55 percent in teens ages 12 to 17 years.
7. By 2010, increase the proportion of students, grades 5, 7, and 9, meeting the healthy zone requirement (six areas of fitness gram test) from 24 percent to 35 percent.

## Background and Barriers to Achieving Goals and Objectives

### Nutrition in California

Poor nutrition, physical inactivity, and obesity together are estimated to account for approximately one-third of all cancer cases, equivalent to tobacco use. Like the risk of tobacco use, people can control these risk factors. The potential exposure to risk is enormous. Since everyone eats and moves, the entire California population may be exposed to dietary and physical inactivity contributors to cancer.



- › Colon, rectum: 66 percent to 75 percent
- › Breast: 33 percent to 50 percent
- › Stomach: 66 percent to 75 percent
- › Prostate, endometrium, cervix, bladder, thyroid: 10 percent to 20 percent

Considering their potential impact on cancer prevention, nutrition and physical activity promotion programs are not adequately funded in California. What is needed is steady, long-term funding for broad population-based policy, environmental, and educational

Studies from around the world indicate that healthier eating can reduce the risk of cancer over one's lifetime (35). The American Institute for Cancer Research (AICR) has reported a global projection of cancers that can be prevented by good diet, physical activity, and obesity prevention.

After controlling for non-dietary cancer risk factors such as smoking, AICR estimates that a healthy diet and physical activity may prevent obesity and reduce the risk of developing certain types of cancers (12), by as much as:

interventions that can make it easier for people to eat healthily, exercise, and to reduce their risk of multiple chronic diseases, including heart disease and cancer (34).

In 1988, California launched the groundbreaking 5 a Day for Better Health! campaign that is now nationwide, a public-private partnership supported by the NCI, the U.S. Department of Agriculture (USDA), ACS, and the produce industry as notable leaders (47). These authorities recommend that individuals eat at least 5 to 9 servings of fruits and vegetables every day.

Simple enough, but the California Dietary Practices Survey that studied trends in healthy eating among California adults from 1989-2001 found that only one in three adults ate 5 or more daily servings of fruits and vegetables. One out of three ate two or fewer servings - a frequency that essentially doubles their risk of developing some of the common cancers listed above compared to eating at least 5 servings (3). Further, there is new evidence that nationwide consumption of fruits and vegetables is declining.

The proportion of adults eating 5 a Day rose when state nutrition campaigns were conducted but declined when they ended. The percentages of individuals eating 5 a Day are worse among males (30 percent), African Americans (22 percent), young adults (27 percent), people with less formal education (24 percent), and among those living in low income households less than \$15,000 (24 percent).

## Obesity

California, like the United States and the world, is in the midst of an obesity epidemic that has been characterized as the most serious uncontrolled public health problem facing us today. Obesity has been identified as a major risk factor for a host of other chronic diseases including cancers, such as cancer of the prostate, breast, colon, esophagus, ovary, liver, and pancreas (53).

A recent study on obesity published in the New England Journal of Medicine suggests that death rates from all cancers are significantly higher for obese men and women compared to men and women of normal weight. (NEJM, April 2003) The study also suggests current patterns of overweight and obesity in the United States could account for 14 and 20 percent of all deaths from cancer in men and women, respectively.

Obesity and physical inactivity were estimated to account for nearly \$29.6 billion of California's health care costs and related lost productivity in 2000, which includes about seven percent of health care in the general population, and at least 10 percent of the Medicaid (Medi-Cal in California) budget (15). If California's diet-attributable health care costs for cancer were extrapolated from the USDA figure of \$4.3 billion (U.S.), the costs would be approximately \$516 million based on California's proportion (12 percent) of the U.S. population.

In 2001, 57 percent of adults in California were identified as overweight or obese compared to 38 percent in 1984 (15). The trend is similar nationwide and cuts across all ages, racial, and ethnic groups, and genders. (See Appendix C: Definitions of Obesity and Overweight.)

## Physical Activity

Regular physical activity is crucial in maintaining healthy weight and body composition.

Unfortunately, Californians, like many in the rest of the nation, are not achieving the recommended level of regular physical activity. Statewide surveillance data demonstrate that since 1996, only one out of five California adults engages in moderate-intensity physical activity for 30 minutes or more at least 5 days of the week.

This means that over two-thirds of Californians are not participating in sufficient physical activity to reap significant benefits.

Recent research suggests a strong link between physical activity and cancer risk. Regular physical activity at a level that meets the Surgeon General's recommendations is associated with a 40 to 50 percent decreased



risk for colon cancer, and 33 percent of colon cancer cases are attributed to physical inactivity (15).

There is a clear inverse dose-response relationship between physical activity level and colon cancer risk: the more physical activity, the lower the risk. Several studies also indicate that regular physical activity can reduce breast cancer risk by up to 30 percent (15). In addition, physical activity is an essential component of cancer treatment and rehabilitation, with positive impact upon functional ability, fatigue, body weight, mood, side effect severity, and quality of life (63).

## Nutrition, Children, and Cancer Prevention

Lifelong eating behaviors develop early in childhood. Over 25 percent of California teens aged 12 to 17 are at-risk or already overweight. Rates are especially high among Latino and African American teens and older teen boys (16).

The California Children's Healthy Eating and Exercise Practices Survey (CalCHEEPS) conducted in 1999 among 9-to 11-year-olds yielded additional disturbing data. One-third of the children were found to be overweight or at-risk of overweight, and African American, Latino, and Asian/Pacific Islander or other children of color were more likely than non-Hispanic white children to meet this criterion. Overweight children ate fewer servings of fruits and vegetables, drank more soda, and ate more high-fat snacks and fast food (17).

ACS and other public health officials have viewed with extreme alarm the low fruit and vegetable consumption reported in this study. While this trend continues, schools are succumbing to the sales pitches of the fast food, snack, and soft drink industries to place these

products in schools, sometimes in return for hefty monetary contributions from industry. This represents an unfortunate disregard of California's children, their health, and their future cancer risks for short-term monetary gain.

Adult behaviors and knowledge about healthy nutrition and physical activity practices lay the foundation for children in the home. Therefore, helping adults to improve the nutrition and physical activity practices of the next generation is important. This foundation also establishes the nutrition and physical activity behaviors that reduce site-specific cancers in adults.

## NUTRITION, OBESITY, PHYSICAL ACTIVITY, AND CANCER - STRATEGIES AND TACTICS

### Top Strategies to Achieve Goals and Objectives:

Based on the model provided by the successful tobacco prevention campaign in California, identify current funding streams and mobilize new resources to at least a comparable level of California's Tobacco Control Program. Create a similar statewide infrastructure to change state norms regarding healthy dietary and physical activity behaviors as follows:

1. Develop a statewide infrastructure that provides leadership, management, planning, information and intervention dissemination, resource development training, and coordination.
2. Institute environmental and policy change.
3. Implement mass communication strategies.

## Additional Strategy:

- ▶ Increase research and surveillance to monitor and evaluate healthy behaviors, interventions, and new programs.

## Tactics for Implementing the Top Strategies:

### Strategy 1 \_\_\_\_\_ Develop leadership, planning, management, and coordination.

- ▶ By January 2006, create statewide leadership through the development of a state-level education and research oversight committee to (1) develop and monitor a statewide plan, (2) coordinate and plan the development of a comprehensive nutrition and physical activity control program, (3) conduct state wide research and evaluation, and (4) secure and diversify funding sources for public agencies and CBO's.
- ▶ Create and manage a nutrition and physical activity regional infrastructure of constituencies, locally funded programs, networks, and advocacy groups.
- ▶ By January 2006, develop and maintain an action-oriented Intervention Clearing house that encourages collaboration for partners, provides resources to program planners and resources to the public regarding nutrition and physical activity and cancer risk reduction, and provides sample ordinances, organizational initiatives, and strategies.
- ▶ Annually conduct at least one statewide conference, local summits and trainings for the purpose of gathering agencies together to prioritize the issues of obesity, poor nutritional habits, and physical inactivity. Partners would include business, industries, and other new partners. Topics may include awareness of health impacts, costs of inaction, access for change, and

education of health care providers, the public, and policy makers. Outcomes would include increased funds for programs from agencies, foundations, and health care providers.

- ▶ Increase and monitor collaborative projects among leadership agencies such as the American Heart Association, the ACS, and the American Diabetes Association.
- ▶ Fund and implement national and evidence-base state programs throughout California, particularly in schools, e.g., Healthier U.S., Garden in Every School, International Walk to School Day, School Health Index, 5 a Day—Power Play! Toolbox, and Shape Up America.
- ▶ Increase and monitor collaborative projects among agricultural organizations, the food/retail industry and fitness industry.
- ▶ Document the state's physical activity campaign intervention efforts and population, environmental and policy changes. Validate that large-scale population change and smaller-scale behavior and policy changes are associated with subsequent health outcomes.

### Strategy 2 \_\_\_\_\_ Institute environmental and policy change

- ▶ By January 2006, secure funding to implement environmental and policy interventions to reduce barriers and increase access to affordable low-cost fruits and vegetables in communities, retail and foodservice establishments, schools and work places.
- ▶ By January 2006, secure funding to implement environmental and policy interventions to reduce barriers and provide safe, affordable and accessible opportunities for physical activity for adults and children in communities, schools, and work places.

- › By January 2006, develop a systematic framework for (1) assessing community needs and assets, (2) determining environmental and community-level measures, and (3) implementing and evaluating appropriate policy and environmental interventions.
- › By January 2006, make the issues of obesity, nutrition, and physical activity an organizational priority by providing incentives for local organizations to adopt healthy lifestyle policies.
- › Develop parallel mission and vision statements among major voluntary organizations.

## Strategy 3 --- Implement mass communication strategies

Conduct a large multi-level, multi-component mass communication campaign to frame issues appropriately and move communities, policy makers and individuals toward healthy behavior norms.

By January 2006, key activities will include:

- › State-level and regional media campaigns to increase awareness and likelihood of improving health behaviors.
- › Media advocacy trainings for locally funded agencies and community-based organizations to use media effectively to advocate for environmental and policy change.
- › Marketing kits and web-based resources to train and empower community-based agencies to conduct local media activities and coordinate health messages.
- › Public relations to increase partner activities and increase media coverage.



# COMPREHENSIVE CANCER CONTROL IN CALIFORNIA, 2004

## CHAPTER X

# OTHER CANCERS: MELANOMA AND NON-MELANOMA SKIN, LIVER, CERVICAL, CHILDHOOD-ADOLESCENT, OVARIAN, AND PANCREATIC CANCERS

## OTHER CANCERS: MELANOMA AND NON-MELANOMA SKIN, LIVER, CERVICAL, CHILDHOOD-ADOLESCENT, OVARIAN, AND PANCREATIC CANCERS

### GOALS

1. By 2010, decrease the mortality rate of melanoma cancer by 20 percent, from a baseline of 2.8 deaths per 100,000 persons.
2. By 2010, reduce hepatitis B infection by 99 percent and increase the survival rate of primary liver cancer by 20 percent. By 2010, all Asian/Pacific Islanders should be screened for hepatitis B to decrease the liver cancer mortality rate among Asian/Pacific Islanders.
3. By 2010, reduce the mortality rate from cancer of the cervix by 40 percent among all women in California, from a baseline of 2.8 deaths per 100,000 women.
4. By 2010, increase the survival rate of cancers of childhood and adolescence by 10 percent.
5. By 2010, increase the survival rate of ovarian and pancreatic cancers by at least 10 percent through referral of patients to cancer centers for aggressive treatment and clinical trials.

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Cancers of the lung, breast, prostate, and colon-rectum account for the majority of cancer cases and deaths, but other cancers, particularly those that are readily preventable must be addressed to continue or accelerate California's overall progress against this disease.

Cancers addressed in this chapter include melanoma and non-melanoma skin cancers, liver, ovarian, pancreatic, and childhood and adolescent cancers, as well as cervical cancer because it is largely preventable through screening and early detection.

## Melanoma and Non-Melanoma Skin Cancers

### Burden

Non-melanoma skin cancer includes basal cell carcinoma (BCC) and squamous cell carcinoma (SCC), usually involving the upper layers of skin, and for the most part are easily treated if detected early. Malignant melanoma, on the other hand, involves pigment cells of the skin and requires more aggressive treatment.

Excessive sunlight exposure is associated with the majority of skin cancer. As little as one sunburn may significantly increase an individual's risk of developing skin cancer. Skin cancer can appear anywhere on the body, but is usually found on areas that receive the greatest exposure to the sun. Non-Hispanic whites are at the highest risk for all skin cancers. Treatment of skin cancer consists of surgery, cryosurgery, laser surgery, and other methods. Prevention, however, is key to avoiding these cancers (24).

In 2004, over 5,700 Californians are expected to be diagnosed with malignant melanoma and approximately 775 people are expected to die from it (1). In younger people less than 45 years of age, more women than men are expected to be diagnosed with invasive malignant melanoma, but over age 65 twice as many men will be diagnosed. In California, melanoma, both in-situ and invasive, has increased three to four percent each year over the past ten years, and data from the San Francisco Bay Area Cancer Registry show that cases of melanoma doubled from 1973 to 1992 (48). These cancers have risen dramatically due to a culture of "tan is beautiful," depletion of stratospheric ozone, an aging population, migration to sunnier regions, more outdoor leisure time, and less clothing coverage (24).

The incidence rate for invasive melanoma continues to rise significantly. Mortality, however, decreased significantly from 1988 to 2000 for women, but less so for men.

### People at Risk

Californians at higher risk for skin cancer tend to have one or more of these characteristics:

- › Fair skin
- › Blue, green, or hazel eyes
- › Light colored hair
- › Freckles
- › Tendency to burn rather than tan
- › History of severe sunburn
- › Have many moles which can also be precancers or markers
- › Personal or family history of skin cancer
- › Outdoor occupation

### Identifying Skin Cancer

Melanoma is often distinguished by a mole or nearby lesion that is asymmetrical, has an irregular border, uneven color, and the diameter is larger than an ordinary pencil eraser (56). BCC and SCC are primarily identified by a pale, wax-like, pearly bump or a red, scaly sharply outlined patch that may crust, discharge, or bleed. A person's skin that is routinely exposed to the sun should be examined for any of these changes during an annual physical examination in order to detect skin cancer at its earliest stage.

### Prevention and Treatment

It is vital that healthcare providers educate the public, especially parents, of sun safety prevention measures. Adults and children should reduce or avoid excessive sun exposure from 10 a.m. to 4 p.m. When outdoors during daylight hours, individuals should wear protective clothing, hats with wide brims

and/or side and neck flaps, and Ultraviolet (UV) protective sunglasses. Sunscreen with an Sun Protection Factor (SPF) minimum of 15 should be applied to the skin that remains exposed.

Child care centers, schools, outdoor recreation sites and camps, outdoor occupation venues, and all other entities that provide outdoor activities for children, youth, and adults should incorporate sun-safety measures including policies to reduce risk for skin cancer.

## Objective

Increase the proportion of adults age 18 years and older to 60 percent who use at least one protective measure when outdoors.

## Skin Cancer - Strategies and Tactics to Achieve Goals and Objectives

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### Strategy 1

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Promote and disseminate existing skin cancer prevention education and policy resources to child care centers, schools (K-12), parks and recreation departments, sports venues, outdoor-based businesses, camps, planning commissions for construction requirements, and developers to support integration of sun protection strategies into their activities, policies, and structures.

#### Tactics:

- › Obtain funding from the Centers for Disease Control and Prevention, private foundations, sun product manufacturers and retailers, and through legislation to increase the California Department of Health Services' Skin Cancer Prevention Program budget.

- › Collaborate with national, state, and local professional organizations and other cancer prevention entities to implement this strategy.
- › Promote distribution and use of existing sun-safety materials through promotional pieces placed in journals, newsletters, web sites, and other media that target populations at high-risk for skin cancer.

### Strategy 2

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Increase awareness among the general public regarding the dangers of unprotected exposure to UV rays and the corresponding recommended practices for decreasing skin cancer risk.

#### Tactics:

- › Produce and disseminate culturally and linguistically appropriate, user-friendly sun-protection educational and policy resources.
- › Produce and distribute media pieces designed for use in or at the classroom, beach, and sports venues.
- › Conduct forums at state and national meetings occurring in California where public policy is crafted, e.g., Conference of State Legislatures, Society of Optical Engineers, and others.
- › Identify celebrity spokespersons who will use their influence to encourage individuals and organizations to adopt pro sun-safety practices.

## Liver Cancer

### Burden

Primary liver cancer, a very deadly form of cancer, is on the rise in California. Since 1988, liver cancer incidence rates have increased by more than 45 percent. In 2004, approximately

1,770 new cases of liver cancer are expected and 1,420 deaths (48). Of these cases, 1,200 will be among men and 570 will be among women (1). Although liver cancer comprises about one percent of new cancer cases and two percent of cancer related deaths in the overall California population, a high proportion of cases occur in California's Asian/Pacific Islander populations, particularly those who have immigrated to the state from Asia, where liver cancer is common.

The San Francisco Bay Area has 33 percent of the state's Asian/Pacific Islander population and has the highest incidence of liver cancer in California and in the country. The average age at diagnosis is 65 years for men in California, and 69 years for women, with an earlier age at diagnosis for Asian/Pacific Islanders (28).

## People at Risk

Men are three-four times more likely to develop liver cancer than women. Asian/Pacific Islanders have the highest incidence of liver cancer followed by Hispanics/Latinos and African Americans. The burden of liver cancer, however, is carried chiefly by California's Asian/Pacific Islanders where it ranks among the top five causes of death. Liver cancer ranks first in cancer prevalence and incidence among Laotians', and as a cause of death it is second for Vietnamese, fourth for Koreans and Chinese, and fifth for Filipinos. For Cambodian, Hmong, Laotian, and Vietnamese males, liver cancer mortality is second only to lung cancer (28).

The major risk factor for liver cancer is infection with the hepatitis virus B or C. In China, over 90 percent of liver cancer patients have detectable hepatitis B infection and antibodies, compared to 10-26 percent in the U.S. Asian/Pacific Islander immigrants arriving in California may bring this infection with them, only to have the

infection predispose them to liver cancer over time (28).

Hepatitis B spreads mostly in Asian/Pacific Islanders via mothers who pass the virus on to their newborns. Hepatitis B and C are also spread through blood transfusions, contaminated needles, sharing personal items with infected blood on them (e.g., toothbrushes, razors), and by unprotected sexual intercourse (8).

## Prevention and Treatment

Hepatitis B infection can be prevented by immunization. However, there is no vaccine for hepatitis C (8). Although the hepatitis B vaccine is free for school children under 18 years of age, an immunization gap exists for high school students. The same gap exists for people of childbearing age. In addition, health insurance frequently does not cover hepatitis B vaccination in adults. This vaccine should be widely accessible at no or low cost for high-risk populations who, in turn, need to be screened and treated for hepatitis B or C infection as early in life as possible. In addition, immigrant populations and health care providers should be provided with culturally appropriate knowledge of risk factors for liver cancer.

There is no effective systemic chemotherapy to treat primary liver cancer. Treatment for liver cancer is surgical resection, but that is possible only if the cancer is detected early. Currently only about 20 percent of liver cancer is resectable by the time the diagnosis is made. Early diagnosis of small tumors is the only effective way of improving the outcome of liver cancer treatment, and that is only possible through the screening of high-risk populations. If symptoms are already present, the patient's balance of life is short (32).

## Objectives:

1. Assure hepatitis B immunization of all children, teenagers, and adults, especially those of childbearing age or who remain sexually active.
2. Screen all Asian/Pacific Islanders for hepatitis B infection, especially those who are foreign born, 18 years of age and under with hepatitis B vaccine and persons who are not already immune.

## Liver Cancer - Strategies and Tactics to Achieve Goals and Objectives

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### Strategy 1

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Implement a culturally appropriate campaign aimed at Asian/Pacific Islander communities and health care providers (physicians and others) to increase their awareness about hepatitis B, liver cancer, and preventive measures.

### Tactics:

- › Conduct a media campaign such as San Francisco's "Jade Ribbon" campaign that includes culturally and linguistically appropriate materials about what every Asian/Pacific Islander should know regarding liver cancer and hepatitis B, a web site in Asian languages, and a personally staffed toll-free number.
- › Expand collaboration to all Asian/Pacific Islander groups, health insurers, the DHS, and policy-makers for funding, monitoring, and successful hepatitis B and liver cancer preventive outcomes.

### Strategy 2

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Screen all Asian/Pacific Islanders for hepatitis B and immunize those who are not protected.

### Tactics:

- › Work with insurance companies and state and federal legislators for hepatitis B immunization coverage for adults.
- › Reach Asian/Pacific Islander populations for education, screening, and immunization at points of entry into the country, points of service, areas of worship, cultural organizations, and any other locations determined through collaboration with Asian/Pacific Islander communities and their leaders.
- › Extend hepatitis B immunization requirement to junior and senior high schools and colleges.
- › Provide early treatment of hepatitis B and C infections and screen those with chronic hepatitis for liver cancer.
- › Make hepatitis B immunization a Health Plan Employer Data and Information Set (HEIDIS) indicator.
- › Educate health care providers about the need for hepatitis B screening in all Asian/Pacific Islanders, and educate them about liver cancer, its risk factors, persons at-risk, and culturally appropriate ways to reach and communicate with their Asian/Pacific Islander patient populations.

## Cervical Cancer

### Burden

Cervical cancer used to be one of America's most common cancers, but since 1955, the number of cervical cancer deaths has decreased 74 percent in the U.S. It is now the ninth most common cancer in the U.S. and accounts for 1.7 percent of

deaths among females. The CCR estimates that in 2004 about 1,690 California women will be diagnosed with invasive cervical cancer and 470 will die from it (1). When cervical cancer is diagnosed and treated in its earliest, non-invasive stage, the five-year survival rate approaches 100 percent (25).

Cervical cancer is becoming less of a priority for the mainstream population, however, it is equally important to stress that many women still do not receive adequate screening.

In California, Latinas have the highest incidence of cervical cancer - more than twice that of non-Hispanic white women, while African-American women have the highest mortality rate. Latinas may forgo Pap tests even by a physician for various reasons including cultural values of modesty. Asian/Pacific Islander and African-American women have the second highest incidence of this cancer, and cervical cancer is the most common cancer among California's Laotian women (1). In fact, recent Asian/Pacific Islander immigrants still experience cervical cancer incidence equivalent to the rates found in their countries of origin.

## Risk Factors

Exposure to certain subtypes of human papillomavirus (HPV) is heavily implicated in cervical cancer - an infection that is passed from one person to another through sexual intercourse. Having unprotected sex makes HPV infection more likely, especially among young, sexually active women. Women who have many sexual partners greatly increase their risk for HPV. This is also true if a woman has sex with a male who has had many partners (9).

Other factors that increase the risk of cervical cancer include a history of abnormal Pap tests, history of cervical cancer, treatment for cancer or precancerous lesions, immune compromised

state, smoking, and early age of intercourse. Additional risk factors associated with cervical cancer include chlamydia infection, family history of cervical cancer, poor diets low in fruits and vegetables, and exposure to diethylstilbestrol (DES). Additional barriers to preventing cervical cancer include, lack of access to the Pap test, lack of or no insurance coverage, and cultural values or ethnic practices.

## Early Detection and Prevention

Avoiding risk factors, particularly HPV infection, is the best way to prevent cervical cancer, as well as having routine Pap tests that can detect HPV and precancerous cervical lesions that are treatable before cancer develops. Most invasive cervical cancers are found in women who have not had regular Pap tests. Low-income women and women over 65 years of age are less likely than other groups to have had a Pap test within the past two years. (See Appendix E: American Cancer Society Guidelines for Early Detection of Cervical Cancer.)

In 2000, the percent of women age 18 and older who reported having a Pap test in the previous three years was 90 percent among African-Americans, 87 percent among non-Hispanic whites, 83 percent of Latinas, and 78 percent among Asian/Pacific Islanders. According to the 1997 California Women's Health Survey, 12 percent of low-income women in California have never had a Pap test, and this is fifty years after its introduction (25).

## Diagnosis and Treatment

Treatment for cervical cancer depends on factors such as stage of the disease, patient's age, and overall health of the woman. Pre-invasive lesions detected by a Pap test and followed up by colposcopic-directed biopsies may be treated by Loop Electrosurgical Excision Procedure (LEEP) or conization. Invasive cervical cancer is

generally treated by surgery with radiation and with or without chemotherapy (18).

## California's Programs

For several decades, organizations such as the ACS led the way in partnership with local health departments and other federally funded programs in promoting community Pap test clinics throughout California. Pap tests were subsequently integrated into routine primary care for women in health care institutions, and insurance coverage followed. During 2000-01, over 20,000 women received cervical cancer screening through the DHS programs, but this only represents about 1 percent of the population eligible for this program (See Appendix D: California's Breast and Cervical Cancer Programs.)

## Objectives:

1. Increase the proportion of women 18 years of age and older who have had a Pap test within the past three years.
2. When available, promote the vaccine for HPV among high-risk women. Although this vaccine is still under development, studies suggest this vaccine will have substantial efficacy and public health benefit.

## Cervical Cancer - Strategies and Tactics to Achieve Goals and Objectives

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### Strategy 1

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Promote access to free or affordable and appropriate screening and treatment services.

### Tactics:

- › Expand the California Department of Health Services' Cancer Detection Programs: Every Woman Counts to all communities in California; obtain additional funding to support the program through legislation.
- › Provide patient transportation where needed to screening and treatment locations.
- › Involve leaders in the community to advocate for cervical cancer control programs.
- › Involve state legislators to lobby Congress to fund California's Cancer Detection Programs: Every Woman Counts.
- › Obtain legislation to expand the California Department of Health Services Cancer Detection Programs: Every Woman Counts funding to include cervical cancer screening.

## Strategy 2

Provide culturally appropriate comprehensive cervical cancer education reaching all women including Latinas, Asian/Pacific Islanders, African Americans, older women, the uninsured, low-income, underserved, as well as tribal leaders, community leaders, and health care providers.

### Tactics:

- › Develop an awareness campaign among these groups.
- › Build collaboration with groups that include representation from ethnic communities, health care, geographical areas, women's organizations, senior citizens organizations, faith-based communities, and other community agencies.
- › Include information about cervical cancer and its prevention in all women's health informational packets.

## Childhood and Adolescent Cancers

### Burden

Cancer is the second leading cause of death of children age 1 to 14 years in California (29). Each year approximately 7,500 children under the age of 15 years are diagnosed with cancer in the U.S., and a total of 10,000 children and adolescents under the age of 21 years are diagnosed. This age group accounts for about one percent of all invasive primary cancers diagnosed annually, compared to 70 percent of cases which are diagnosed in adults over age 60. The incidence rate of childhood and adolescent cancer in California has remained fairly consistent since 1988, but varies by age, sex, race, and ethnicity. Sadly, the death of a single child from cancer may result in over 60 years of life lost compared to an average of 15 years lost by an adult dying from cancer.

### Risk Factors

In contrast to adult cancers, few risk factors have been identified for childhood malignancies. The few that have been suggested include radiation, chemotherapeutic agents, and other medications. Inherited genetic disorders and prenatal exposures may increase the risk for certain tumors but these are relatively rare in the overall picture. Carcinogenic risk factors debated at this time include electromagnetic fields, pesticides, and some parental occupational exposures (29).

### Treatment and Quality of Life

The ten leading causes of cancer mortality in California children and adolescents, ages 0 to 19 years, all races combined for the period 1988-1994, by site were: leukemia, brain and nervous system, lymphoma, endocrine, bone, soft tissue, ill-defined cause, kidney, liver, and genital system. In California, over one-half of these cancer deaths are due to leukemia or tumors of the brain or nervous system (26, 29).

The increase in childhood and adolescent cancer survival has been dramatic over the past thirty years due to advances in treatment. A majority of young cancer patients now attain five-year survival. However, children treated at approved pediatric cancer centers have greater survival rates than those treated at other treatment centers.

Diagnosis of cancer in children and adolescents is frequently difficult because early symptoms are relatively non-specific (29). Treatment now commonly involves coordinated aggressive, multi-modalities relying on combinations of surgery, chemotherapy, radiation, and supportive treatments. Recruitment of children with cancer into clinical trials would help advance the search for effective treatment modalities even further.

Treatment of children's cancers, even with a resultant cure, is extremely traumatic both for the children and their families, thus childhood cancer should really be treated as a family disease. Quality of life concerns that must be dealt with by health care providers and the families are paramount and include the significant emotional, physical, and financial costs that are related to the treatment process. Every effort needs to be made to bring support systems not only into the treatment regimen, but also into the child's recovery. For the cured patient, quality of life and long term supportive or palliative care are still needed. Long-term survivors of childhood malignancies are also at high risk for second malignancies (29, 38).

## Objectives:

1. Increase the number of health care providers and healthcare organizations that provide quality of life support and palliative care to children with cancer and their families.
2. Promote the latest advances in treating childhood cancers through provider education.
3. Increase referral of childhood cancer patients to pediatric cancer centers and clinical trials.

## Childhood and Adolescent Cancers - Strategies and Tactics to Achieve Goals and Objectives

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### Strategy 1

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Emphasize the need for comprehensive care for children and adolescents with cancer and their families to maximize quality of life outcomes.

#### Tactics:

- ▶ Promote professional education (physicians, nurses, social workers, psychologists, and others), professional societies, insurance carriers, philanthropic groups, advocacy groups, and other professional associations to advance quality of life outcomes for children and adolescents with cancer.
- ▶ Establish a statewide information or educational system on how to create culturally sensitive programs for children and adolescents with cancer.

### Strategy 2

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Promote medical, psychosocial, and educational follow-up care for childhood cancer survivors.

#### Tactics:

- ▶ Tactics are the same as those for Strategy 1.

## Ovarian Cancer

### Burden

Ovarian cancer is a particularly virulent form of gynecologic cancer occurring in one or both of a woman's ovaries. It is the fifth most common cancer among California women and causes more death than any other gynecologic cancer (50).

In California, about 2,655 new cases of ovarian cancer are expected to be diagnosed in 2004 and 1,515 women are expected to die from it (1). Over the past decade, the incidence rate for ovarian cancer has declined by 16 percent and the mortality rate has fallen as well. In the U.S. overall, women diagnosed with ovarian cancer have a survival rate of only 50 percent no matter what the cancer stage at diagnosis.

Non-Hispanic white women are at the greatest risk for this cancer and Asian/Pacific Islander women have the lowest risk. Fifty percent of ovarian cancer occurs in women 60 years of age and older with a median age of diagnosis of 62 years. The incidence peaks at age 75 years (51).

### Risk Factors

There is no screening test for ovarian cancer. Understanding the risk factors and methods by which to reduce risk is critical.

The following factors may increase the risk (51):

- › Family history of ovarian, breast or colon cancer,
- › Increasing age,
- › Fertility drug use, and
- › Not bearing children.

### Early Detection

A chance for early detection may improve with an annual vaginal/rectal pelvic examination, trans-vaginal ultrasound, and a blood test measuring CA 125 antigen as a tumor marker. Warning signs for ovarian cancer are very subtle, but may include swelling of the stomach, gas, bloating, indigestion or long-term stomach pain, unusual vaginal bleeding, a sense of pressure in the pelvic area, pain during intercourse, unusual tiredness, shortness of breath, and unexpected weight gain or loss. Women should be educated to see a health care professional if any of these symptoms are present and persistent (51).

### Treatment

Treatment for ovarian cancer depends on the disease stage, type of disease, and the patient's age and overall health. Treatment usually involves a combination of surgery and chemotherapy. In some cases radiation therapy may also be used to kill cells and shrink tumors (51).

Support of the patient, including the spouse, partner or family during treatment and recovery are essential to the patient's quality of life and the difficulties she faces. Community cancer support groups and cancer survivor volunteers can also help the woman during this difficult time, and if needed, pain management and other palliative care measures should be a highly prioritized part of her care (4).

### Objective:

Increase the survival rate of ovarian cancer by promoting aggressive treatment modalities and alerting women to the risks, symptoms, and detection measures.

## Ovarian Cancer - Strategies to Achieve Goals and Objectives

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### Strategy 1

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Promote the referral of ovarian cancer patients to clinical trials.

### Strategy 2

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Promote the education of women about detection and treatment of ovarian cancer, especially those at higher-risk, in California communities, organizations, and venues where older women are likely to be reached.

### Strategy 3

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Provide state funding for ovarian cancer research focusing on prevention and early detection.

## Pancreatic Cancer

### Burden

Pancreatic cancer is one of the deadliest of all cancers. It is the fourth leading cause of cancer mortality in men and women. In 2004, 2,965 new cases of pancreatic cancer are expected among Californians - the number is almost equally divided between men and women. Approximately 3,075 Californians are expected to die of this disease in 2004 (1). About two out of 10 patients will live for at least one year after diagnosis, but very few will survive for five years (10).

### Risk Factors

Although scientists at this time do not know exactly what causes pancreatic cancer, several risk factors are associated with the disease. Like

many risk factors, people can control some, and others, e.g., age, sex, and race, they cannot (10).

The major risk factors are:

- › Age: Most pancreatic cancers are found in people over 60 years of age.
- › Sex: Men have pancreatic cancer somewhat more often than women.
- › Race: African Americans are at higher risk than other populations.
- › Smoking: About three out of 10 pancreatic cancer cases are linked to smoking.
- › Diet: A diet high in meats and fat increases the risk whereas eating fruits and vegetables seems to offer some protection.
- › Diabetes: Pancreatic cancer is more common in people with this disease.

### Detection

The pancreas is located behind the stomach, and is responsible for breaking down fats and protein for the body to use and to help control the amount of sugar in the blood. Cancer is more commonly found in the portion of the pancreas that breaks down fats and proteins. Because the pancreas is found so deep in the body, early stage tumors are seldom found. They cannot usually be seen or felt by health care providers during routine examinations, and there are no blood tests or screening tests that can accurately detect early cancers (10).

Cancers are more often found when the tumors have become large enough to have spread and exhibit symptoms. Symptoms of pancreatic cancer can include: jaundice, abdominal pain, weight loss, digestive problems, gallbladder enlargement, blood clots in veins or fatty tissue abnormalities, and problems with sugar metabolism (10).

## Treatment and Quality of Life

Pancreatic cancer is very difficult to cure once it is diagnosed. In 2001, the European Study Group for Pancreatic Cancer reported on its investigation of treatment of patients by comparing surgery plus chemotherapy to surgery plus chemoradiotherapy. The study found that chemoradiotherapy had little effect on survival but that chemotherapy alone following surgery did provide some benefit.

### Objective:

Increase research to find effective diagnostic tests and treatment(s) for pancreatic cancer in order to improve five-year survival rates to at least 15 percent over the current rate of near zero. Obtain state funds for research on prevention of pancreatic cancer.

## Pancreatic Cancer - Strategies to Achieve Goals and Objectives

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### Strategy 1

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Promote the referral of pancreatic cancer patients to clinical trials.

### Strategy 2

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Promote the education of the public regarding pancreatic cancer. This is particularly important considering the large increase in diabetes cases expected as a result of the current obesity epidemic.

### Strategy 3

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Solicit the legislature to provide state funds for pancreatic cancer research.

## Global Strategies for “Other Cancers”

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### Strategy 1

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For all cancer patients, provide access to state-of-the-art screening, early detection, prevention, immunization, and treatment, with access to a third party payment with no disparities in clinical outcomes.

### Tactics:

- ▶ Advocate for universal health insurance coverage.
- ▶ Define a minimum cancer coverage benefits package.
- ▶ Provide multi-lingual web sites with links to other web sites.
- ▶ Provide a clearinghouse of sites including culturally appropriate material and sites in other languages.
- ▶ Teach advocacy to all cancer-related constituent groups.

### Strategy 2

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Provide culturally appropriate information and education about cancer prevention in rural and metropolitan areas assuring equitable access to quality care.

### Tactics:

- ▶ Provide education on tobacco use, control, and cessation.
- ▶ Other tactics are the same as for Strategy 1.

## Strategy 3 ---

Conduct a public awareness campaign regarding the cause, impact, prevention, and treatment of indicated cancers.

### Tactics:

- › Develop and integrate cancer risk-reduction educational resources and policies into organizations that serve high-risk populations for the indicated cancers.



CHAPTER XI  
APPENDICIES

## APPENDICIES

### Appendix A: Steering Committee Members

**Dr. Ben Abate**  
*American Lung Association*

**Dr. Lourdes Baezconde-Garbanati**  
*Assistant Professor, Department of Preventive Medicine  
USC Keck School of Medicine*

**Dr. Lisa Bailey**  
*American College of Surgeons*

**Dr. Dileep G. Bal**  
*Chief, Cancer Control Branch  
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**Ms. Lori Belle-Isle, MPH**  
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*Assist. De Coordinadora de Condiciones  
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Lideres Campesinas*

**Griselda Camacho**

**Ms. Maria Casey**  
*Executive Director  
Partnership for the Public's Health*

**Moon Chen**  
*Principal Investigator  
Asian American Network for Cancer  
Awareness, Research, and Training*

**Jennie Cook**  
*Past Chair  
Intercultural Cancer Council*

**Arlyne Draper**  
*Past President  
CABCO*

**Nancy Evans**  
*Health Science Consultant  
Breast Cancer Fund*

**Ms. Patricia M. Felts**  
*Chief Executive Officer  
California Division  
American Cancer Society*

**Dr. Diane Fink**  
*Chief Cancer Control Officer  
California Division  
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**Dr. Judith C. Gasson**  
*Associate Professor  
UCLA School of Medicine*

**Willis Goldbeck**  
*Chairman of the Board  
Institute for Alternative Futures*

**Mr. Juan Gomez**  
*Child, Family & Community Services, Inc*

**Dr. Jon Greif**  
*State Chair  
American College of Surgeons*

**Dr. Larry Gruder**  
*Director  
Special Research Programs, University  
of California, Office of the President*

**Cynthia Hallett**  
*Executive Director  
Americans for Nonsmokers' Rights*

**Ms. Glenn Hildebrand**

**Dr. Gordon Hunt**  
*Chief Medical Officer  
Sutter Health*

**Kim Hunter**  
*Founder President & CEO  
La Grant Communications*

**Van Johnson**  
*CEO  
Sutter Health*

**Michael Lerner**  
*President  
Commonweal*

**Ms. Roslyn McClain**  
*California Department of Health  
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**Dr. Frank McCormick**  
*Director  
UCSF Cancer Center*

**Meryl Nissenberg**  
*California Prostate Cancer Coalition*

**Dr. Theodore O'Connell**  
*State Chair  
American College of Surgeons*

**Mrs. Vicki Rakowski**  
*V.P. Cancer Control  
American Cancer Society - Great Lakes  
Division*

**Dr. Glovioell Rowland**  
*Pasadena Church of God*

**Dr. Christy Russell**  
*American Cancer Society*

**Dr. Joseph Selby**  
*Director, Division of Research  
Kaiser Foundation*

**Ms. Susan Matsuko Shinigawa**  
*Boardmember  
Intercultural Cancer Council*

**Dr. Kurt Snipes**  
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# COMPREHENSIVE CANCER CONTROL IN CALIFORNIA, 2004

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# COMPREHENSIVE CANCER CONTROL IN CALIFORNIA, 2004

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## Appendix C: Definitions of Obesity and Overweight.

CDC defines a healthy body mass index (BMI) as between 18.5 and 24.9.  $BMI = (\text{weight in pounds} \div \text{height in inches} \div \text{height in inches}) \times 703$ . For example, a person weighing 210 pounds and 6 feet tall would have a  $BMI = 210 \text{ pounds} \div 72 \text{ inches} \div 72 \text{ inches} \times 703 = 28.5$ . Individuals with a BMI of 25 to 29.9 are considered overweight, while persons with a BMI of 30 or more are considered obese.

The National Institutes for Health Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in adults aged 18 years and older indicates those who have a BMI of 25 or more are considered at risk for premature death and disability. These risks increase as the severity of an individual's obesity increases.

## Appendix D: California's Breast Cancer Programs.

California has a remarkable history and determination to reach low-income and ethnic women with breast cancer screening, follow-up, and treatment services. Programs of ACS and the DHS, plus support for breast cancer research, legislation, and policies, have made a huge difference in accelerating California's progress against breast cancer for all women.

In 1991, DHS received \$4 million a year from the CDC for a Breast and Cervical Cancer Control Program (BCCCP). The program, which operated in several locations, provided income eligible women, age 40 and older, with free breast and cervical cancer screening tests and free mammograms for women over 50 years of age.

With help from the ACS, this program was followed in 1992 by a state income tax check-off for a breast cancer research program that amounted to \$300,000 a year. In 1993, the State Legislature passed a special tobacco tax that included a two-cent tax per pack of cigarettes to fund a DHS Breast Cancer Early Detection Program - a significant expansion to the federally funded BCCCP - and the Breast Cancer Research Program, each for \$16 million a year. The two-cent tax made it possible to give access to all women throughout the entire state through over 2,000 providers. In 2002, this program and BCCCP were unified under a common billing and data collection system with the name: "Cancer Detection Program: Every Woman Counts." These events, again with assistance from the ACS and many others, helped to put California's Breast Cancer Program on a more secure footing.

However, what the breast cancer screening program revealed was an urgent need for breast cancer treatment for low-income women. When uninsured, low-income women were diagnosed with breast cancer, they felt they had nowhere to turn and would forego potentially life-saving treatment due to financial hardship it would create.

In 1994, therefore, the program received a one-time award of \$12.4 million from private foundations to establish the California Breast Cancer Treatment Fund for a DHS Breast Cancer Diagnostic and Treatment Program that served all 58 California counties. The foundations extended the funding by \$8 million in 1998 and another \$8 million was received with tobacco tax dollars. This kept the program alive until the State Legislature allocated a one-time \$5 million in 1999 and in 2000, \$20 million annually. The Federal Breast and Cervical Cancer Treatment Act for Medicaid expansion enacted in 2000 made it possible to expand treatment for breast and cervical cancers including precancerous conditions.

Since inception, the Breast Cancer Treatment Program has served over 5,000 patients through 1000 participating providers. With new funding by the State of California in 1999-2000, patients are now eligible for treatment over an 18-month period as opposed to a 12-month period earlier. In addition, California law now requires all physicians who perform breast biopsies or treatment for breast cancer, to provide women with their options, including the risks, advantages, and disadvantages of each procedure. During 200-2001, over 167,000 women received breast cancer screening and 20,000 received cervical cancer screening. This is a magnitude of service rarely matched, particularly in a state as diverse as California.

- › Women who have had a total hysterectomy (removal of the uterus and cervix) may choose to stop screening unless the surgery was done as treatment for cervical cancer or precancer.
- › Women who have had a hysterectomy without removal of the cervix should follow the guidelines above.

## Appendix E: American Cancer Society Guidelines for Early Detection of Cervical Cancer.

For early detection of cervical cancer, the ACS recommends:

- › All women begin Pap tests about 3 years after they start having vaginal intercourse, but no later than 21 years of age.
- › Starting at age 30, women who have had 3 normal tests in a row may get screened every 2 to 3 years. Women with certain risk factors should continue annual screening, e.g. diethylstilbestrol (DES) exposure, HIV infection, a weakened immune system due to organ transplant, chemotherapy, or chronic steroid use.
- › Women 70 years of age or older who have had 3 or more normal pap tests in a row and no abnormal Pap tests in the last 10 years may choose to stop screening. And women with a history of cervical cancer, DES exposure before birth, HIV infection or weakened immune system should continue to be screened as long as they are in good health.

## CHAPTER XII

### REFERENCES

1. American Cancer Society, California Division, Public Health Institute, California Cancer Registry (2003). *Cancer Facts and Figures 2004*. Oakland, CA: American Cancer Society, California Division.
2. American Cancer Society, National Cancer Institute (2002). Annual report to the nation on the status of cancer, 1973-1999, featuring implications of age and aging on U.S. cancer burden. *CANCER*. 94 (10). Bethesda, MD: National Cancer Institute.
3. American Cancer Society (2001). *Guidelines on Nutrition and Physical Activity for Cancer*. Atlanta, GA: American Cancer Society.
4. American Cancer Society, Ends Committee on the Quality of Life (2002). *Progress Report to the National Board of Directors*. Atlanta, GA: American Cancer Society.
5. American Cancer Society (2000). *Cancer Facts and Figures 2001*. Atlanta, GA: American Cancer Society.
6. American Cancer Society. Do we know what causes oral cavity or oropharyngeal cancer? Retrieved August 15, 2002 from <http://www.cancer.org>.
7. American Cancer Society. What happens after treatment? (Lung) Retrieved October 23, 2002 from <http://www.cancer.org>.
8. American Cancer Society. Can liver cancer be prevented? Retrieved August 8, 2002 from <http://www.cancer.org>.
9. American Cancer Society. Can cervical cancer be prevented? Retrieved August 8, 2002 and January 15, 2003 from <http://www.cancer.org>.
10. American Cancer Society. What is pancreatic cancer? What causes pancreatic cancer? How many people get pancreatic cancer? Retrieved January 16, 2003 from <http://www.cancer.org/docroot/cricri>.
11. American Cancer Society. Gains made in pancreatic cancer treatment. Retrieved from <http://www.cancer.org/docroot/nws/content>.
12. American Institute for Cancer Research (1997). *Food, Nutrition, and the Prevention of Cancer: A Global Perspective*. World Cancer Research Fund, American Institute for Cancer Research.
13. The Breast Cancer Fund and Breast Cancer Action (2003). *State of the Evidence: What is the Connection between Chemicals and Breast Cancer*. (Monograph) San Francisco, CA: Breast Cancer Fund and Breast Cancer Action.
14. Brownson, R.C., Bal, D.G. (1996). The future of cancer control research and translation. *Journal of Public Health Management Practice*. 2 (2), 70-78. Aspen Publishers, Inc.
15. California Department of Health Services (2003). *The Economic Burden of Physical Inactivity and Obesity in California Adults*. Sacramento, CA: California Department of Health Services, Cancer Prevention and Nutrition Section.
16. California Department of Health Services (2000). *California Teen Eating, Exercise, and Nutrition Survey*. Sacramento, CA: California Department of Health Services, Cancer Prevention and Nutrition Section.
17. California Department of Health Services (1999). *California Children's Healthy Eating and Exercise Practices Survey*. Sacramento, CA: California Department of Health Services, Cancer Prevention and Nutrition Section.
18. California Department of Health Services (2002). Reported data by the Cancer Detection Section. Unpublished. Sacramento, CA: California Department of Health Services, Cancer Detection Section.
19. California Department of Health Services (2002-2003). Data reported by the Data Analysis and Evaluation Unit, Tobacco Control Section. Sacramento, CA: California Department of Health Services, Tobacco Control Section.
20. California Department of Health Services (2000). Cigars not a harmless fad. (Fact Sheet) Sacramento, CA: California Department of Health Services, Tobacco Control Section.
21. California Department of Health Services (2000). *California Youth Tobacco Survey*. Sacramento, CA: California Department of Health Services, Tobacco Control Section.
22. California Department of Health Services (1998). *A Model for Change: The California Experience in Tobacco Control*. Sacramento, CA: California Department of Health Services, Tobacco Control Section.
23. California Department of Health Services (2000). *California Tobacco Control Update*. Sacramento, CA: California Department of Health Services, Tobacco Control Section.

24. California Department of Health Services, Cancer Prevention and Nutrition Section. Skin cancer prevention campaign. Retrieved August 19, 2002 from <http://www.dhs.ca.gov/cpns/skin>.
25. California Department of Health Services (2000). *California Plan to Prevent and Control Breast and Cervical Cancer*. A collaborative plan developed by the Breast and Cervical Cancer Plan Task Force. Sacramento, CA: California Department of Health Services, Cancer Detection Section.
26. California Department of Health Services (1999). *Cancer in Our Children. Cancer Surveillance Spotlight*. Sacramento, CA: California Department of Health Services, Cancer Surveillance Section.
27. California Department of Health Services (2002). *California Cancer Research Program. Annual Report to the California State Legislature*. Sacramento, CA.: California Department of Health Services.
28. California Cancer Registry. *Liver Cancer: Cancer Surveillance Spotlight*. n.d.
29. Campleman, S.L., Schlag, R., Perkins, C.I., Glazer, E., Kwong, S.L., Cress, R.D., Wright, W.E. (1999). *Childhood Cancer in California 1984-1994*. Sacramento, CA.; California Department of Health Services, Cancer Surveillance Section.
30. Comprehensive Statewide Cancer Control Plan Stakeholders Meeting, Workgroup on Disparities (2003). Sacramento, CA: American Cancer Society, California Department of Health Services.
31. Comprehensive Statewide Cancer Control Plan Stakeholders Meeting, Workgroup on Lung and Oral Cancer and Tobacco Control (2003). Sacramento, CA: American Cancer Society, California Department of Health Services.
32. Comprehensive Statewide Cancer Control Plan Stakeholders Meeting, Workgroup on Other Cancers (2003). Sacramento, CA: American Cancer Society, California Department of Health Services.
33. Frazier, A., Colditz, G., Fuchs, C. (2000). Cost-effectiveness of screening for colorectal cancer in the general population. *Journal of the American Medical Association*. 284 (15), 154-1961.
34. Gregson, et al. (2001). System, environmental, and policy change: Using the social-ecological model as a framework for evaluation nutrition education and social marketing programs with low-income audiences. *Journal of Nutrition Education*, 33, Supplement 1. S004-10
35. Harvard Report on Cancer Prevention (1996). Socioeconomic Status. *Cancer Causes and Control*, 33-35.
36. Institute of Medicine (2002). *Cancer and the Environment*. Roundtable on Environmental Health Sciences, Research, and Medicine. Washington, D.C.: National Academies Press.
37. Institute of Medicine, National Research Council (2001). *Improving Palliative Care for Cancer*. Washington, D.C.: National Academies Press.
38. Institute of Medicine (2002). *When Children Die: Improving Palliative and End-of-Life Care for Children and Their Families*. Washington, D.C.: National Academies Press.
39. Institute of Medicine (2002). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, D.C.: National Academies Press.
40. International Summit on Breast Cancer and the Environment (2002). *Research Needs*. (Monograph) Chaminade, Santa Cruz, CA.
41. Love, S.M. (1995). *Dr. Susan Love's Breast Book*. Menlo Park, CA: Addison-Wesley.
42. Max, W., Rice, D.P., Zhang, X., Sung, H-U, Miller, L. (2002). *The Cost of Smoking in California 1999*. Sacramento, CA: California Department of Health Services.
43. Max, W., Rice, D.P., Sung HY., Breuer, M., Zang, X. (2002). Burden of Prostate Cancer in California. *Cancer*. 94 (11). American Cancer Society.
44. Max, W., Rice, D., Sung, H-Y., Michel, M., Breuer, W., Zhang, X. The economic burden of gynecologic cancers in California, 1998. San Francisco: University of California, San Francisco. (Unpublished to date)
45. Mills, P.K. (ed) (2000). *Prostate Cancer in California: A Special Report*. Berkeley, CA: Public Health Institute.
46. National Dialogue on Cancer (2002). *An Action Plan to Achieve the NDC State Cancer Plans Goals*. U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention, National Cancer Institute, and American Cancer Society.
47. Nestle, M. (2002). Food Politics: *How the Food Industry Influences Nutrition and Health*, 130-131. Berkeley and Los Angeles, California: University of California Press.
48. Perkins, C.I., Kwong, S.L., Morris, C.R., Cohen, R., Allen, M., Wright, W.E. (2001). *Cancer in California 2002*. Sacramento, CA: California Department of Health Services, Cancer Surveillance Section.
49. Pierce, J.P., Fiore, M.C., Novotny, T.E., Hatziandreu, E. J., Davis, R.M. (1989). Trends in cigarette smoking in the United States: Educational differences are increasing. *Journal of the American Medical Association*, January 6; 161(1): 56-60.
50. Schlag, R., Harris, D.H., Kwong, S., Wright, W.E. (2001). *Ovarian Cancer in California*. Sacramento, CA: California Department of Health Services, Cancer Surveillance Section.
51. University of Minnesota (2001). *A Defining Moment*. Minneapolis, MN: University of Minnesota, Center for Prostate Cancer.

52. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (2002). Recent trends in mortality rates for four major cancers by sex and race/ethnicity - United States, 1990-1998. *Morbidity and Mortality Weekly Report*, January 25, 2002/51 (03), 49-53. Washington, D.C.: U.S. Government Printing Office.
53. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (2003). Defining Overweight and Obesity. Retrieved January 11, 2003 from <http://www.cdc.gov/nccdphp/dnpa/obesity/defininf.htm>
54. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (2003). Body Mass Index for Adults. Retrieved from <http://www.cdc.gov/nccdphp/dnpa/bmi-adult.htm>.
55. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (2002). *At a Glance: Oral Health: Preventing cavities, Gum Disease, and Mouth and Throat Cancers 2002*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
56. U.S. Department of Health and Human Services, Centers for Disease Control and Preventing. *The ABCDs of Skin Cancer*. Retrieved August 8, 2002 from <http://www.cdc.gov/nasd> and <http://www.cdc.gov/cancer/nscpep/skin/htm>.
57. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Working together for comprehensive cancer control: An institute for state leaders. California Institute. Newport Beach, CA: Centers for Disease Control and Prevention with National Cancer Institute, American Cancer Society, College of Surgeons Commission on Cancer, Association of Chronic Disease Directors, Intercultural Cancer Council, National Dialogue on Cancer, and North American Association of Central Cancer Registries.
58. U.S. Department of Health and Human Services (2002). *Healthy People 2010*, (1)11. Washington, D.C.: U.S. Government Printing Office.
59. U.S. Department of Health and Human Services (2002). *Healthy People 2010*, (1) 44-45. Washington, D.C.: U.S. Government Printing Office.
60. U.S. Department of Health and Human Services, National Cancer Institute, California Environmental Protection Agency (1999). *Health Effects of Exposure to Environmental Tobacco Smoke: The Report of the California Environmental Protection Agency*. Smoking and Tobacco Monograph No.10. Bethesda, MD: NIH Publication No. 99-4645.
61. U.S. Department of Health and Human Services, National Cancer Institute (2001). *Risks Associated with Smoking Cigarettes with Low Machine-Measured Yields of Tar and Nicotine*. Smoking and Tobacco Control, Monograph no. 13. Bethesda, MD: U.S. Department of Health and Human Services.
62. U.S. Department of Health and Human Services (2002). *Reducing Tobacco Use: A Report of the Surgeon General*. Executive Summary. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office of Smoking and Health.
63. U.S. Department of Health and Human Services (2001). *Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.
64. U.S. Department of Health and Human Services, National Cancer Institute (2001). Annual report to the nation on the status of cancer (1973 through 1998), featuring cancers with recent increasing trends. *Journal of the National Cancer Institute*. Vol. 93, No. 11, June 6, 2001.

# GOALS AND OBJECTIVES TABLES

## COLORECTAL CANCER

### GOAL

By 2010, Reduce the Colorectal Cancer Mortality Rate in California by 40 Percent.

### OBJECTIVES

- 1) Increase screening for flexible sigmoidoscopy or colonoscopy for Californians over age 50.
- 2) Increase diagnosis of colorectal cancer at an early stage.

### STRATEGIES

### TACTICS FOR IMPLEMENTATION

1) Develop and support proactive advocacy groups.

- 1.1) Identify survivors, physicians, community leaders and interested groups motivated to build an advocacy coalition.
- 1.2) Obtain funds from foundations to support advocacy activities.
- 1.3) Create a combined patient support, legislative and educational focus.
- 1.4) Develop a State of California Colorectal Roundtable to promote on-going dialogue among experts and advocates.
- 1.5) Build relationships between local level efforts and national / international groups.
- 1.6) Partner with a health plan or disease management program dealing with colorectal cancer.

2) Develop and support evidence-based, culturally sensitive public awareness campaigns.

- 2.1) Make early diagnosis of colorectal cancer a family issue and heighten awareness through special campaigns.
- 2.2) Collaborate with diverse communities and leaders to identify messages to reach different communities and cultures.
- 2.3) Obtain funding to support outreach and awareness campaigns.
- 2.4) Create and implement a media campaign.

3) Work toward universal insurance coverage for colorectal cancer screening and treatment.

- 3.1) Obtain funding to support an Office of Colorectal Cancer at the California Department of Health Services to provide outreach, screening and treatment programs.
- 3.2) Work to pass legislation that covers screening and treatment for colorectal cancer at the state and federal level.
- 3.3) Develop advocacy groups.

## BREAST CANCER

### GOALS

- 1) By 2010, reduce the mortality rate from female breast cancer in California by 36 percent through early detection and treatment.
- 2) By 2010, advance scientific and public understanding of modifiable risk factors, how they affect the incidence of breast cancer, and how breast cancer may be prevented.
- 3) By 2010, reduce the morbidity impact of breast cancer on short and long-term quality of life.

### OBJECTIVES

- 1) **By 2010, increase the percent of women in California (age 40 and older) who have had an annual mammogram and clinical breast examination from 60 percent to 90 percent.**
- 2) **By 2010, increase the percent of breast cancers diagnosed at an early stage from 70 percent to 80 percent, including reducing disparities in stage of diagnosis for the insured and uninsured regardless of race and ethnicity.**
- 3) **By 2010 create new ways to continue the breast cancer mortality reduction beyond 2010 at the same rate of decline as outlined in Goal number 1 through research and improved detection methods.**

### STRATEGIES

### TACTICS FOR IMPLEMENTATION

1) By 2006, begin to conduct a statewide tracking of women's breast cancer health care.

- 1.1) Map the stage of breast cancer diagnoses and number of cases to identify high need areas. Map supporting resources and services related to the continuum of cancer care.
- 1.2) Develop and fund a statewide, comprehensive database with patient information and correlate this database with census information. Provide statewide and local data identifying all screening and diagnostic services. Identify geographic areas with gaps in services and resources.

2) By 2006, provide education on breast cancer risk assessment and risk reduction.

- 2.1) Promote participation of health educators and provide professional education to improve sensitivity, communication skills and cultural competency.
- 2.2) "Disseminate the course," Clinical Breast Examination: Proficiency and Risk Management to all medical schools, nurse practitioner schools, and physician assistant schools in California.
- 2.3) Educate medical professionals treating breast cancer to treat patients following evidence-based medicine and provide access to clinical trials to all patients.
- 2.4) Continue to fund the California Department of Health Services to develop statewide educational and outreach materials and disseminate this information through a variety of media.
- 2.5) Identify and/or develop age, literacy level, culturally, and linguistically appropriate breast cancer-related outreach and educational materials.

## BREAST CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>2) By 2006, provide education on breast cancer risk assessment and risk reduction.</p>	<p>2.6) Provide a directory via an 800 number and on the web with the location of all resources and services available to all women statewide and locally.</p> <p>2.7) Fund and partner with the California Cancer Registry to provide statewide and local data on stage at of diagnosis and identify areas with high incidence of late stage diagnosis.</p> <p>2.8) Develop a cancer orientation packet containing information for lawmakers, policy makers, and community providers that covers the statewide and local issues regarding breast cancer.</p> <p>2.9) Identify guidelines and quality benchmarks for early detection, diagnosis, and treatment.</p> <p>2.10) Educate providers and consumers on available clinical trials for treatment as well as risk reduction.</p> <p>2.11) Educate consumers and providers about pharmacological agents, such as tamoxifen, that have shown promise in reducing breast cancer risk.</p> <p>2.12) Provide health professionals and consumers with information regarding the location and availability of centers that can provide an enhanced complexity of care for cancer treatment.</p>
<p>3) By 2006, develop a coordinated system and resources to provide access to breast cancer detection, diagnosis, and treatment services including recovery and palliative care.</p>	<p>3.1) Develop and provide resources for a high quality, coordinated system of networks that a) makes high quality entry-level screening services widely and easily accessible statewide in the communities where women live b) provides referral and ensure access to progressively more complex levels of high quality care c) deploys resources optimally to fill gaps in communities where there is insufficient entry-level screening and referral capacity and fill gaps or eliminate redundancies in regional capacity for more complex care.</p> <p>3.2) Encourage collaboration among the California Department of Health Services, voluntary and community organizations, community clinics, medical professionals, and medical schools in all counties to increase efficiency of services provided.</p>

## BREAST CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>3) By 2006, develop a coordinated system and resources to provide access to breast cancer detection, diagnosis, and treatment services including recovery and palliative care.</p>	<p>3.3) Provide a structure and process to identify and ensure appropriate care or referral for early detection, diagnosis, and treatment to include symptom control, amelioration of pain, rehabilitation, and reduction in the side effects of treatment based upon an appropriate care plan using uniform standards of care.</p> <p>3.4) Establish a network for appropriate interventions, such as advocacy, referral and education to address financial, employability, and insurability issues, and access to treatment and follow-up care.</p> <p>3.5) Establish a network to provide appropriate care or referral to services and support groups, such as those provided by the American Cancer Society, the wellness community, hospice services, and others for identified psychological, emotional, and spiritual problems or needs.</p> <p>3.6) Enhance the existing system of networks to include all Medi-Cal physicians.</p> <p>3.7) Identify areas of need for indigenous patient navigators and train them for culturally specific outreach and patient interaction.</p> <p>3.8) Lobby local, state, and federal governments and health insurance carriers to increase funding for early detection, diagnosis, and treatment of breast cancer.</p>

## PROSTATE CANCER

### GOALS

- 1) By 2010, reduce the prostate cancer mortality rate of California men, including men in high-risk groups, by 23 percent.
- 2) By 2010, improve the quality of life of men with prostate cancer and their families while creating measures to monitor and evaluate quality of life improvements.

### OBJECTIVES

- 1) **By 2010, provide all California men diagnosed with prostate cancer timely access to treatment programs and information that will help them make an informed choice among treatment options, including the risks, benefits, and the impact on their quality of life.**

### STRATEGIES

- 1) By January 1, 2006, educate the public, health professionals, and policy makers regarding prostate cancer including its risks, treatment options and quality of life, fears, beliefs and perceptions about the cancer and its treatment, lack of trust in the health care system among diverse groups, the need for easier access to prostate cancer detection and care, and lack of accurate, unbiased information.

### TACTICS FOR IMPLEMENTATION

- 1.1) Develop a unified and uniform message on prostate cancer to distribute to health professionals in California.
- 1.2) Provide information and education to patients through NCI's Cancer Information Service and the American Cancer Society's National Cancer Information Center.
- 1.3) Develop a unified and uniform message on prostate cancer to distribute to public policy makers in California.
- 1.4) Work with the American Board of Family Practice to educate primary care physicians about prostate cancer.
- 1.5) Encourage the California Department of Health Services to develop a media campaign, culturally sensitive to all, about prostate cancer education.
- 1.6) Incorporate prostate cancer information in material provided to women about breast cancer.
- 1.7) Encourage collaboration among those groups interested in prostate cancer to disseminate information about the disease.
- 1.8) Provide education about successful outcomes and treatment for localized prostate cancer.
- 1.9) Involve prominent figures to reach the public, e.g., George Foreman – "Real Men Get It Checked campaign."

## PROSTATE CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>2) By 2006, increase state funding for prostate cancer control research that includes basic, translational, clinical, and health services, quality of life, and outcomes research.</p>	<p>2.1) Restore funding for the California Department of Health Services Cancer Research Program. Seek funding for the infrastructure to implement the comprehensive cancer control plan.</p> <p>2.2) Highlight the deficiencies in our knowledge of prostate cancer to policy makers.</p> <p>2.3) Identify and aggressively seek funding from private sources for prostate cancer research and education.</p> <p>2.4) Encourage organizations like the American Cancer Society to provide targeted research funding for prostate cancer.</p> <p>2.5) Create an entity dedicated to raising funds for prostate cancer like the Susan G. Komen Foundation for breast cancer.</p> <p>2.6) Seek state funding to bring California comprehensive and clinical cancer centers together and formulate a plan for collaboration.</p>
<p>3) By 2006, ensure consistent funding of existing prostate cancer mandates and programs for the low income, uninsured, and underinsured.</p>	<p>3.1) Restore adequate funding for the state's Prostate Cancer Treatment Program, IMPACT</p> <p>3.2) Adequately fund existing prostate cancer mandated programs for the low income, uninsured, and the underinsured.</p>

## LUNG AND ORAL CANCER

### GOAL

By 2010, accelerate significantly the rate of decline of lung and oral cancer mortality by preventing tobacco use, helping smokers and users of spit tobacco to quit, and diagnosing lung and oral cancer at an earlier, potentially more curative stage.

### OBJECTIVES

- 1) **By 2010, decrease the smoking prevalence rate in adults ages 18 and older from 16.6 percent in 2000 to 10 percent.**
- 2) **By 2010, decrease the smoking prevalence rate in youth ages 12 to 17 years from 7 percent to 4 percent.**
- 3) **By 2010, decrease exposure to secondhand smoke to 10 percent or less of the California population.**
- 4) **By 2010, double the percentage of lung cancer diagnosed in California at Stage 1A.**

### STRATEGIES

- 1) Prevent or control tobacco use by funding and implementing the Tobacco Education and Research Oversight Committee Master Plan to strengthen the California Tobacco Control Program structure.

### TACTICS FOR IMPLEMENTATION

- 1.1) By 2006, augment the Tobacco Control Program's budget by \$200 million.
- 1.2) By 2006, recommend that the California Legislature increase the tobacco tax with an earmark for California's Tobacco Control Program. Educate the Legislature that even though consumption may be declining, more resources are needed to prevent and control tobacco use.
- 1.3) By 2006, strive to eliminate disparities in tobacco control by funding more programs, surveillance, and research for California's varied racial and ethnic groups and other priority populations (GLBT, low-SES, etc.)
- 1.4) Increase surveillance capacity by increasing funding of the California Cancer Registry from non-Proposition 99 sources to compile and track tobacco-related data on Asian-Pacific Islander and American Indian populations.
- 1.5) Decrease exposure to secondhand smoke (SHS) in all enclosed workplaces, outdoor working environments, entertainment venues, and homes by continuing to educate Californians about the dangers of SHS and by implementing progressive policies that protect all Californians.
- 1.6) Initiate policy efforts to regulate the tobacco industry and the sellers of tobacco products and their influence. Policies should include a) requiring tobacco retailers to obtain a license to sell tobacco that can be suspended or revoked if they sell tobacco to children b) prohibiting tobacco industry sponsorship and advertising at community entertainment, and sporting events, and c) asking elected officials not to accept tobacco industry campaign contributions and publicize those who do.

## LUNG AND ORAL CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>1) Prevent or control tobacco use by funding and implementing the Tobacco Education and Research Oversight Committee Master Plan to strengthen the California Tobacco Control Program structure.</p>	<p>1.7) Increase the enforcement of tobacco control laws (i.e., sales to minors, smoke-free workplaces) by specifically earmarking funding for local law enforcement agencies and providing training and technical assistance.</p> <p>1.8) Encourage more professional organizations to make tobacco control a priority.</p> <p>1.9) Hold state and county First Five Commissions accountable for their mission by allocating substantial resources to programs in conjunction at DHS' TCS.</p>
<p>2) Integrate evidence-based and efficacious smoking and smokeless tobacco cessation services into the state's school systems, community-based organizations, public health programs, and health care plans and institutions.</p>	<p>2.1) By 2006, increase funding of diverse community-based organizations to address cessation in a culturally and linguistically appropriate manner.</p> <p>2.2) By 2006, increase the level and capacity of cessation services to assist tobacco users in diverse communities and in a variety of languages and methods.</p> <p>2.3) By 2006, encourage health care providers to assess patient tobacco use and exposure to SHS status routinely and to provide assistance and referral to evidence-based and efficacious cessation services.</p> <p>2.4) By 2006, advocate for evidence-based and culturally linguistically appropriate cessation counseling coverage as a core benefit of health insurance plans.</p> <p>2.5) Fully implement "Tobacco as a Vital Sign" in all patient visits.</p> <p>2.6) Continue to publicize the services provided by the California Smokers' Helpline and encourage tobacco users to use its free services.</p> <p>2.7) Require the California Department of Managed Health Care to make evidence-based best practices for tobacco use services a required component of managed health care plans.</p> <p>2.8) Increase funding for research on tobacco-use cessation strategies for priority populations that include racial and ethnic groups, LGBT, teens, hard-core smokers and other tobacco users, and those individuals with low SES, and Medi-Cal and Healthy Families enrollees.</p> <p>2.9) Support research to uncover the barrier to cessation counseling and services by health care providers. Support the provision of cessation facilitator trainings in health and social service organizations.</p>

## LUNG AND ORAL CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>2) Integrate evidence-based and efficacious smoking and smokeless tobacco cessation services into the state's school systems, community-based organizations, public health programs, and health care plans and institutions.</p>	<p>2.10) Support programs that strive to engage health care providers in cessation counseling and referrals.</p> <p>2.11) Assure that tobacco use cessation is included in the Health Plan Employer Data and Information Set (HEDIS).</p>
<p>3) Improve current and develop new technologies for screening, early diagnosis, and treatment of lung, oral cancer, and other tobacco-related cancers (e.g. cervical, stomach, pancreatic), and improve the quality of life measures at all stages of the patient's health care and balance of life.</p>	<p>3.1) By 2006, improve access to quality lung and oral cancer treatment and palliative care for all patients.</p> <p>3.2) By 2006, increase research to improve and expand upon quality of life for lung and oral cancer patients.</p> <p>3.3) Identify and bring together national and California organizations and researchers who perform or otherwise have an interest in spiral CT scans as an efficient community screening methodology in California. Determine screening and infrastructure guidelines based on results of the NCI spiral CT scan clinical trial when it is completed.</p> <p>3.4) Advocate for insurers to cover lung cancer screening methods that are recommended by the American Cancer Society.</p> <p>3.5) Encourage participation of diverse populations in clinical trials dealing with lung and oral cancer.</p> <p>3.6) Encourage additional studies within the National Institutes of Health that look at biomarkers as cancer detection tools.</p> <p>3.7) Encourage research and clinical trials to improve treatments for oral and lung cancers.</p> <p>3.8) Increase health care coverage of experimental treatments.</p> <p>3.9) Encourage increased sampling of the environment for radon and asbestos exposure, where appropriate.</p>

## NUTRITION, OBESITY, PHYSICAL ACTIVITY AND CANCER

### GOALS

- 1) By 2010, change the environmental and California societal norms to those of healthy eating and physical activity.
- 2) By 2010, arrest the upward obesity and overweight trends by increasing physical activity, consumption, consumption of fruits and vegetables and reducing caloric intake among Californians.
- 3) By 2010, reduce the 2001-2002 prevalence rate of obesity among California adults from 19.9 percent to 14 percent.
- 4) Reduce the 2001-2002 prevalence rate of overweight among California adults from 54.4 percent to 40 percent.
- 5) By 2010, reduce the prevalence rate of overweight and obese children from 34 percent in 1999 to 14 percent.
- 6) By 2010, reduce the prevalence rate of at-risk and overweight teens from 25 percent in 2000 to 17 percent.

### OBJECTIVES

- 1) **By 2010, increase the proportion of adults who consume at least 5 servings per day of fruits and vegetables from 32 percent in 2001 to 45 percent.**
- 2) **By 2010, increase the proportion of all teens, ages 12 to 17 years, who consume at least 5 servings of fruits and vegetables from 44 percent in 2000 to 58 percent.**
- 3) **By 2010, increase the proportion of children, ages 9 to 11 years, who consume at least 5 servings of fruits and vegetables from 20 percent in 1999 to 30 percent.**
- 4) **By 2010, decrease the consumption among children, teens, and adults of high calorie, low nutrient foods (soft drinks, fried snacks, and sweet desserts) by 30 percent, 15 percent, and 30 percent respectively.**
- 5) **By 2010, increase the prevalence rate of adults who do physical activity for 30 minutes at least five days a week from 22 percent in 2001 to 35 percent.**
- 6) **By 2010, increase the prevalence rate of children and youth who do physical activity for 60 minutes daily from 61 percent in 1999 to 80 percent in children ages 9 to 11 years, and 40 percent in 2000 to 55 percent in teens ages 12 to 17 years.**
- 7) **By 2010, increase the proportion of students, grades 5, 7, and 9, meeting the healthy zone requirement (six areas of fitness gram test) from 24 percent to 35 percent.**

### STRATEGIES

- 1) Develop leadership, planning, management, and coordination.

### TACTICS FOR IMPLEMENTATION

- 1.1) By 2006, create statewide leadership through the development of a state-level education and research oversight committee to a) develop and monitor a statewide plan b) coordinate and plan the development of a comprehensive nutrition and physical activity control program c) conduct statewide research and evaluation and d) secure and diversify funding sources for public agencies and CBO's.
- 1.2) Create and manage a nutrition and physical activity regional infrastructure of constituencies, locally funded programs, networks, and advocacy groups.

## NUTRITION, OBESITY, PHYSICAL ACTIVITY AND CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>1) Develop leadership, planning, management, and coordination.</p>	<p>1.3) By 2006, develop and maintain an action-oriented Intervention Clearinghouse that encourages collaboration for partners, provides resources to program planners and resources to the public.</p> <p>1.4) Annually conduct at least one statewide conference, local summits and trainings for the purpose of gathering agencies together to prioritize the issues of obesity, poor nutritional habits, and physical inactivity. Outcomes would include increased funds for programs from agencies, foundations, and health care providers.</p> <p>1.5) Increase and monitor collaborative projects among leadership agencies such as the American Heart Association, the American Cancer Society, and the American Diabetes Association.</p> <p>1.6) Fund and implement national and evidence-based State programs throughout California, particularly in schools, e.g., Healthier U.S., Garden in Every School, International Walk to School Day, School Health Index, 5 a Day--ToolboxPower Play! Toolbox, and Shape Up America, etc.</p> <p>1.7) Increase and monitor collaborative projects among agricultural organizations, the food/retail industry and fitness industry.</p> <p>1.8) Document the state's physical activity campaign intervention efforts and population, environmental and policy changes. Validate that large-scale population change and smaller-scale behavior and policy changes are associated with subsequent health outcomes.</p>
<p>2) Institute environmental and policy change.</p>	<p>2.1) By 2006, secure funding to implement environmental and policy interventions to reduce barriers and increase access to affordable low-cost fruits and vegetables in communities, retail and foodservice establishments, schools and work places.</p> <p>2.2) By 2006, secure funding to implement environmental and policy interventions to reduce barriers and provide safe, affordable and accessible opportunities for physical activity for adults and children in communities, work, and school.</p> <p>2.3) By 2006, develop a systematic framework for a) assessing community needs and assets b) determining environmental and community-level measures, and c) implementing and evaluating appropriate environmental and policy and environmental interventions.</p>

## NUTRITION, OBESITY, PHYSICAL ACTIVITY AND CANCER

(CONTINUED)

STRATEGIES	TACTICS FOR IMPLEMENTATION
2) Institute environmental and policy change.	<p>2.4) By 2006, make the issues of obesity, nutrition, and physical activity an organizational priority by providing incentives for local organizations to adopt healthy lifestyle policies .</p> <p>2.5) Develop parallel mission and vision statements among major voluntary organizations.</p>
3) Implement mass communication strategies	<p>3.1) Conduct a large multi-level, multi-component mass communication campaign to frame issues appropriately and move communities, policy makers and individuals toward healthy behavior norms. By 2006, key activities will include: a) State-level and regional media campaigns to increase awareness and likelihood of improving health behaviors. b) Media advocacy trainings for locally funded agencies and community-based organizations. c) Marketing kits and web-based resources to train and empower community-based agencies to conduct local media activities and coordinate health messages.d) Public relations to increase partner activities and increase media coverage.</p>

## SKIN, LIVER, CERVICAL, CHILD-ADOLESCENT, OVARIAN AND PANCREATIC CANCERS

### GOALS

- 1) By 2010, decrease the mortality rate of melanoma cancer by 20 percent, from a baseline of 2.8 deaths per 100,000 persons.
- 2) By 2010, reduce hepatitis B infection by 99 percent and increase the survival rate of primary liver cancer by 20%. By 2010, all Asian-Pacific Islanders should be screened for hepatitis B to decrease the liver cancer mortality rate among Asian-Pacific Islanders.
- 3) By 2010, reduce the mortality rate from cancer of the cervix by 40 percent among all women in California, from a baseline of 2.8 deaths per 100,000 women.
- 4) By 2010, increase the survival rate of cancers of childhood and adolescence by 10 percent.
- 5) By 2010, increase the survival rate of ovarian and pancreatic cancers by at least 10 percent through referral of patients to cancer centers for aggressive treatment and clinical trials.

### OBJECTIVES - MELANOMA AND NON-MELANOMA SKIN CANCER

- 1) **Increase the proportion of adults age 18 years and older to 60 percent who use at least one sun protective measure when outdoors.**

### STRATEGIES

- 1) Promote and disseminate existing skin cancer prevention education and policy resources and support integration of sun protection strategies into activities, policies, and structures.

- 2) Increase awareness among the general public regarding the dangers of unprotected exposure to UV rays and the corresponding recommended practices for decreasing skin cancer risk.

### TACTICS FOR IMPLEMENTATION

- 1.1) Obtain funding from the Centers for Disease Control and Prevention, private foundations, sun product manufacturers and retailers, and through legislation to increase the California Department of Health Services' Skin Cancer Prevention Program budget.
- 1.2) Collaborate with national, state, and local professional organizations and other cancer prevention entities to implement this strategy.
- 1.3) Promote distribution and use of existing sun-safety materials through promotional pieces placed in journals, newsletters, web sites, and other media that target populations at high-risk for skin cancer.

- 2.1) Produce and disseminate culturally and linguistically appropriate, user-friendly sun-protection educational and policy resources.
- 2.2) Produce and distribute media pieces designed for use in or at the classroom, beach, and sports venues. Conduct forums at state and national meetings occurring in California where public policy is crafted.
- 2.3) Identify celebrity spokespersons who will use their influence to encourage individuals and organizations to adopt pro sun-safety practices.

## SKIN, LIVER, CERVICAL, CHILD-ADOLESCENT, OVARIAN AND PANCREATIC CANCERS

(CONTINUED)

OBJECTIVES - LIVER CANCER	
<p>1) <b>Assure hepatitis B immunization of all children, teenagers, and adults, especially those of childbearing age or who remain sexually active.</b></p> <p>2) <b>Screen all Asian-Pacific Islanders for hepatitis B infection, especially those who are foreign born, 18 years of age and under with hepatitis B vaccine and persons who are not already immune.</b></p>	
STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>1) Implement a culturally appropriate campaign aimed at Asian-Pacific Islander communities and health care providers (physicians and others) to increase their awareness about hepatitis B, liver cancer, and preventive measures.</p>	<p>1.1) Conduct a media campaign that includes culturally and linguistically appropriate materials about what every Asian-Pacific Islander should know regarding liver cancer and hepatitis B, a Website in Asian languages, and a personally staffed toll-free number.</p> <p>1.2) Expand collaboration to all Asian-Pacific Islander groups, health insurers, the California Department of Health Services, and policy-makers for funding, monitoring, and successful hepatitis B and liver cancer preventive outcomes.</p>
<p>2) Screen all Asian-Pacific Islanders for hepatitis B and immunize those who are not protected.</p>	<p>2.1) Work with insurance companies and state and federal legislators for hepatitis B immunization coverage for adults.</p> <p>2.2) Reach Asian-Pacific Islander populations for education, screening, and immunization at points of entry into the country, points of service, areas of worship, cultural organizations, and other locations.</p> <p>2.3) Extend hepatitis B immunization requirement to junior and senior high schools and colleges.</p> <p>2.4) Provide early treatment of hepatitis B and C infections and screen those with chronic hepatitis for liver cancer.</p> <p>2.5) Make hepatitis B immunization a Health Plan Employer Data and Information Set (HEIDIS) indicator.</p> <p>2.6) Educate health care providers about the need for hepatitis B screening in all Asian-Pacific Islanders, and educate them about liver cancer, its risk factors, persons at risk, and culturally appropriate ways to reach and communicate with their Asian-Pacific Islander patient populations.</p>

## SKIN, LIVER, CERVICAL, CHILD-ADOLESCENT, OVARIAN AND PANCREATIC CANCERS

(CONTINUED)

OBJECTIVES - CERVICAL CANCER	
<p>1) <b>Increase the proportion of women 18 years of age and older who have had a Pap test within the past three years.</b></p> <p>2) <b>When available, promote the vaccine for HPV among high-risk women. Although this vaccine is still under development, studies suggest this vaccine will have substantial efficacy and public health benefit.</b></p>	
STRATEGIES	TACTICS FOR IMPLEMENTATION
<p>1) Promote access to free or affordable and appropriate screening and treatment services.</p>	<p>1.1) Expand the California Department of Health Services' Cancer Detection Section's (CDS):Every Woman Counts to all communities in California; obtain additional funding to support the program through legislation.</p> <p>1.2) Provide transportation for patient where needed to screening and treatment.</p> <p>1.3) Involve leaders in the community to advocate for cervical cancer control programs.</p> <p>1.4) Involve state legislators to lobby Congress to fund California's CDS's:Every Woman Counts.</p> <p>1.5) Obtain legislation to expand the California Department of Health Services CDS's:Every Woman Counts funding to include cervical cancer screening.</p>
<p>2) Provide culturally appropriate comprehensive cervical cancer education reaching all women including Latinas, Asian-Pacific Islanders, African Americans, older women, the uninsured, low-income, underserved, as well as tribal leaders, community leaders, and health care providers.</p>	<p>2.1) Develop an awareness campaign among these groups.</p> <p>2.2) Build collaboration with groups that include representation from ethnic communities, health care, geographical areas, women's organizations, senior citizens organizations, faith-based communities, and other community agencies.</p> <p>2.3) Include information about cervical cancer and its prevention in all women's health informational packets.</p>
OBJECTIVES - CHILDHOOD AND ADOLESCENT CANCERS	
<p>1) <b>Increase the number of health care providers and health care organizations that provide quality of life support and palliative care to children with cancer and their families.</b></p> <p>2) <b>Promote the latest advances in treating childhood cancers through provider education.</b></p> <p>3) <b>Increase referral of childhood cancer patients to pediatric cancer centers and clinical trials.</b></p>	

## SKIN, LIVER, CERVICAL, CHILD-ADOLESCENT, OVARIAN AND PANCREATIC CANCERS

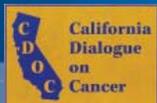
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STRATEGIES	TACTICS FOR IMPLEMENTATION
1) Emphasize the need for comprehensive care for children and adolescents with cancer and their families to maximize quality of life outcomes.	1.1) Promote professional education, professional societies, insurance carriers, philanthropic groups, advocacy groups, and other professional associations to advance quality of life outcomes for children and adolescents with cancer.  1.2) Establish a statewide information or educational system on how to create culturally sensitive programs for children and adolescents with cancer.
2) Promote medical, psychosocial, and educational follow-up care for childhood cancer survivors.	2.1) Tactics are the same as those for Strategy 1.
<b>OBJECTIVE - OVARIAN CANCER</b>	
<b>1) Increase the survival rate of ovarian cancer by promoting aggressive treatment modalities and alerting women to the risks, symptoms, and detection measures.</b>	
<b>STRATEGIES</b>	
1) Promote the referral of ovarian cancer patients to clinical trials.  2) Promote the education of women about detection and treatment of ovarian cancer, especially those at higher-risk, in California communities, organizations, and venues where older women are likely to be reached.  3) Provide state funding for ovarian cancer research focusing on prevention and early detection.	
<b>OBJECTIVE - PANCREATIC CANCER</b>	
<b>1) Increase research to find effective diagnostic tests and treatment(s) for pancreatic cancer in order to improve five-year survival rates to at least 15 percent over the current rate of near zero. Obtain state funds for research on prevention of pancreatic cancer.</b>	
<b>STRATEGIES</b>	
1) Promote the referral of pancreatic cancer patients to clinical trials.  2) Promote the education of the public regarding pancreatic cancer. This is particularly important considering the large increase in diabetes cases expected as a result of the current obesity epidemic.  3) Solicit the legislature to provide state funds for pancreatic cancer research.	

## SKIN, LIVER, CERVICAL, CHILD-ADOLESCENT, OVARIAN AND PANCREATIC CANCERS

(CONTINUED)

GLOBAL STRATEGIES FOR OTHER CANCERS	GLOBAL TACTICS FOR IMPLEMENTATION
<p>1) For all cancer patients, provide access to state-of-the-art screening, early detection, prevention, immunization, and treatment, with access to a third party payment with no disparities in clinical outcomes.</p>	<p>1.1) Advocate for universal health insurance coverage.</p> <p>1.2) Define a minimum cancer coverage benefits package.</p> <p>1.3) Provide multi-lingual Web sites with links to other web sites.</p> <p>1.4) Provide a clearinghouse of Web sites including culturally appropriate material and sites in other languages.</p> <p>1.5) Teach advocacy to all cancer-related constituent groups.</p>
<p>2) Provide culturally appropriate information and education about cancer prevention in rural and metropolitan areas assuring equitable access to quality care.</p>	<p>2.1) Provide education on tobacco use, control, and cessation.</p> <p>2.2) Other tactics are the same as for Strategy 1.</p>
<p>3) Conduct a public awareness campaign regarding the cause, impact, prevention, and treatment of indicated cancers.</p>	<p>3.1) Develop and integrate cancer risk-reduction educational resources and policies into organizations that serve high-risk populations for the indicated cancers.</p>



# COMPREHENSIVE CANCER CONTROL IN CALIFORNIA, 2004