

Public Health in California: Trends and Challenges in 2006



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SOLUTIONS-ORIENTED CONVERSATIONS IMPROVING HEALTH POLICY

Californians' Health

There are four major determinants of the public's health: health behaviors/lifestyles, human biology and genetics, the physical and social environment, and medical care.¹ However, the public resources devoted to improving the public's health have been directed inversely to the relative contribution of these determinants. California devotes approximately 97.6% of state health expenditures to medical care, which determines only 10% of health status. In contrast, California spends 2.4% on public health programs that address health behaviors and environmental factors, which together contribute to 60% of health status. California ranks 40th out of 50 states in its per capita public health expenditures, spending only \$21 per capita, less than half of the national average of \$59 per capita.²

Despite ranking low in public health spending, California's population, on average, is among the healthiest in the nation, with lower age-adjusted mortality rates, infant mortality rates, and rates of adult smoking compared to the rest of the nation.³ However, *all* Californians do not share this state of good health.

California presently faces four major public health challenges:

1. Reducing the health disparities among its diverse populations;
2. Adopting healthier behaviors to prevent chronic disease and related deaths;
3. Increasing access to effective preventive care; and
4. Preparing for potential natural and man-made disasters.

Reducing Health Disparities

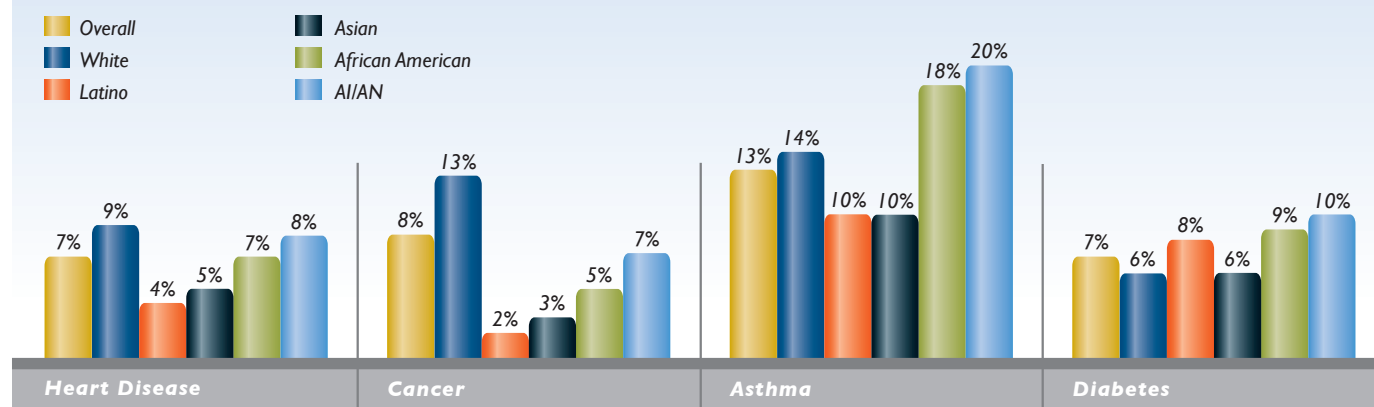
California has one of the most diverse populations in the U.S., which presents challenges for delivering culturally and linguistically appropriate health services and programs. The difference in underlying health status varies tremendously by subpopulation groups. Overall, Latinos, American Indians (AI)/Alaskan Natives (AN) and African Americans report the highest rates of fair/poor health.⁴ The prevalence of chronic conditions varies significantly across different racial and ethnic groups. Rates of cancer are highest among Whites and lowest among Latinos, Asians, and African Americans. Rates of asthma are significantly higher among AI/AN, African Americans, and Whites compared to the state as a whole and are significantly lower among Latinos and Asians. Finally, African Americans report higher rates of diabetes compared to the state average, while Whites report the lowest rates.⁵

Improving Health Behaviors

Approximately one-third of all deaths in the U.S. are caused by three specific health behaviors: smoking, exercise and diet.⁶ Smoking increases the risk of heart disease, cancer, respiratory diseases, influenza and pneumonia. A poor diet and inactivity lead to obesity and are associated with increased risks of heart disease, cancer, stroke, diabetes, and unintentional injury.

Tobacco Approximately 43,000 Californians die annually due to tobacco-related disease.⁷ Tobacco-use is responsible for 87% of lung cancers and contributes to coronary heart

HEALTH CONDITIONS BY RACE/ETHNICITY IN CALIFORNIA, 2003

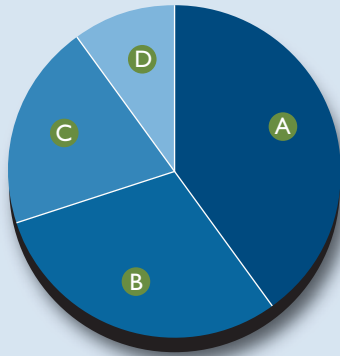


Source: California Health Interview Survey; UCLA Center for Health Policy Research, available at www.askchis.com.

DETERMINANTS OF HEALTH

- A. Behavioral Patterns 40%**
- B. Genetic Predispositions 30%**
- C. Physical and Social Environment 20%**
- D. Inadequate Medical Care 10%**

Source: McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Affairs*, 2002. 21(2):78-93



disease, chronic lung disease, and stroke. Smoking rates among adults declined from 20% to 15% between 1990 and 2004.⁸ While California has the second lowest smoking rate in the nation, tobacco-use is responsible for about \$9 billion of direct medical expenditures annually, plus another \$7 billion in lost productivity.⁹ Smoking rates vary by race and ethnicity with AI/AN (30%) reporting the highest rates, followed by African Americans (22%) and Whites (18%). Smoking rates are lowest among Latinos (14%) and Asians (14%).¹⁰

Diet, Physical Activity and Obesity Sedentary lifestyles and poor diets have contributed to an epidemic of overweight and obesity in both California children and adults. In 2002, more than half of the adult population in California was either overweight (BMI 25-29.9) or obese (BMI 30+).¹¹ California has experienced one of the fastest rates of increase in adult obesity in the U.S. with rates of overweight and obesity in the adult population increasing between 1992 and 2003 from approximately 46% (34% overweight, 12% obese) to 56% (35% overweight, 20% obese).¹² This trend is even more alarming among children, where the percentage of children who are overweight has more than doubled in the past 30 years.¹³ Almost one-third of California children are considered overweight.¹⁴ It is estimated that in 2005 physical inactivity, obesity, and overweight cost California \$28 billion dollars in

both direct medical costs and indirect lost productivity and workers compensation costs.¹⁵

Rates of physical inactivity vary greatly across racial/ethnic groups in California. The groups reporting the highest rates of physical inactivity are Latinos (43%), Asians (34%) and African Americans (32%). The groups most likely to report being overweight are Latinos (39%) and AI/AN (38%). Rates of obesity are highest among African Americans (30%), Latinos (27%) and AI/AN (26%).¹⁶

Increasing Access To Preventive Care

Clinical preventive services have been firmly established as being effective over the past 30 to 40 years.¹⁷ Many preventive services—vaccines, early detection screening and behavioral counseling programs—are among the most effective and cost effective services health care professionals can provide.¹⁸ However, provision and use of preventive care falls short, not only for the uninsured and for certain racial and ethnic groups, but even among those who have insurance.

In 2003, an estimated 6.6 million Californians were uninsured.¹⁹ Compared to persons with health insurance, persons who are uninsured are more likely to report having no regular source of health care (36% vs. 9%) and not receiving recommended preventive care. For example, compared to women with health insurance, uninsured women in California are less likely to have had a mammogram in the last two years (38% vs. 64%), and to have had a Pap smear in the last three years (76% vs. 84%).²⁰

Access and utilization of preventive care in California varies by race and ethnicity. For example, 83% of women in California report having had a Pap test in the last three years, compared to only 74% of Asians. African Americans (87%) report the highest rates of Pap tests. The average rate of having a mammogram in the last two years is 61%; however, the rate is significantly lower for Latinos (48%), AI/AN (58%), and Asians (58%), and is highest among Whites (66%).²¹

Many major, preventable chronic diseases such as cardiovascular disease, cancer, and diabetes affect millions of Californians,

Endnotes

- 1 McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Affairs*, 2002. 21(2):78-93.
- 2 United Health Foundation. America's Health: State Health Rankings, 2004 Edition. <http://www.unitedhealthfoundation.org/shr2004/components/percent>. (accessed on 1/17/06).
- 3 State Health Facts Online, Kaiser Family Foundation, located at www.statehealthfacts.org.
- 4 California Health Interview Survey, 2003. UCLA Center for Health Policy Research. Available at www.askchis.com. (accessed on 1/17/06).
- 5 California Health Interview Survey, 2003.
- 6 Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. *JAMA* 2004; 291:1238-1245 and Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Correction: Actual causes of death in the United States, 2000. *JAMA* 2005; 293:293.
- 7 Max W, Rice DP, Sung H, Zhang X, and Miller L. The economic burden of smoking in California. *Tobacco Control* 2004, 13:264-267.
- 8 Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1990-2004.
- 9 Max W, Rice DP, Sung H, Zhang X, and Miller L, 2004.
- 10 California Health Interview Survey, 2003.
- 11 BMI = body mass index. BMI is defined as weight in kilograms divided by height in meters squared (w/h²).
- 12 Centers for Disease Control and Prevention (CDC), 1990-2004 (Does not add up to 56% due to rounding).
- 13 National Center for Health Statistics. Health, United States, 2005. Hyattsville, MD: 2005. Available on-line at <http://www.cdc.gov/nchs/data/has/has05.pdf>
- 14 California Center for Public Health Advocacy. The growing epidemic: child overweight rates on the rise in California assembly districts. August 2005, policy brief no. 4.
- 15 Chenoweth D. The economic costs of physical inactivity, obesity, and overweight in California adults: health care, worker's compensation, and lost productivity. Available at: <http://www.dhs.ca.gov/ps/cdic/CPNS/press/downloads/CostofObesityToplineReport.pdf>. (accessed on 1/17/06).
- 16 California Health Interview Survey, 2003.
- 17 U.S. Preventive Services Task Force, Guide to Clinical Preventive Services (Baltimore MD: Williams and Wilkins), Second Edition 1996.

cause major limitations in activity, and account for 70% of all deaths.²² The medical costs attributable to chronic diseases account for more than 75% of total health care costs.²³ While modification of health behaviors and greater access to preventive care will contribute to reducing the rates of these chronic diseases in the future, there is much that needs to be done for persons living with these conditions to prevent many of the complications associated with these diseases.

Nearly half the time, persons with chronic conditions are not receiving recommended care to manage their disease.²⁴ As a result of a large and growing body of medical evidence-based scientific research on the effectiveness of specific services for managing chronic disease, clinical practice guidelines have been developed to help health care professionals prevent, diagnose and manage specific conditions. Use of evidence-based guidelines has been shown to increase provision of appropriate care.²⁵ However, a national survey of physician organizations (medical groups and IPAs) found that California physician groups use evidenced-based practices less than half of the time.²⁶

Preparing for Disasters

Californians rely on a strong public health system to meet emergencies including natural disasters, emerging infectious diseases or an act of bioterrorism. Systems for rapid response and facilitating communications are essential to responding to disasters in an effective and equitable way. In the aftermath of Hurricane Katrina, it became clear that low-income and elderly populations are particularly vulnerable to the ravages of natural disaster and special plans are needed to ensure their safety.

Natural Disasters

California experiences more natural and man-made disasters than any region of the country. Since 1989, every county in California has filed at least one declared disaster due to an earthquake, storm, flood, winter freeze or fire.²⁷ The Governor's Office of Emergency Services (OES) administers California's Earthquake Program including earthquake preparedness planning, emergency response and disaster recovery.²⁸

Resources for Policymakers

Given the breadth of macro health trends, California policymakers may visit the following resources for evidence-based specific recommendations:

- For health behaviors/underlying causes of death (e.g., tobacco use) and chronic diseases (e.g., obesity) policy, see the Centers for Disease Control and Prevention (CDC) *Guide to Community Preventive Services* (www.thecommunityguide.org);
- To increase access to preventive care (e.g., ideal smoking cessation benefits for Medi-Cal, CalPERS, etc.), visit the *U.S. Preventive Services Task Force Guide to Clinical Preventive Services* (www.ahrq.gov).
- To determine the effectiveness of interventions to reduce disparities, consult *Strategies for Improving Minority HealthCare Quality* (Evidence Report/Technology Assessment Number 90, www.ahrq.gov).

For information related to preparedness and emergency responses for state and local government (not necessarily evidence-based) visit the Centers for Public Health Preparedness at the CDC (www.cdc.gov).

Emerging Infections

In the last year, a new avian influenza virus subtype has caused infections in more than 130 people in Asia. The virus appears to have a 50% mortality rate.²⁹ However, as of January 2006 the people who have contracted the virus got it through contact with infected birds and no human-to-human transition has yet occurred. However, if and when the virus is able to spread from one human being to another, the risk of an international pandemic increases. The California Department of Health Services developed Influenza Pandemic response plans in 2001 and 2006. President Bush has requested \$7.1 billion in federal

18 U.S. Preventive Services Task Force, *Guide to Clinical Preventive Services*, 1996.

19 ER Brown, SA Lavarreda, T Rice, JR Kincheloe, MS Gatchell, UCLA Center for Health Policy Research. *The State of Health Insurance in California: Findings from the 2003 California Health Interview Survey*.

20 California Health Interview Survey, 2003.

21 California Health Interview Survey, 2003.

22 Centers for Disease Control and Prevention (CDC). Chronic Disease Overview. Available at: www.cdc.gov/nccdphp/overview.html (accessed on 1/17/06).

23 Centers for Disease Control and Prevention (CDC), accessed on 1/17/06.

24 Ellrodt G, Lee J, Cho M, Hunt D, Weingarten S. Evidence-based disease management. *JAMA* 1997;278:1687-1692.

25 Ellrodt G, Lee J, Cho M, Hunt D, Weingarten S., 1997.

26 Casalino L, Gillies RR, Shortell SM, et al. External incentives, information technology and organization processes to improve health care quality for patients with chronic disease. *JAMA* 2003;289:434-441.

27 Governor's office of Emergency Services, *Origins and Development: A chronology 1917-1999*. <http://www.oes.ca.gov/Operational/OESHHome.nsf/Content/DE011AC74CA7B73A88256B7B0026B5F3?OpenDocument>

28 California Governor's Office of Emergency Services, *Earthquake Program Description*. March 7, 1997. Available at: <http://www.oes.ca.gov/Operational/OESHHome.nsf/978596171691962788256b350061870e/E9708AEFCE60E33088256BBF005C98F9?OpenDocument>

29 See: Centers for Disease Control and Prevention. *Pandemic Influenza: Worldwide Preparedness*. Available at: <http://www.cdc/flu/pandemic>; and Centers for Disease Control and Prevention. *Key Facts About Pandemic Influenza*. Available at: <http://cdc.gov/flu/pandemic/keyfacts.htm>

30 California Department of Health Services. *Bioterrorism Epidemiology Section*. January 2002. Available at: <http://www.dhs.ca.gov/dcdc/bt/index.htm>

31 Kohatsu ND, Robinson JG, Torner JC. Evidence-based public health: an evolving concept. *Am J Prev Med* 2004;27(5).

32 Ellrodt G, Lee J, Cho M, Hunt D, Weingarten S., 1997.

support from Congress for the development and purchase of a vaccine and antiviral medications, support for state and local governments and global virus detection and containment.

Bioterrorism

Since the terrorist attacks in Washington, New York and Pennsylvania, the nation has been on alert for the possibility of additional attacks, including use of weaponized biological agents. The Division of Communicable Disease at the California

Department of Health Services has developed a California Bioterrorism Surveillance and Epidemiological Response Plan.³⁰ Additional plans to be developed include those addressing the role of the laboratories in detecting and responding to bioterrorism, and the health and medical response communication. While the state received \$286 million from the CDC in bioterrorism preparedness grants, between 2000 and 2004, the state spent less than half of these funds.

Policy Considerations: Moving Towards Evidence-based Public Health

While there is considerable evidence demonstrating the effectiveness of specific public health strategies for reducing disease, disability and premature death, much of the policymaking and program planning in public health has not been built on this large evidence base. Moreover, many people who would benefit from public health and preventive interventions do not receive them. The gap between what is recommended and what is received is particularly great among certain population subgroups. In addition, public health programs are often not held accountable for the outcomes they achieve.

Evidence-based public health is “the process of integrating science-based interventions with community preferences to

improve the health of populations.”³¹ All of the areas of public health discussed in this brief would benefit greatly from increased accountability for achieving health outcomes. All public health programs in the state could be evaluated with regards to:³²

1. The quality of the science base for the intervention;
2. The involvement of the community; and
3. The effect on the desired public health outcome.

In addition, programs must be designed and implemented in a way that reaches those population subgroups with the least access and the greatest needs in a way that is both culturally and linguistically appropriate.

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The California Health Policy Forum (CAHPF) provides an independent platform for education, idea sharing and conversations among legislative and executive branch health policy staff about the complex and vast array of health issues facing the state today. CAHPF is an initiative of the Center for Health Improvement (CHI). CHI is an independent, nonprofit health policy center dedicated to improving population health and encouraging healthy behaviors.

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