

Sonoma County Obesity Prevention Plan 2010-2013



County of Sonoma
Department of Health Services
Public Health Division

Introduction

The County of Sonoma Department of Health Services (DHS), Obesity Prevention Plan was developed by Public Health Division staff working in numerous programs that are focused on increasing healthy eating and active living, and preventing and reducing overweight and obesity among a range of populations.

The workplan section of the Obesity Prevention Plan was developed using strategies taken from the CDC's *Recommended Community Strategies and Measurements to Prevent Obesity in the US: implementation and Measurement Guide, 2009*. The Plan reflects work that DHS is currently engaged in or planning to do, and efforts that the Department would like to do in collaboration with community partners during the next 1-3 years.

Healthy Eating and Obesity Prevention

The benefits of a healthy diet are well documented. A healthy diet helps to control weight and reduces the risk of obesity and related chronic diseases and is associated with a lower risk of mortality in all age groups (Robert Wood Johnson Foundation, *Improving Access to Healthy Foods: A Guide for Policy-makers*, fall 2007). Adequate nutrients from the four food groups make up a healthy diet and are needed to maintain and improve health.

Diets low in fruits and vegetables are estimated to cause 85% of heart diseases, 15% of cancers, and 11% of strokes (WHO, 2002). Additionally, there is evidence that a high intake of fats and sugars contributes to obesity, which is the leading risk factor for Type 2 diabetes (WHO/FAQ, 2003). Dietary factors are associated with four of the ten leading causes of death – heart disease, some types of cancer, stroke and type-2 diabetes (DHHS, *Healthy People 2010*, p 19-3).

Americans consume about 50 gallons of soda and sweetened beverages per capita annually. They also consume 250-300 calories more today than 20 years ago (Obesity. 2007; 15:2739-2747). A meta-analysis of research on soft drinks found a powerful link between these sweetened beverages and increased caloric intake. Several studies have found a strong link between soda consumption and obesity (Am. J. Public Health.2007; 97:667-675).

Overweight and obesity are national public health problems. The obesity epidemic is driven by two principal factors: poor nutrition and lack of physical activity. The prevalence of overweight and obesity has increased significantly over the past several decades (CDC). If this trend continues, this generation of children is expected to be the first to have a shorter life expectancy than their parents (New England Journal of Medicine vol. 352(11) March 2005, pp 1138-1145).

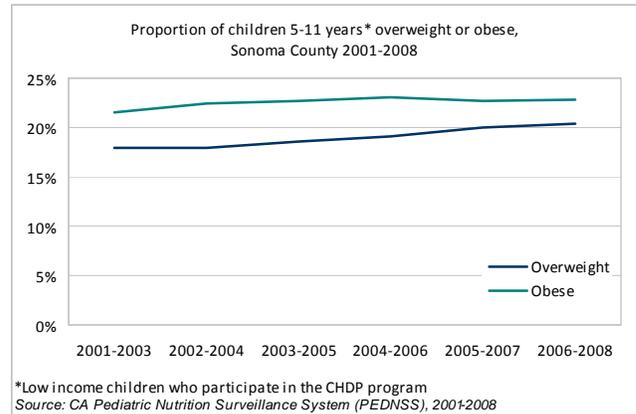
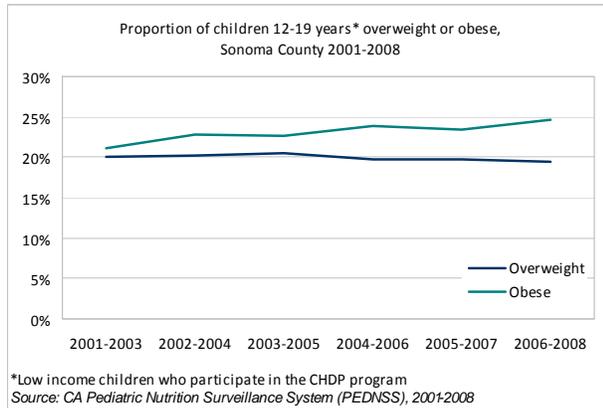
Overweight and obesity are associated with negative social and emotional impacts, increased risk for injuries, increased medical costs, and increased school days missed. Sonoma County is in step with the state and national trends in overweight and obesity. The number of Sonoma County adults (ages 18 years and older) who are obese has doubled since 2001, from 14% to 28% (CHIS 2001, 2007).

Compared to the general population, low-income youth and adults are at higher risk for both overweight and obesity (MMWR Weekly, July 24, 2009, 58(28); 769-773). Obesity among low income teens (ages 12-19 years) increased from 21.1% in 2001-2003 to 24.7% in 2006-2008.

For 5-11 year olds from low income households, overweight rose from 17.9% to 20.4% and obesity from 21.5% to 22.9% during the same time period (PEDNSS, 2001 -2008).

For 5-11 year olds there is an increasing trend for children who are overweight and obese.

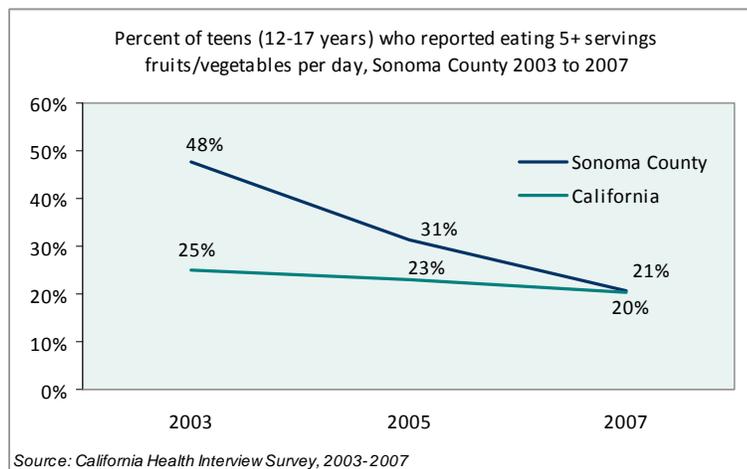
For 12-19 year olds there is an increasing trend for the children who are obese. There was no change for the children who are overweight in this category.



Sonoma County’s high rates of overweight and obesity are reflected in the low numbers adults and teens who report eating healthy diets rich in fruits and vegetables and who actively exercise.

Slightly more than half (55%) of Sonoma County adults reported eating the recommended five or more servings of fruits and vegetables per day compared to 48.7% of adults in California (CHIS 2005).

More concerning is, only one in five Sonoma County teens (20.8%) reported eating five or more servings of fruits and vegetables per day. Trend data suggest there is a decreasing trend in consumption, but it is difficult to conclude with only 3 years of survey data from a relatively small sample.



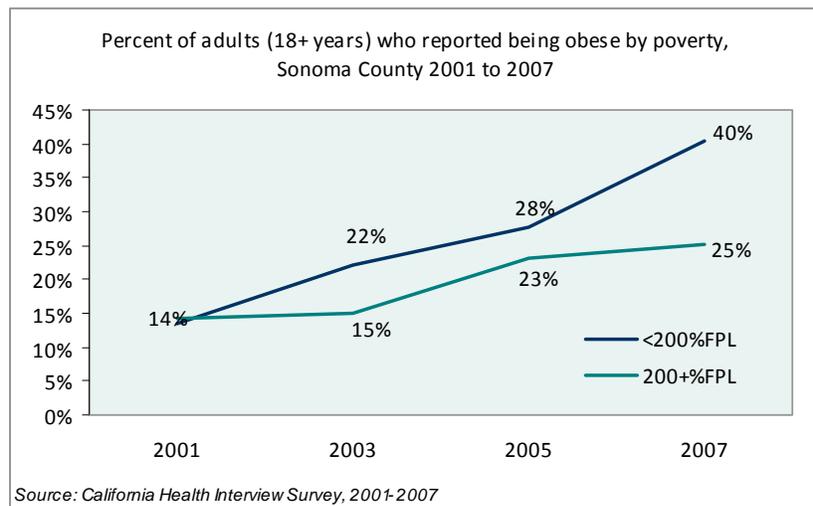
Who is disproportionately affected?

Lower income populations are disproportionately affected by obesity and associated environmental conditions that do not support access to healthy, affordable foods.

There is growing evidence that what people eat and the likelihood of being overweight is influenced by the environment where they live, work, learn, and play. As we strive to reverse the obesity epidemic, access to healthy foods and physical activity is more important than ever.

High rates of overweight and obesity are linked to the high prevalence and consumption of inexpensive, high-calorie, processed, and fast foods; extensive marketing of unhealthy food products; and limited access to healthy, affordable foods. One study of food prices in the Seattle area from 2004-2006 found a 19.6% rise in the cost of the lowest calorie foods like vegetables and fruits. Conversely, there was a 1.6% drop in the cost of foods high in calories from sugar and fat. Based on a standard 2000-calorie diet, a diet consisting primarily of calorie-dense foods cost \$3.52 a day, but a diet consisting primarily of low-calorie, high nutrient food cost \$36.32 a day. The average American eats a variety of foods throughout the day, spending \$7 a day (JADA, 2007; 107(12):2071-2076).

The rate of obesity in adults is increasing more rapidly over time for those <200%FPL than those >200%FPL.



Children from low-income households also suffer disproportionately from health consequences stemming from poor nutrition. Recent research has shown an association between obesity, iron deficiency and food insecurity in children and adolescents in low-income households (Nead, et al. Pediatrics, July 2004; Brotanek, et al. Arch Ped Adolesc Med, Dec. 2008). Food security means that all people have access at all times to enough food for an active, healthy life.

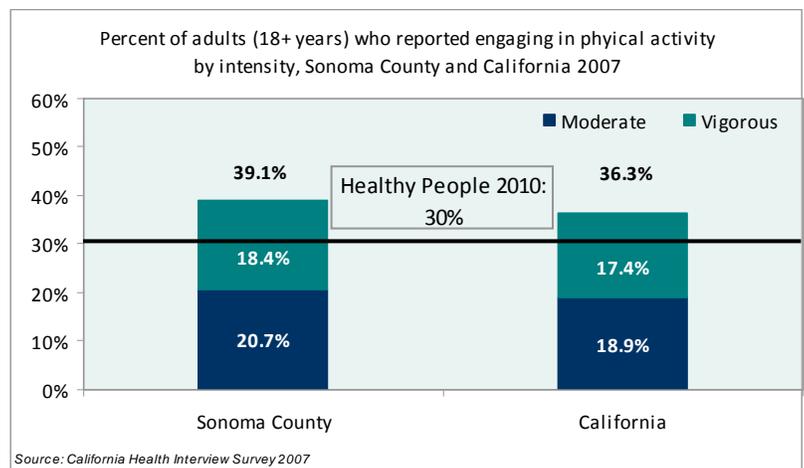
Physical Activity and Obesity Prevention

Being physically active is one of the easiest and most inexpensive ways to help improve well-being and prevent a variety of chronic diseases including hypertension, diabetes, heart disease, stroke, and cancer. Regular physical activity, fitness, and exercise are critically important for the health and well being of people of all ages (US Dept of Health and Human Services, *Physical Activity Fundamental to Preventing Disease*, June 20, 2002, <http://aspe.hhs.gov/health/reports/physicalactivity/>.) Even among frail and very old adults, mobility and functioning can be improved through physical activity (Butler RN, Davis R, Lewis, CB, et al. *Physical Fitness: benefits of exercising for the older patient*. *Geriatrics* 53(10):46-62, 1998.

In 2008, the U.S. Department of Health and Human Services released the Physical Activity Guidelines for Americans. The report provides the latest scientific evidence on the connection between health and physical activity. The consensus among epidemiologists, exercise experts, and health professionals is that 150 minutes of moderate intensity or 75 minutes of vigorous intensity aerobic exercise per week for adults, and 60 minutes per day of moderate to vigorous exercise for children, is enough to improve health and quality of life. Older adults and those with disabilities who cannot engage in 150 minutes because of limitations from chronic conditions should be as active as their conditions and abilities safely allow.

Despite the well-known benefits of physical activity, most adults and many children lead a relatively sedentary lifestyle and are not active enough to achieve these health benefits. Approximately 30% of persons age 65 or older lead a sedentary lifestyle. Older women are generally less physically active than older men. More than one-third of students in grades 9-12 do not regularly engage in physical activity and 43% of them watch television more than two hours per day. (US Dept of Health and Human Services, *Physical Activity Fundamental to Preventing Disease*, June 20, 2002).

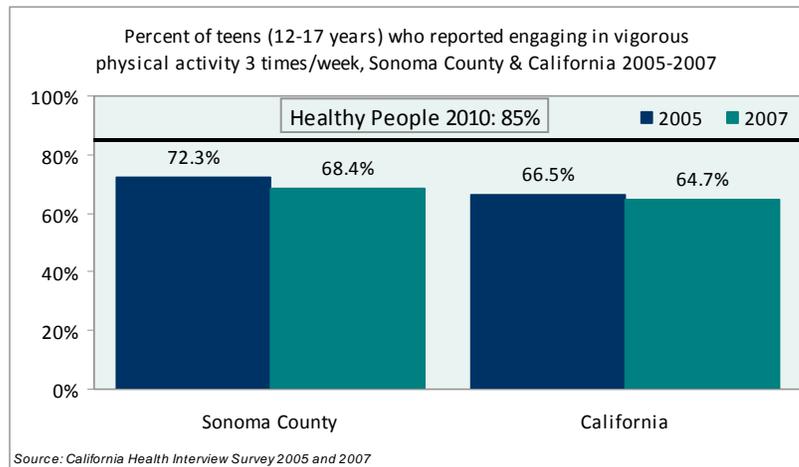
In Sonoma County, only one-fifth (20.7%) of adults reported engaging in 30 minutes of moderate physical activity five days or more per week. This was slightly higher than for the state but below the Healthy People 2010 (HP 2010) goal of 30%. However, when you add the 18.6% of adults engaging in vigorous activity at least 3 times per week, Sonoma County adults exceed the 30% HP 2010 goal.



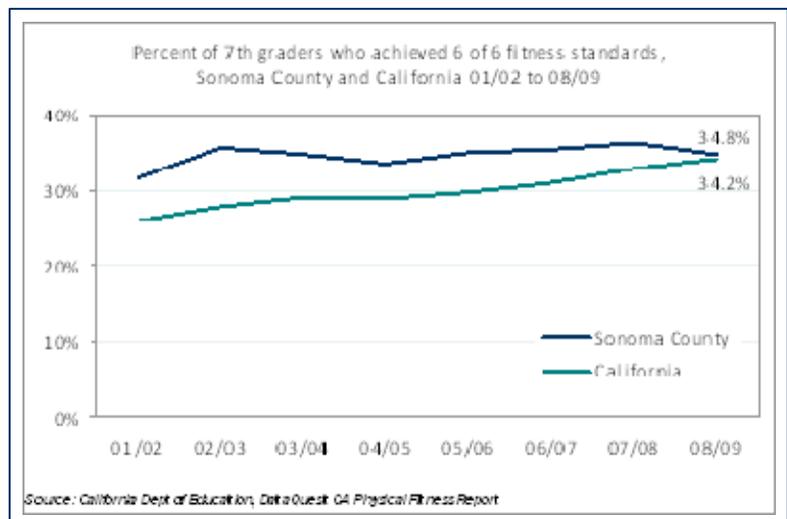
For youth and teens, decreased activity and increased inactivity have contributed significantly to increased rates of overweight and obesity. Children now spend more time sitting in front of the television than in school. According to the CDC, less than eight percent of primary schools and six percent of middle and high schools nationwide provide physical education (PE) (Source: CDC, 2000). Research has shown a significant relationship between physical fitness and

academic achievement, higher levels of self-esteem and lower levels of anxiety and stress (Sources: CDC, *The Association between School-Based Physical Activity, Including Physical Education, and Academic Performance*, 2010; Action for Healthy Kids, *The Learning Connection: The value of Improving Nutrition and Physical Activity in our Schools*, 2004.

More than two-thirds (68.4%) of Sonoma County teens reported engaging in vigorous physical activity at least 3 or more days per week but less than the Healthy People 2010 objective of 85%.



Slightly over one-third (34.8%) of Sonoma County 7th graders achieved 6 of the 6 fitness standards. While the California rate slowly continues to improve, the Sonoma County rate has not changed significantly in the past 8 years.



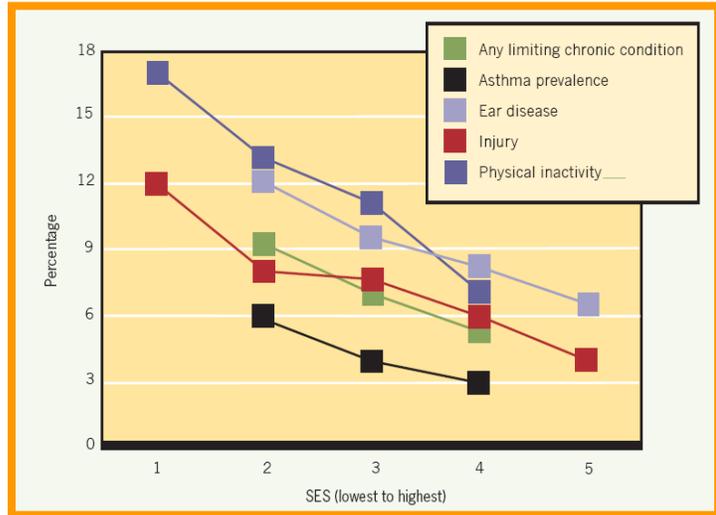
Who is disproportionately affected?

Lower income populations are disproportionately affected by social and environmental conditions that do not support physical activity.

Lower income populations as a group engage in less physical activity and suffer from poorer health outcomes than the general population (*Active Living by Design, Low Income Populations and Physical Activity*, <http://www.healthtrust.org/pdf/PhysicalActivityforLowIncomePopulations-TheHealthTrust.pdf>).

Prevalence of Health Problems in Children

Children in families whose parents have the lowest socioeconomic status (SES), i.e., lowest education, income, and occupational levels are less physically active than children from middle and higher SES families. (Reaching For A Healthier Life, N. Adler, et al)



Note: Different studies generated the data used to create this figure, and some of these sources did not analyze all SES groups.

Source: Created from data reported in Psychol Bull. 2002; 128:295-329.

In Sonoma County, 26.4% of adults below 200% FPL report moderate or vigorous physical activity compared to 42.2% of adults $\geq 200\%$ FPL. However, this difference is not statistically significant.

Low-income populations often confront difficult social and environmental barriers to physical activity. Barriers can include unsafe neighborhood and traffic conditions, poor access to parks and recreational facilities, air pollution, poor health and lack of social support for exercise (*Active Living by Design, Low Income Populations and Physical Activity*, <http://www.healthtrust.org/pdf/PhysicalActivityforLowIncomePopulations-TheHealthTrust.pdf>).

As a local example, in the Santa Rosa/unincorporated neighborhoods south of highway 12 there are 12 parks while in a more affluent, comparable geographic area north of highway 12 there are 36 parks.

Additionally, many Sonoma County schools have eliminated physical education due to decreased funding and increased pressure to improve academic performance. Often low-income schools have little or no time for physical education because they are in Program Improvement with the State Department of Education to improve test scores. Consequently, students from low-income households are more at risk for overweight than their middle-class peers because they are less able to be physically active at school and in their neighborhoods.

A Public Health Approach to Obesity Prevention

Effectively halting the obesity epidemic will require using a combination of strategies that are aimed at changing the physical and social environments in which people live, work, learn and play. Further, expanding efforts to engage community members, and develop and maintain effective partnerships is essential to accomplishing the Plan.

**Sonoma County Obesity Prevention Plan
2010-2013**

Strategy	Objective	Timeline	Who's Responsible	Outcome/Evaluation
Promote the availability of affordable healthy food and beverages				
Increase the availability of healthier food and beverage choices in public service venues	The County of Sonoma will develop and adopt a healthy and sustainable food policy directive.	By 2011	Health Action	Policy directive approved by Board of Supervisors
Improve availability of affordable healthier food and beverage choices in public service venues	Six schools will implement and evaluate an objective in their wellness policy promoting healthy foods and limiting unhealthy foods for classroom parties and fundraisers.	By 2012	Healthy Students Initiative	HEAL Assessment Tool
Provide assistance to food retailers to offer healthier food and beverage choices in underserved areas	At least 20 food outlets in Fetters Hot Springs, Guerneville, Monte Rio, and Santa Rosa will implement the Healthy Food Outlet Project and increase the amount of healthy foods marketed, offered for sale, and sold.	By 2013	CAN-C CX ³ Committee	Produce sales tracking system and results At least 75% of participating food outlets will take advantage of at least one loan or rebate programs At least 75% of qualifying food outlets will take advantage of Network for a Healthy California's Retail Program Participating food outlets will implement

				at least one change in each of the four objective categories Store Quality Scores for all participating food outlets will increase at least 15 % over baseline.
Improve availability of mechanisms for purchasing foods from farms	The Sonoma County Food System Alliance will develop a Food System Assessment to determine gaps and priorities to improve the local food system. Develop buying program for local food outlets to help reduce produce costs, e.g., buying directly from local farms.	By 2011 2010-2013	Health Action CAN-C CX3 Subcommittee & Health Action Food Systems Alliance	Completed Food System Assessment System developed allowing food outlets to purchase directly from local farms
Provide assistance and/or incentives for the production, distribution, and procurement of foods from local farms	Conduct a community outreach and education campaign (iGROW) that provides resources and promotes home, school, neighborhood, and community gardens. The Food System Alliance will develop priority projects to increase production, distribution, and procurement of foods from local farms.	By 2011 By 2011	Health Action Health Action	Increase by 50% the number of gardens measured using registered data from iGROW site. Projects developed
Support healthy food and beverage choices				
Restrict availability of less healthy foods and beverages in	Implement two local ordinances requiring vending machines stock 100% healthy foods and beverages	By 2012	Community Activity and Nutrition Coalition (CAN-C) Policy	Ordinances codified and vending machine contents 100% healthy.

public facilities	and requiring the availability of clean drinking water.		Advocacy Committee	
Institute smaller portion size options in public places.	At least 15 restaurants will implement the Smart Meal Program in south Santa Rosa, showcasing entrees that are lower in fat, calories, and sodium and include components such as grains, fruits, and vegetables.	By 2014	CAN-C CX3 Subcommittee	Monitor sales of Smart Meals in relation to overall sales
Limit advertisements of less healthy foods and beverages	At least 15 restaurants will promote Smart Meals through point-of-purchase marketing and advertising.	By 2014	CAN-C CX3 Subcommittee	Secret shopper to ensure restaurants are meeting program advertising requirements.
	At least 20 food outlets will increase healthy food marketing, which limiting unhealthy marketing, in stores as part of the Healthy Food Outlet Project	By 2014	CAN-C CX3 Subcommittee	Annual assessment of store environments
Discourage consumption of sugar-sweetened beverages	100% of First 5 grant awardees/contract recipients prohibit providing sugar-sweetened beverages to children in their care/programs.	2010-2013	First 5	Policies enacted and practiced.
	Implement <i>Rethink Your Drink</i> campaign at up to 7 schools in south Santa Rosa and municipalities with Healthy Vending Ordinances.	By 2014	CAN-C Healthy Students Initiative and Policy Advocacy Subcommittee	Campaign launched
Conduct community outreach and education to	Provide education and skills-building classes to women of childbearing age, and at-risk youth,	By 2012	MCAH, HEAL Healthcare Sector, CAP, CAN-C	Classes conducted, pre and post evaluation results measure

encourage healthy eating	to increase their ability to shop, prepare and promote healthy foods for themselves and their families.			individual behavior change.
Promote breastfeeding				
Increase support of breastfeeding	Provide assistance to one area hospital to implement the CA Dept. of Public Health's (CDPH) Model Hospital Policy toolkit and select exclusive breastfeeding as a JCAHO's Perinatal Core Measure.	2013	MCAH, SC Breastfeeding Coalition (SCBC)	One area hospital will adopt lactation policies.
	Conduct two development forums to increase provider skill in using motivational interviewing (MI) techniques to increase breastfeeding duration.	2012	HEAL Healthcare Sector Workgroup, MCAH	Post training evaluations demonstrate increased confidence in utilizing MI techniques for breastfeeding promotion.
	Provide technical assistance to Sonoma County Indian Health Project and the Native Breastfeeding Council (NBC) to increase breastfeeding initiation and duration among Native American women.	2011-2013	MCAH	Clinic and WIC data demonstrate increased breastfeeding rates.
	Identify, recruit and support two local businesses and two public agencies that employ a large number of women of child-bearing age to implement lactation accommodation policies that support breastfeeding mothers returning to work.	By 2012	MCAH	Lactation accommodation policies are in place for two businesses and two public agencies.

Promote Physical activity or limit sedentary activity among children and youth				
Increase the amount of physical activity in schools	Coordinate training with six schools for teachers in grades 1-6 to increase capacity to provide a minimum of 100 minutes of moderate to vigorous activity per week.	2010-2013	HEAL School Sector & Healthy Students Initiative	Evaluation measuring trainees increased confidence and commitment to conduct physical education classes. Annual HEAL School Wellness Assessment Tool and Report demonstrating increase in PE offered and in students physical activity levels.
Increase opportunities for extracurricular physical activity	Convene a Sonoma County Physical Activity Collaborative to increase recreation and physical activity opportunities for all citizens through resource management, joint use, and partnership development.	By 2014	HEAL	Physical activity assessment conducted, resource website launched, and plan to increase opportunities developed.
Increase opportunities for physical activity	Conduct a community outreach and education campaign (iWALK) that provides resources and promotes walking.	By 2011	Health Action	Increase by 42% the number of registered iWALK groups as measured using data from iGROW website.
Create safe communities that support physical activity				
Improve access to outdoor recreational facilities	Implement community leadership development program where residents advocate for environmental and policy changes to increase parks and/or amenities, bike lanes/paths, and other infrastructure improvements in underserved communities.	By 2014	HEAL, Health Action	Increased park land/amenities, bike lanes, sidewalks, footpaths, walking trails, and safe pedestrian street crossings.

Enhance Infrastructure supporting bicycling and walking	Organize and conduct walkability audits and engage public works departments in identifying and making walking and bicycling infrastructure improvements. Establish an on-going and sustainable, comprehensive, countywide SRTS program.	By 2012 By 2012	Healthy By Design, Health Action, Countywide SRTS Workgroup Healthy By Design, Health Action, Countywide SRTS Workgroup	Walkability audit reports, infrastructure improvements made and tracked. Funding mechanism in place and program launched.
Enhance traffic safety in areas where persons are or could be physically active	Partner and coordinate with local law enforcement agencies in conducting traffic calming efforts near SRTS program schools.	2010 and on-going	South Santa Rosa SRTS Program, Countywide SRTS Workgroup	Speed trailer used and tracked, increased law enforcement presence and activity. Traffic calmed as measured by speed trailer recorded data and reports.
Enhance personal safety in areas where persons are or could be physically active	Conduct one HEAL/St. Josephs Leadership Training annually to build residents' capacity to develop and engage in community- building projects that will improve neighborhood safety and related issues.	2011-2013	HEAL	Completed projects and evidence of change reported to HEAL.
Encourage communities to organize for change				
Participate in community coalitions or partnerships to address obesity	Continue to convene, provide staff support and/or participate on coalitions, committees, and other partnerships that assist DHS in accomplishing objectives in the 2010-2013 Obesity Prevention Plan, and other evidence-based obesity prevention efforts.	2010 and on-going	HEAL, CAN-C, Health Action, Healthy By Design, MCAH, SCBC, Countywide SRTS Workgroup	Meeting agendas, notes or minutes