Life Expectancy in Los Angeles County

How long do we live and why?

A Cities and Communities Health Report



Message from the Director

Remarkable gains have been made in life expectancy in the United States over the past century. A person born today is expected to live on average nearly 30 years longer than a person born in 1900. Much of this increase is due to public health interventions such as advances in sanitation that led to reduced spread of communicable diseases, workplace education and regulations that led to reductions in occupational injuries, and policies and programs to reduce smoking that led to reductions in lung cancer and other chronic diseases.

In Los Angeles County, average life expectancy at birth has likewise risen steadily, increasing from 75.8 years in 1991 to 80.3 years in 2006 (Figure 1). While life expectancy gains have been seen across genders and each of the four largest racial/ethnic groups in the county, substantial disparities continue to exist. At the extremes, there is a nearly 18-year difference in life expectancy between black males and Asian/Pacific Islander females (69.4 vs. 86.9 years, respectively).

Average life expectancy is one of the most fundamental measures of the health of a population and community. In this report, we present average life expectancy estimates

2006

Figure 1: Life Expectancy in Los Angeles County, 1991-2006

for all cities and unincorporated communities in the County with 15,000 or more residents. The findings are sobering. The dramatic variation seen across the county begs the basic question: Why do such significant disparities exist? For example, why should an unincorporated community in South Los Angeles (Westmont) have an average life expectancy that is 10 years lower than a city (Culver City) only 10 miles away? One important factor reflected in the report is the finding that reduced life expectancy is strongly related to community-level economic conditions.

72

1991



We recognize that life expectancy provides only a partial picture of the public's health and that the quality of one's health while alive may be of equal importance. However, life expectancy is an important global indicator of health that reflects the impact of major illnesses and injuries and their underlying causes, including the social, economic, and environmental conditions in which we live. We hope the information in this report is helpful to communities and cities in identifying and pursuing opportunities to improve the health of their residents. Toward this goal, we look forward to working with you to create environments in which all County residents can live longer and healthier lives.

Jonathan E. Fielding, MD, MPH

Director of Public Health and Health Officer

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Study methods

Defining Cities and Communities within Los Angeles County

To delineate the geographic areas used in the study, the Census 2000 Incorporated Places and Census Designated Places were used to define boundaries for cities and communities, respectively. Because of its large size, the city of Los Angeles was further broken down into city council districts.

Calculating Life Expectancy

Life expectancy at a given age is the average survival time of those who have survived beyond that age. At any given age, the number of years you are expected to survive is calculated by looking at mortality rates for people

who are older than you. For the first year of life, we find mortality rates by dividing the number of recorded infant deaths by the number of infants in the population (based on birth data). For subsequent years, we calculate mortality rates using population estimates and death records. After the age of 100, there are so few persons left that we cannot accurately estimate expected mortality rates. Instead, we extrapolate trends in mortality rates for persons 85 to 99 years of age to individuals over the age of 100. Life expectancy was calculated for individual cities and communities in LA

County using 2006 data (the latest year data were available). Cities/communities with populations less than 15,000 were too small for reliable life expectancy calculations to be conducted and were excluded from city/community calculations. The resulting 103 cities/communities were ranked, with 1 having the longest, and 103 having the shortest, life expectancy at birth.

Interpreting Life Expectancy

We can't predict the future, and anticipated medical advances or environmental improvements may affect how likely an infant born today is to survive into old age. So how do we determine life expectancy?

Life expectancy estimates are calculated based on the assumption that future mortality rates at each age will remain exactly as they are today. We hope that medical advances and improvements in the public's health will cause everyone to outlive our expectations. However, as we formulate health policies, we are more concerned with what is happening right now than with what might happen in a future we can't predict. Life expectancy tables, along with other measures such as years of potential life lost for specific health conditions, help us to identify disparities that currently exist within our communities, to understand how great a toll observed health disparities are likely to take if they remain uncorrected, and to devise interventions accordingly.

The Economic Hardship Index

Social and economic conditions within a community have been shown to be strongly associated with health.³ To examine the relationship between these conditions and life expectancy in the county, we used a measure called the Economic Hardship Index.⁴ The index is scored by combining six indicators:

- 1. Crowded housing (percent age of occupied housing units with more than one person per room)
- 2. Percent of persons living below the federal poverty level
- 3. Percent of persons over the age of 16 years who are unemployed
- 4. Percent of persons over the age of 25 years without a high school education
- 5. Dependency (percent age of the population under 18 or over 64 years of age)
- 6. Per capita income

Data for these indicators were obtained from the 2000 U.S. Census. The index can range from 1 to 100, with a higher index representing a greater level of economic hardship. Cities/communities were ranked by economic hardship, with 1 having the least and 101 having the greatest level of economic hardship. Economic hardship data were not available for the cities of Industry and Montebello.

Findings

Average life expectancy at birth in Los Angeles County in 2006 was 80.3 years. Overall, the estimated life expectancy of LA County residents was approximately 2.5 years higher than the national average. Life expectancy has been improving steadily among all racial/ethnic groups (Figure 2). However, there are still large disparities in life expectancy that have persisted. For example, Asians/Pacific Islanders have an average life expectancy of 84.8 years while for blacks, it is 73.5 years; additionally, although the gap in life expectancy between whites and blacks has narrowed nationally, we have not seen a narrowing of this gap in LA County.

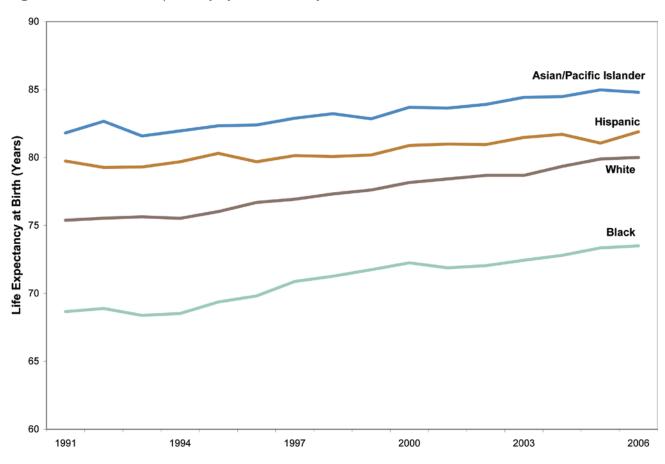
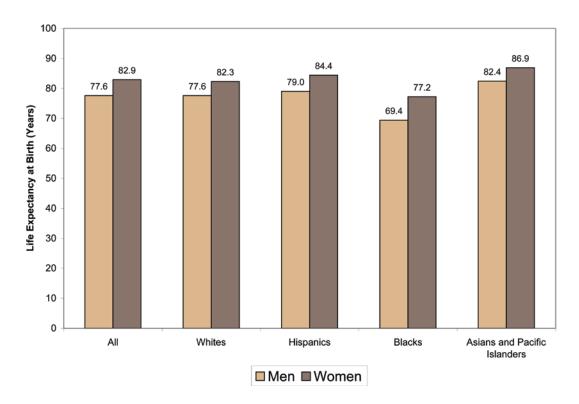


Figure 2: Trends in Life Expectancy by Race/Ethnicity, 1991-2006

Substantial differences in life expectancy are also evident between men and women, with women outliving men by an average of 5.3 years. These pronounced gender and racial/ethnic disparities result in a striking 17.5 year difference in life expectancy between black males and Asian/Pacific Islander females (Figure 3).

Figure 3: Life Expectancy at Birth by Sex and Race/Ethnicity, 2006



We also found that life expectancy varied widely among cities and communities in LA County, ranging from a low of 72.4 years in Westmont, to a high of 87.8 years in La Cañada Flintridge (Figure 5, Table 1). A strong inverse relationship was found between estimated life expectancy and the level of economic hardship in a neighborhood, (Figure 4). Cities and communities with higher levels of economic hardship tended to have lower life expectancies.

Figure 4: Association of Life Expectancy and Economic Hardship in Los Angeles County Cities and Communities, 2006⁶

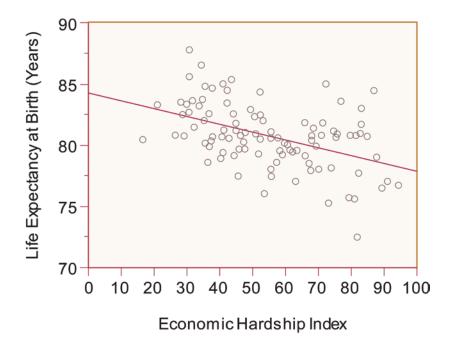


Figure 5: Life Expectancy at Birth by City/Community in Los Angeles County, 2006

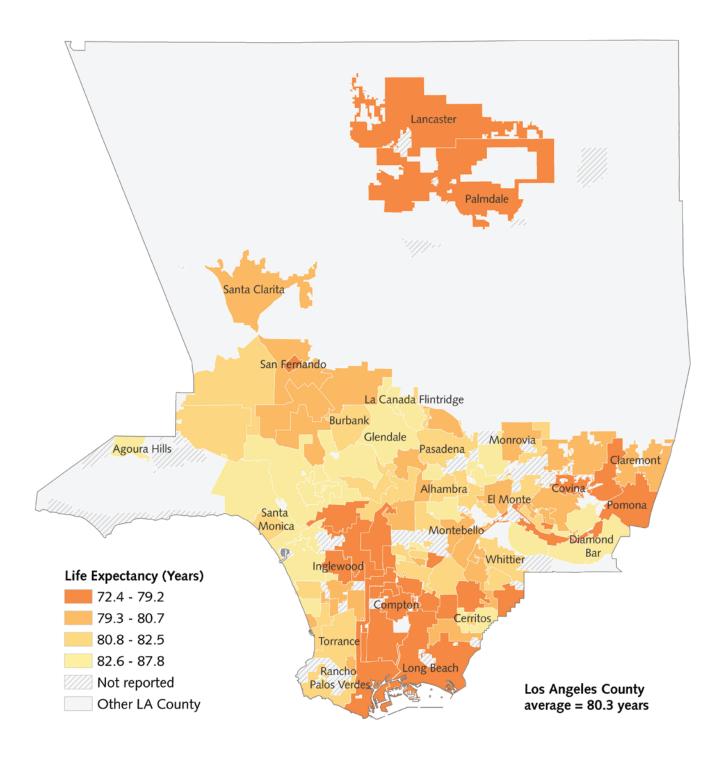


Table 1: Life Expectancy and Economic Hardship, by City and Community, Los Angeles County, 2006

City	y/Community Name	Life Expectancy at Birth (Years)	Life Expectancy Rank		Economic Hardship Index	Economic Hardship Rank	
L	Los Angeles County, Overall	80.3	_	_	_	_	<u> </u>
< /	Agoura Hills	83.4	15		28.6	4	
• /	Alhambra	82.3	28		50.9	47	
1	Altadena	80.7	52		41.0	27	
+ /	Arcadia	84.7	8		37.8	24	
+ /	Artesia	82.0	29		53.4	53	
< /	Azusa	80.0	68		61.0	64	
• E	Baldwin Park	80.8	46		71.3	78	
• E	Bell	80.8	47		80.1	88	
• E	Bell Gardens	79.0	82		87.9	98	
• E	Bellflower	78.0	89		56.0	58	
• E	Beverly Hills	85.6	3		31.3	10	
• E	Burbank	81.2	37		41.5	31	
+ (Carson	79.2	78		52.0	49	
+ (Cerritos	83.2	18		34.3	14	
+ (Claremont	80.7	53		38.0	25	
+ (Compton	75.7	100		79.6	87	
+ (Covina	79.1	80		44.5	36	
+ (Cudahy	80.7	54		84.9	96	
+ (Culver City	82.6	24		37.1	22	
+ [Diamond Bar	84.8	7		35.8	18	
+ [Downey	80.9	43		51.4	48	
+ [Duarte	81.0	41		48.0	45	
E	East Compton	76.5	98		89.6	99	
E	East Los Angeles	80.8	48		81.6	90	
E	East San Gabriel	85.0	5		41.2	29	
+ E	El Monte	80.7	55		75.9	85	
• E	El Segundo	80.8	49		29.3	6	
F	Florence-Graham	76.7	97		94.6	101	
+ (Gardena	80.4	60		52.5	51	
+ (Glendale	82.9	22		49.5	46	
+ (Glendora	80.3	62		37.5	23	
ŀ	Hacienda Heights	83.4	16		42.7	33	
• F	Hawthorne	79.6	73		61.7	65	
• F	Hermosa Beach	80.4	61		16.6	1	
• F	Huntington Park	81.7	34		83.4	95	
+ I	ndustry	78.7	84		_	_	_
I	nglewood	77.0	95		63.2	67	

Excludes cities/communities with populations less than 15,000; Indicates incorporated city; Economic Hardship ranked among 101

Table 1: Life Expectancy and Economic Hardship, by City and Community, Los Angeles County, 2006

C	ity/Community Name	Life Expectancy at Birth (Years)	Life Expectancy Rank		Economic Hardship Index	Economic Hardship Rank	
+	La Cañada Flintridge	87.8	1		30.9	8	
	La Crescenta-Montrose	83.7	12		34.8	16	
*	La Mirada	78.9	83		40.6	26	
*	La Puente	81.3	36		68.8	75	
*	La Verne	80.1	66		35.9	19	
*	Lakewood	79.3	77		41.1	28	
*	Lancaster	76.0	99		53.7	54	
*	Lawndale	79.5	75		58.6	61	
	Lennox	84.4	9		87.2	97	
*	Lomita	80.6	57		42.8	34	
*	Long Beach	78.6	85		57.6	59	
*	Los Angeles, All Districts	80.4	_		_	_	_
•	L.A. City, Council District 1	80.9	44		82.8	93	
*	L.A. City, Council District 2	79.7	71		47.4	43	
*	L.A. City, Council District 3	81.8	31		44.9	38	
*	L.A. City, Council District 4	82.6	25		44.7	37	
•	L.A. City, Council District 5	83.6	13		31.7	11	
*	L.A. City, Council District 6	80.3	63		68.2	73	
•	L.A. City, Council District 7	79.9	70		69.5	76	
•	L.A. City, Council District 8	75.2	102		73.3	81	
*	L.A. City, Council District 9	77.0	96		91.1	100	
*	L.A. City, Council District 10	79.1	81		66.2	70	
*	L.A. City, Council District 11	83.2	19		33.7	13	
•	L.A. City, Council District 12	81.2	38		41.2	30	
•	L.A. City, Council District 13	81.8	32		71.5	79	
•	L.A. City, Council District 14	80.7	56		68.3	74	
•	L.A. City, Council District 15	77.9	91		67.9	72	
*	Lynwood	77.7	92		82.4	92	
•	Manhattan Beach	83.2	20		21.4	2	
•	Maywood	83.0	21		83.3	94	
•	Monrovia	79.7	72		46.7	42	
•	Montebello	80.3	64		_	_	
•	Monterey Park	84.3	11		52.4	50	
•	Norwalk	79.2	79		59.1	62	
•	Palmdale	77.4	94		55.8	56	
+	Paramount	78.1	88		74.0	82	
•	Pasadena	81.2	39		45.2	39	
*	Pico Rivera	80.1	67		59.9	63	

1st quartile (1st to 25th) 2nd quartile (26th to 51st) 3rd quartile (52nd to 77th) 4th quartile (78th to103rd*)

Excludes cities/communities with populations less than 15,000; • Indicates incorporated city; * Economic Hardship ranked among 101

Table 1: Life Expectancy and Economic Hardship, by City and Community, Los Angeles County, 2006

С	ity/Community Name	Life Expectancy at Birth (Years)	Life Expect	ancy Rank	Economic Hardship Index		omic ip Rank
*	Pomona	78.5	87		67.4	71	
•	Rancho Palos Verdes	82.5	26		29.2	5	
*	Redondo Beach	80.8	50		26.6	3	
*	Rosemead	81.8	33		66.1	69	
	Rowland Heights	85.3	4		43.8	35	
*	San Dimas	78.6	86		36.5	20	
•	San Fernando	78.0	90		70.6	77	
*	San Gabriel	82.4	27		52.6	52	
+	Santa Clarita	80.0	69		36.8	21	
*	Santa Fe Springs	80.6	58		55.7	55	
*	Santa Monica	81.5	35		32.7	12	
*	South El Monte	80.9	45		75.7	84	
+	South Gate	81.1	40		75.1	83	
•	South Pasadena	82.7	23		30.9	9	
	South San Jose Hills	85.0	6		72.5	80	
	South Whittier	81.0	42		55.9	57	
*	Temple City	84.4	10		42.5	32	
*	Torrance	82.0	30		35.4	17	
	Valinda	79.6	74		63.6	68	
*	Walnut	86.6	2		34.6	15	
	Walnut Park	83.6	14		77.0	86	
	West Carson	77.5	93		46.0	40	
*	West Covina	80.2	65		47.5	44	
*	West Hollywood	83.3	17		29.9	7	
	West Puente Valley	79.5	76		62.7	66	
	West Whittier-Los Nietos	80.6	59		57.8	60	
	Westmont	72.4	103		81.9	91	
*	Whittier	80.8	51		46.5	41	
	Willowbrook	75.6	101		81.2	89	

2nd quartile (26th to 51st) 3rd quartile (52nd to 77th) 4th quartile (78th to103rd*) 1st quartile (1st to 25th)

Excludes cities/communities with populations less than 15,000; • Indicates incorporated city; * Economic Hardship ranked among 101

Discussion

Substantial disparities in life expectancy persist between men and women, among racial/ethnic groups, and across cities and communities in LA County. The higher life expectancy among women compared to men is seen in most countries; while biological differences between the sexes may play a role, differences in risk behaviors may play an even greater role. In LA County, premature deaths due to homicide, suicide, motor vehicle crashes, drug overdose, liver disease, HIV, and lung cancer, were all higher in males than in females. These seven of the top eight causes of years of potential life lost in men are primarily related to risk behaviors.

The marked geographic and racial/ethnic disparities in life expectancy are also due to underlying social and environmental conditions in our communities, which can profoundly influence our health and the health of our children. One of the most important factors affecting the health of families is the social and economic environment of the neighborhood where a family lives. The strong correlation

between economic hardship and life expectancy observed in this analysis is consistent with a large body of evidence demonstrating that a person's risk of death and risk for many negative health outcomes is higher among those who are poor, who have less education, and who have less social support and fewer economic resources. Those living in poorer neighborhoods may have limited access to health care, less opportunity to participate in health-promoting activities, and fewer resources to fall back on when crises occur.³

Our physical environment, reflected in the way our communities are designed, also affects our health. Poorer neighborhoods may have fewer large grocery stores, resulting in less access to fresh, nutritious, and affordable fruits and vegetables, and may have fewer outdoor recreational areas and safe places where children and families can play. The availability of these community resources encourages positive health behaviors and can determine whether or not our communities promote health. Furthermore, some studies suggest that residents of lower income and ethnic minority neighborhoods may be at increased risk for exposure to toxic environmental hazards in their community.⁷

Table 2: Leading Causes of Premature Death by Sex, Los Angeles County, 2006

	Men		Women		
Rank	Cause of death	Years of life lost	Cause of death	Years of life lost	
1	Coronary heart disease	46,642	Coronary heart disease	16,948	
2	Homicide	41,636	Breast cancer	13,716	
3	Motor vehicle crash	24,159	Motor vehicle crash	8,468	
4	Liver disease	14,812	Stroke	7,841	
5	Suicide	14,563	Lung cancer	7,506	
6	Drug overdose	11,618	Diabetes	6,584	
7	Lung cancer	10,950	Drug overdose	5,447	
8	HIV	9,952	Homicide	5,163	
9	Diabetes	9,772	Liver disease	5,063	
10	Stroke	9,644	Colorectal cancer	4,749	

We can improve life expectancy by reducing mortality from the leading causes of premature death (death before the age of 75) in the County (Tables 2, 3). Understanding the factors that contribute to these leading causes can help communities and city officials focus on effective strategies for preventing premature death and promoting longevity.

For example, if we hypothetically eliminated all deaths from coronary heart disease, the leading cause of premature death among both men and women, we would acheive the largest gains in life expectancy for all groups, with an estimated gain of 3 years on average for men and women of all races and ethnicities.

On the other hand, if we were to completely eliminate all deaths due to homicide, which is the leading cause of premature death among black males, this would likely have the greatest impact on reducing the disparity in life expectancy between black males and males of other racial/ethnic groups, and would result in a gain of 14 times more life-years at birth for black males relative to white males. Other conditions that contribute significantly to racial/ethnic disparities in life expectancy include diabetes and HIV.



Fortunately, most of these premature deaths are preventable. There are many preventive actions that we can take to make continued progress in increasing the years and quality of life in Los Angeles County, and also to reduce health disparities. Continued advances can only be achieved by our working together in active partnership with cities, community organizations, schools, businesses, and health care organizations. While there are a multitude of actions that can be taken to move us foward, the following section contains 7 recommendations to help guide efforts in creating a long and healthy future for all residents in your city or community.

Table 3: Leading Causes of Premature Death by Race/Ethnicity, Los Angeles County, 2006

Rank	Whites	Hispanics	Blacks	Asians/Pacific Islanders
1	Coronary heart disease	Homicide	Homicide	Coronary heart disease
2	Lung cancer	Motor vehicle crash	Coronary heart disease	Motor vehicle crash
3	Motor vehicle crash	Coronary heart disease	Lung cancer	Stroke
4	Drug overdose	Liver disease	Stroke	Suicide
5	Suicide	Diabetes	Motor vehicle crash	Lung cancer
6	Liver disease	Suicide	Diabetes	Homicide
7	Breast cancer	Stroke	HIV	Colorectal cancer
8	Diabetes	Drug overdose	Breast cancer	Liver cancer
9	Stroke	HIV	Drug overdose	Breast cancer
10	Emphysema/COPD	Breast cancer	Colorectal cancer	Diabetes

Creating communities that promote health and well-being

Where we live impacts how long we live

Design communities that encourage active lifestyles and healthy eating

Obesity is one of the greatest challenges facing Los Angeles County, and together with diabetes threatens to halt and even reverse the gains in life expectancy we've achieved. By incorporating health into local planning and land use decisions, urban planners, architects, transportation engineers, developers, and public health professionals can work together to create health promoting environments. 10,11

- Incorporate health considerations in General Plans, transportation plans, and redevelopment activities.
- Increase access to safe places for residents to walk, bike, play and exercise.
- Increase open space requirements in new developments.
- Promote joint use agreements so school resources can be used by community members after school.
- Promote the accessibility of healthy foods through incentives, zoning, and regulations.
- Ensure access to affordable fruits, vegetables, and healthy foods by increasing grocery stores and farmers' markets and decreasing the abundance of convenience stores and fast-food outlets, especially near schools, through zoning regulations, grants, and tax incentives.
- Provide access to healthful foods and snacks in vending machines, cafeterias, and snack stores at public events, schools, and government facilities.





Much of what determines our quality of life and how long we live is rooted in the social and cultural fabrics of our communities. Being able to obtain a good education, be fully employed, feed our families, and have a safe place to live are fundamental to our health. But for millions of Angelenos, acquiring these necessities presents a daily challenge. While no community can solve these problems alone, communities can work together with local partners to promote social connectedness and community well-being.

- Encourage social and civic engagement by residents, community organizations, and businesses.
- Provide parks, recreational areas, and gathering places that foster neighborhood social cohesion.
- Promote the availability of safe, affordable housing through tenant-based rental assistance programs.
- Invest in education and job training programs.
- Promote the availability of early childhood development programs for low-income children.
- Support gang reduction and prevention programs.
- Partner with local businesses to provide jobs, and develop after-school programs.



Create smoke-free environments

Tobacco use is still the number one cause of preventable death and disability, contributing to higher rates of heart disease, stroke, respiratory diseases, lung cancer, and other cancers. More than one million teens and adults in the County continue to smoke. Take steps to decrease smoking rates and exposure to secondhand smoke in your community.¹²

- Enforce smoking bans and restricted access to tobacco by minors. 12
- Support smoke-free environments to protect children and non smokers from second hand smoke. 12
- Improve availability and access to low-cost smoking-cessation therapies and programs. 12
- Use media campaigns to educate people about the harms of smoking and to motivate people to quit. 12
- Educate non smokers about the harms of smoking and second hand smoke.

Reduce excessive alcohol consumption and abuse of other drugs

Excessive consumption of alcohol and abuse of other substances is a significant public health concern. They result in serious medical illnesses, impaired mental health, and higher rates of motor-vehicle crashes, injuries, and violent crime. Additionally, they result in significant social costs such as negative impacts on family interactions, work productivity, and school performance.

- Limit the density of alcohol outlets. 12
- Work with retailers to restrict alcohol sales to minors. 12
- Provide education and training to servers of alcoholic beverages to modify serving practices to prevent customer intoxication and alcohol-impaired driving.¹²
- Prescription drug abuse is a growing problem. Work with schools and community groups to increase awareness among students and families of the harms associated with misuse of prescription drugs.
- Provide access to mental health and substance abuse services to provide treatment and to prevent suicides and violent crime.

Reduce the spread of HIV

Despite recent progress in screening, diagnosis, and treatment, HIV continues to be a leading cause of premature death among black and Hispanic men and contributes significantly to racial/ethnic disparities in life expectancy.



- Everyone between ages 13 and 64 should be tested at least once. If you are at increased risk, you should be tested at least once per year. Visit www.hivla.org to find free testing locations in your community.
- Educate the community about how HIV is transmitted and how to avoid getting infected.
- Promote partner notification through healthcare provider referral.¹²
- Encourage retail stores to make condoms readily available to customers.
- Promote the availability of HIV counseling, testing, and treatment services.

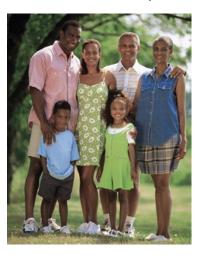
Promote access to regular medical care, prevention and screening

Access to affordable, quality health care is fundamental to maintaining good health. However, over 25% of Los Angeles County adults report having difficulty obtaining medical care when needed, and 15% of parents report difficulty accessing medical care for their children.

- Provide information about, and assistance with, enrolling in state and federal health insurance programs.
- Encourage employers to offer insurance to their employees and their dependents.
- Use media campaigns to educate the community about the importance of receiving recommended health screenings on schedule.
- Provide information about how to obtain low-cost or no-cost health screenings.

Creating a healthy community begins with you

Become a role model in your community by making healthful changes in your own life.



- Eat nutritious foods and stay physically active. Maintaining a healthy weight through physical activity and healthy eating are an important part of a healthy lifestyle that can reduce the risk of chronic health conditions, such as heart disease, stroke, diabetes, arthritis, and certain cancers.
- Don't smoke. If you already smoke, get help to quit. Call 1-800-NO-BUTTS for free assistance.
- Prevent avoidable injuries in adults and children. Injuries including motor vehicle crashes, homicide, suicide, drug overdoses, and drownings are leading causes of death for persons 1-44 years of age.
- Make sure you and your family get recommended vaccinations to protect you, your family, and your community from preventable illnesses.
- Get preventive medical care and screenings.



Helpful Online Resources

For Cities and Communities

Public Health Law & Policy www.phlpnet.org/

Active Living by Design www.activelivingbydesign.org/

Local Government Commission www.lgc.org/

EPA Smart Growth Program www.epa.gov/smartgrowth/

International CPTED Association www.cpted.net/

APA Planning and Community
Health Research Center
www.planning.org/nationalcenters/health/
research/

Building Healthy Places www.cdc.gov/healthyplaces/

The Guide to Community Preventive Services www.communityguide.org

For Businesses

Worksite Obesity Prevention www.cdc.gov/leanworks

For Schools

Healthier U.S. Schools Challenge www.fns.usda.gov/tn/healthierus/index.html

For Families

Let's Move Campaign www.letsmove.gov

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