COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC HEALTH

COMMUNITY HEALTH ASSESSMENT 2015

County of Los Angeles Public Health

COUNTY OF LOS ANGELES – DEPARTMENT OF PUBLIC HEALTH

Community Health Assessment (CHA)

Acknowledgments 4

Introduction 6

I. About Los Angeles County 8

II. Social Environment
- a. Income and Cost of Living 17
- b. Housing and Homelessness 24
- c. Education 28
- d. Food Security and Food Environments 32
- e. Community Cohesion and Emergency Preparedness 35

III. Physical Environment
- a. Community Safety 39
- b. Livable Communities 44

IV. Health Care System
- a.Hospital Infrastructure and Utilization 51
- b. Health Care Safety-Net 54
- c. Physician Supply 60
- d. Access to Medical and Dental Care 61

V. Health Status of Adults, Children, Adolescents & Older Adults
- a. Healthy Mothers and Babies 67
- b. Women's Health 74
- c. Adolescent Health 81
- d. Health of Older Adults 89
- e. Mental Health 95

VI. Preventive Services
- a. Preventive Care 101

VII. How Long Do We Live and Why?
- a. Life Expectancy 107
- b. Chronic Diseases 112
- c. Health Behaviors 118
- d. Communicable Diseases 126

VIII. The Process to Develop the Community Health Assessment (CHA) 133
- a. Stakeholder Input on Health Needs 135
- b. Stakeholder Input on Assets and Resources 138

IX. Endnotes 140

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Introduction

This Community Health Assessment (CHA) describes the health of Los Angeles County residents by presenting the complex web of factors that affect health. While this report illustrates disease rates and individual health behaviors that can increase people's chances of contracting a disease, it also moves beyond disease and personal behavior, to provide a broader analysis on factors that impact people's health. The CHA captures conditions in the social and physical environment that contribute to health such as housing costs, access to healthy food and places for recreation, and physical safety. We are grateful to our community partners and our County colleagues who supported us in selecting measures to represent health broadly.

The purpose of this report is to highlight the key health issues faced by Los Angeles County residents along with critical disparities related to health status and neighborhood conditions. The intended audiences are people working on public health issues, as well the broader professional community, including schools, community organizations and civic leaders. Strategies to improve health will be described in a separate document, the Community Health Improvement Plan (CHIP), a 5-year strategic plan for improving health in Los Angeles County to be developed in conjunction with community partners. Both the CHA and the CHIP are requirements for accreditation of the Los Angeles County Department of Public Health (LAC DPH) by the Public Health Accreditation Board (PHAB), which oversees a voluntary accreditation process for local public health departments across the nation.

As this report illustrates, income level, educational attainment, housing options and many health outcomes are associated with strong disparities when examined by racial/ethnic group, geographic region, gender and other subgroups. LAC DPH looks forward to partnering with community stakeholders to work towards a Los Angeles County that offers healthy choices, healthy neighborhoods, and a high quality of life for all community members.

How This Report is Structured

The data in this report are presented in seven sections: i) About Los Angeles County, ii) Social Environment, iii) Physical Environment, iv) Health Care System, v) Health Status of Adults, Children, Adolescents & Older Adults, vi) Preventive Services, and vii) How Long Do We Live and Why? These seven sections are further divided into 22 topical subsections that stand alone, for example, "Women's Health," "Health Behaviors," "Food Environment and Food Insecurity." Each subsection contains data at the County level and also highlights disparities among subgroups (usually by SPA or race/ethnicity, but occasionally by gender and other subgroups). Not all disparities are mentioned; the fact that a particular disparity is not mentioned does not mean it does not exist or is not significant. Difficult decisions had to be made about what to include in this report and inclusion of a topic also depended on data availability. Each subsection ends with "Key Points" that summarize the data and shed light on what the data mean.

About the Data Presented in this Report

A significant portion of the data in this report come from LAC DPH's 2011 Los Angeles County Health Survey (LACHS). The LACHS is a periodic telephone survey (cell and landline) of Los Angeles County households randomly selected to be representative of the housed, non-institutionalized population in Los Angeles County. Data on children and adults is collected from interviews with adults with a subsample of parents/guardians/primary caretakers of children. The 2011 survey sample consists of 8,036 Los Angeles County adults and 6,013 parents/guard-

ians/primary caretakers of children. Consequently, among the limitations of the LACHS survey are the self-reported nature of the data and sample size limitations which affect the ability to provide reliable estimates for most sub-geographic analysis below the service planning area and for some disparities analysis. Since LACHS does not cover all subjects, many other data sources were included as well. These data may be from different years as data from the same year of the LACHS survey were not always available, or we were able to obtain data from more recent years. However, data comparisons are made only within source and year. For ease of reading, the data year is only included in the references at the end of the report. Occasionally the data year is included in the report's text, when the timeframe is necessary for understanding a data point. Additionally, the data in this report have been rounded.

Breaking Down Data by Smaller Geographic Regions

Most of the data contained in this report are presented at the level of Los Angeles County and occasionally by Service Planning Areas (SPAs), the eight subregions used by County agencies for planning and delivery of services (discussed below in more detail). Brief supplements focusing in more detail on the status of health in each of the eight SPAs are a companion document to this report. In recent years, LAC DPH has begun analyzing data by smaller geographic regions than the SPAs, i.e. by cities/communities. When possible, these data are included or referenced in this report.

Race/Ethnicity

LAC DPH examines health indicators by race/ethnicity to determine if certain groups have higher or lower rates of disease or particular health behaviors, and better or worse access to important resources, etc. This examination is important for prioritizing the focus of public health efforts in order to eliminate disparities among population subgroups.

For most of this report, the race ethnicity categories included are: white, black, Latino and Asian/Native Hawaiian or Other Pacific Islanders (NHOPI). For several years, LAC DPH has combined data for different ethnic groups into one racial/ethnic category labeled, "Asian/Native Hawaiian or Other Pacific Islanders (NHOPI)." A significant limitation of this grouping is that the NHOPI communities' health status can be eclipsed by the more populous Asian group which often skews the data. When possible, data are presented in this report separating the "Asian" subgroup from the "NHOPI" subgroup. When this separation occurs, the sample is too small to generate a reliable estimate for the NHOPI subgroup, so the data are only shown for Asians.

Transgender Data

Transgender is a term inclusive of a range of people who do not identify with their birth sex.[1] Transgender people self-identify using over 100 identity terms, including many that lay outside the traditional binary gender choices of "man" or "woman," and reliable population estimates are difficult to obtain.[2,3] In addition, due to the stigma associated with some types of sexual orientation and a history of discrimination around these issues, collecting accurate data is challenging. While LAC DPH does collect some data on transgender populations, the preponderance of data in this report are limited to man/woman or male/female categories which admittedly conflate sex and gender.

I. About Los Angeles County

INTRODUCTION

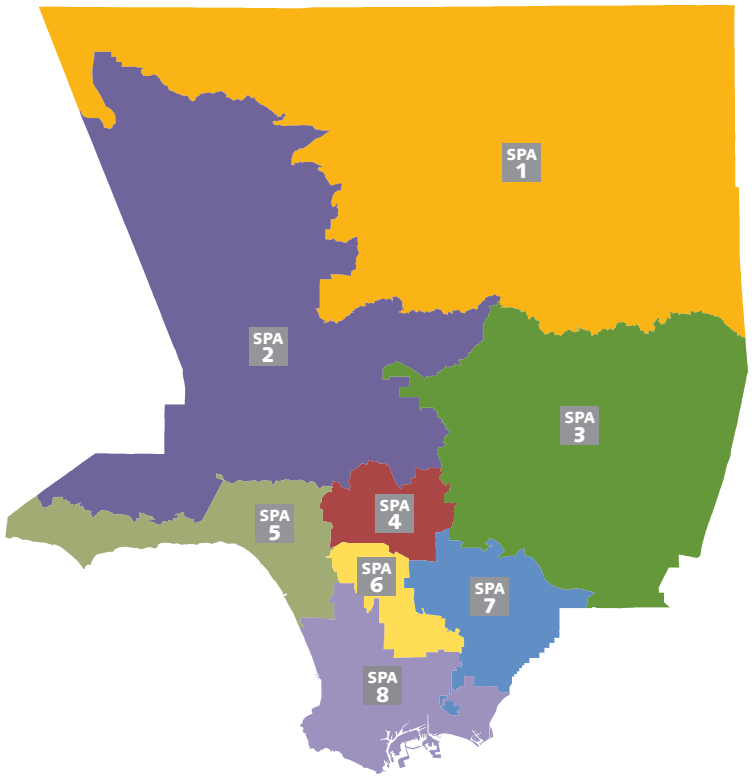
Los Angeles County is the most populous county in the United States, home to over 10 million people.[4] It is a major driver of California's demographics, comprising roughly 27% of the state's total population of 38 million.[5] On its own, Los Angeles County would be the eighth most populous state in the country.[6]

Los Angeles County encompasses over 4,000 square miles. The County offers a diversity of landscapes within its 88 incorporated cities, 140 unincorporated areas, and San Clemente and Santa Catalina islands. Communities range from dense urban neighborhoods to rural areas in the deserts and mountains.

Los Angeles County's Eight Service Planning Areas

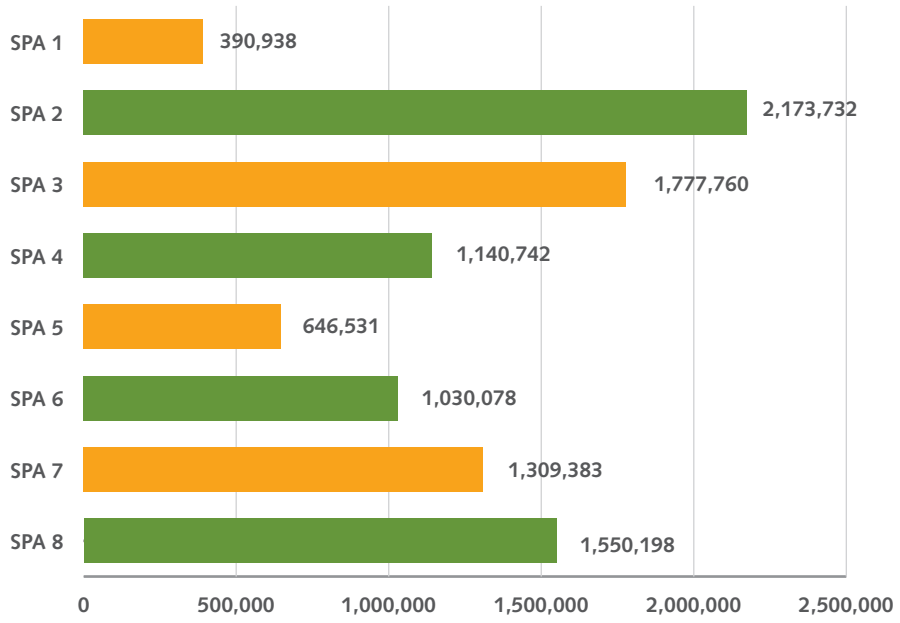
Because of its large size, the County of Los Angeles has divided the region into eight geographic areas called Service Planning Areas (SPAs). These distinct regions are used by several County agencies in the planning and delivery of services (see Map 1).

Map 1 | **Los Angeles County Service Planning Areas (SPAs)**



Map prepared by: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology.

Figure 1 Los Angeles County Population by SPA, 2013 Estimates



Source: July 1, 2013 Population Estimates, prepared by LA County ISD, released 3/15/2014.

Service Planning Area 1, the Antelope Valley, is also referred to as the High Desert. The largest and northernmost SPA, it is a geographically isolated, mostly rural community. SPA 1 is bordered by Kern County, the San Gabriel Mountains and Santa Clarita, San Bernardino County to the east, and Ventura County to the west.[7] Cities include Lancaster and Palmdale, and unincorporated areas include Acton, Lake Los Angeles, and others.

Service Planning Areas 2 and 3 encompass the San Fernando (SPA 2), Santa Clarita (SPA 2) and San Gabriel Valleys (SPA 3). SPA 2 is the most populous SPA with over two million people residing in forty different communities – ten of which are incorporated cities including Glendale, Burbank, Santa Clarita and parts of the City of Los Angeles. Unincorporated areas in SPA 2 include La Crescenta-Montrose and Val Verde. SPA 3 is the second most populous SPA, situated between the San Gabriel Mountains and the Whittier Hills. It is home to many cities including Pasadena and Monterey Park, and to unincorporated areas, including Altadena and Rowland Heights.

Service Planning Areas 4, 6 and 7 are located in the central part of the County and are home to a total of 27 cities, including some communities in the City of Los Angeles. Service Planning Area 4, comprised entirely of one portion of the City of Los Angeles and the City of West Hollywood, is a densely populated area that houses diverse communities including Boyle Heights, Downtown Los Angeles, Koreatown and Hollywood. SPA 6 is the South Service Planning Area. It includes the southern portion of the City of Los Angeles known as South Los Angeles, several cities including Compton and Lynwood, and many unincorporated communities such as Florence/Firestone and Willowbrook. Service Planning Area 7 covers East and Southeast Los Angeles County and includes the cities of Downey and Pico Rivera, as well as several unincorporated areas including East Los Angeles and South Whittier.

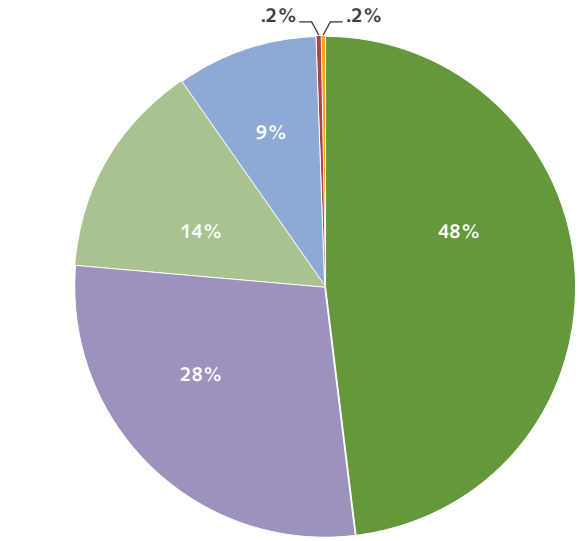
Service Planning Areas 5 and 8 include the County's coastal regions. SPA 5, the West area, includes the cities of Beverly Hills and Santa Monica, the unincorporated area of Marina Del Rey, and part of the City of Los Angeles. SPA 5 is bordered by Ventura County, and the California coastline.[8] SPA 8, the South Bay, includes the cities of Long Beach, Inglewood and Manhattan Beach, part of the City of Los Angeles, as well as unincorporated areas including Lennox and West Carson. SPA 8, the southernmost SPA, is home to the ports and includes the Alameda Corridor which links the ports to the rest of the County and beyond.[9] SPA 8 is bordered by the California coastline and Orange County.

THE DATA

Race, Ethnicity and Language

- Los Angeles County is a racially and ethnically diverse population. Nearly three-quarters (72%) of County residents belong to racial or ethnic minority groups that historically are considered minorities (in comparison to 61% of all Californians).[10,11]
- No single race or ethnicity comprises over half of the population. The County population is 48% Latino, 28% white, 14% Asian, 9% black, 0.2% Native Hawaiian or Other Pacific Islander (NHOPI) and 0.2% American Indian and Alaska Native (see Figure 2).[12]
- Higher concentrations of specific racial/ethnic populations exist in different geographic locations throughout LAC. One in five of the County's Latinos live in SPA 7, followed by 18% in SPA 2 and 17% in SPA 3. Over half (54%) of the County's Native Hawaiian or Other Pacific Islanders (NHOPI) live in SPA 8, and 35% of Asians live in SPA 3. Approximately one-third (34%) of the County's blacks live in SPA 6, and 34% of the non-Latino white population lives in SPA 2.[13]

Figure 2 | **Population by Race/Ethnicity, Los Angeles County 2013**



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: July 1, 2013 Population Estimates, prepared by LA County ISD, released 3/15/2014.

Table 1	Threshold Languages, Los Angeles County 2011

Spanish	Other Chinese	Armenian
Vietnamese	Russian	Tagalog
Cantonese	Korean	Farsi
Mandarin	Arabic	Khmer (Cambodian)

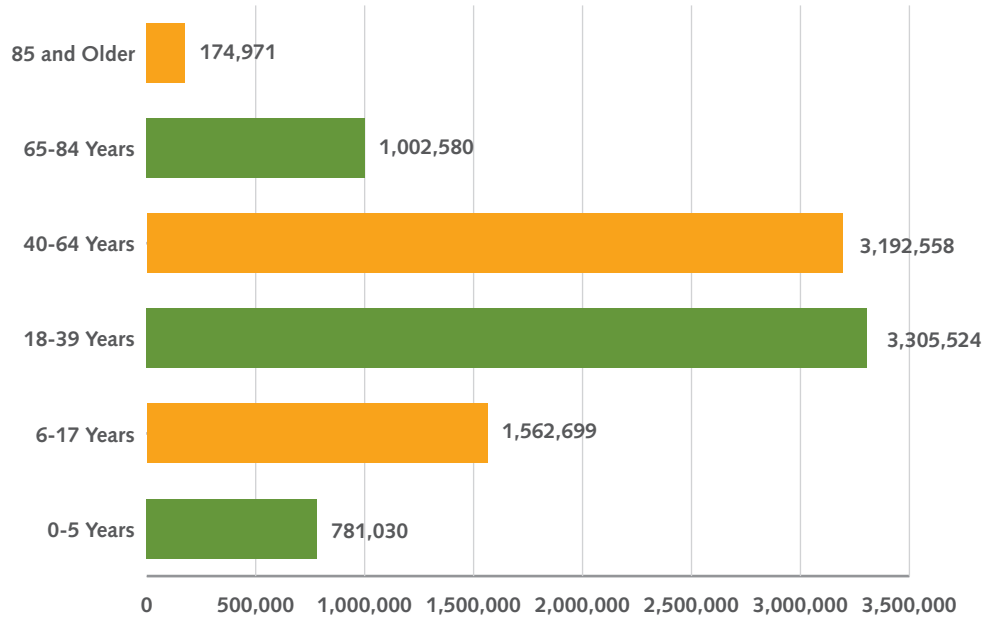
*The State of California defines a "Threshold Language" as a language identified as the primary language, as indicated on the Medi-Cal Eligibility Data System, of 3,000 beneficiaries or five percent of the beneficiary population, whichever is lower, in an identified geographic area, per Title 9, CCR Section 1810.410 (a)(3).[22]
Source: State of California—Health and Human Services Agency, Department of Health Care Services. Retrieved February 7, 2014 from www.dhcs.ca.gov/formsandpubs/Documents/13-09Encl2.pdf.

- Over 200 languages are spoken County-wide. The twelve non-English threshold languages* for the County are listed in Table 1.
- While 61% of adults report that they mostly speak English at home, more than one-third (39%), speak a different language at home.[14]
- Of adults who speak a different language at home, 37% report that they speak English "Very Well," 24% report speaking English "Well," and 39% report speaking English "Not Well" or "Not at All."[15]
- Since 2000, the County has served as the nation's primary immigrant port of entry, and 35% of the adult population is foreign-born.[16] SPA 1 has the lowest concentration of foreign-born adults, at 18%. Meanwhile, 46% of SPA 4 adult residents are foreign-born.[17] Seven percent of blacks and 17% of whites County-wide are foreign-born, followed by 42% of Latinos and 58% of Asians.[18]
- Primary regions of origin for the County's immigrants are Latin America (60%), Asia (31%), and Europe (7%).[19]
- Los Angeles County is home to many immigrant-dense locales. For example: the largest concentration of Armenian-Americans in the United States is located in the suburban city of Glendale, where Armenian-Americans account for 26% of the population.[20] Other large and well-known enclaves include Iranian-Americans in the City of Beverly Hills, Mexican immigrants on the east side of the City of Los Angeles in Boyle Heights and El Sereno, Asians in several San Gabriel Valley cities, and Korean-Americans in the City of Los Angeles' Koreatown.[21]

Gender, Age, and Other Characteristics

- In Los Angeles County, as statewide, females comprise a slightly higher proportion of the population than males (51% vs. 49%).[23] Overall, County life expectancy is 81.5 years; expectancy for females is 84.1 years and expectancy for males is 78.8 years.[24] Average life expectancy for blacks is markedly lower than other racial ethnic groups; County-wide, black life expectancy is 75.6 years, while white, Latino and Asian/NHOPI averages are 80.8, 83.1, and 85.8 years, respectively.[25] Unfortunately (as noted above), data are often collected on Asian and NHOPI ethnicities together, but they comprise a heterogeneous group. Given poorer health outcomes of NHOPI, there may be shorter life expectancy for this population that is masked.
- Fifty eight percent of all adults are married, in domestic partnerships, or living with a significant other.[26] Forty two percent are single: never married, separated, divorced, or widowed,[27] and 43% of homosexual or bisexual adults are married, in domestic partnerships or living with a significant other.[28] It is estimated that there are 14,428 transgender individuals, with a range of 7,214 to 21, 642, and a one-to-one ratio of transgender women (7,214) to transgender men (7,214).[29] Nearly 1 in 5 adults reports having a disability (19%).[30] Of concern, over half of American Indians and Alaska Natives (55%) are categorized as having a disability, followed by nearly one-third of blacks (32%) and over one-quarter of whites (27%), compared to 13% of Latinos, and 14% of Asians/NHOPI.[31] Rates of adults reporting disabilities are highest in SPA 1 (30%) and lowest in SPAs 3 and 6 (17%).[32] (See endnote for definition of disability).
- Eighty-seven percent of adult residents identify themselves as heterosexual, and 4% of adults identify as gay, lesbian, or bisexual. An additional 9% of adults report that they are unsure of their sexual orientation.[33] Of gay, lesbian and bisexual adults, 50% are ages 18-39, followed by 39% ages 40-59 and 11% ages 60 and over.[34]

Figure 3 | **Los Angeles County Population by Age Groups, 2013 Estimates**



Source: July 1, 2013 Population Estimates, prepared by LA County ISD, released 3/15/2014.

Future Demographic Shifts

- Projections indicate that Latinos will be the majority within the next decade, and an estimated 73% of residents will be non-white by 2020 (see Table 2).[35]
- The minority elder population is on a parallel rise. In 2030, the three major minority groups—Latinos, Asians, and blacks—will represent about two-thirds of the county's older adult population (or 1.4 million individuals).[36]
- Over a 20 year period, the older adult population (aged 65 and older) is projected to double in size from 1.1 million in 2010 to 2.2 million in 2030.[37]

Table 2 | **Population Change by Race/Ethnicity, Los Angeles County 2000-2020**

Population Change by Race/Ethnicity in Los Angeles County			
Race/Ethnicity	**2000**	**2010**	**2020 (projected)**
Latino	45%	49%	53%
White	33%	30%	27%
Black	10%	9%	9%
Asian/NHOPI	12%	11%	12%

Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: State of California, Department of Finance, Report P-1 (Race): State and County Population Projections by Race/Ethnicity, 2010-2060. Sacramento, California, January 2013.

KEY POINTS

- Los Angeles County is geographically broad and home to a large, diverse population. There is a clear need for agencies to tailor services to meet varying community needs, including providing services in the appropriate languages.
- The County is becoming even more ethnically and linguistically mixed. Within a decade, Latinos will be the majority racial/ethnic group.
- The County's population is aging. Over the next decade, incidence of chronic diseases and demand for long-term care will increase.

II. Social Environment

II. Social Environment

a. Income and Cost of Living

INTRODUCTION

Higher levels of income are associated with better health while poverty is associated with poorer health. People with higher income levels have lower rates of many chronic diseases and generally live longer compared to people with lower income levels.[38] Income is closely linked with cost of living. When the cost of living in an area is high, low-income families may not have enough money to cover all their basic needs, and may forego healthy food, clothing and medical care in order to pay rent,[39] which can adversely affect health.

Research shows that economic conditions have a significant impact on population health and on differences in health among various groups.[40] Further, there is strong evidence that poverty in childhood has long-lasting effects limiting life expectancy and worsening health for the rest of the child's life, even if social conditions subsequently improve.[41]

Los Angeles County's poverty rate, adjusted for cost of living, is higher than any other county in the state. The social and economic burdens of less than self-sufficient income, coupled with poor education and lack of affordable housing, affect not only those people with the fewest resources, but all residents, since higher rates of disease and disability and lesser productivity translate into higher public costs absorbed by more resourced communities. Improving the economic status of Los Angeles County residents would have a substantial payoff in improved health and longevity, while also increasing economic productivity.[42]

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL).[43]

Cost of Living in Los Angeles County

- In order to pay for basic needs in Los Angeles County, a single-parent family with one preschooler needs to earn at least $55,774 per year, a single-parent family with a preschooler and a school age child needs to earn at least $64,480 per year, and a two-parent family with two children, with both parents working outside the home, needs to earn at least $72,833 per year (see Table 3).[44]

Table 3 | **Income Needed for Monthly Household Self-Sufficiency by Household Composition, Los Angeles County 2011**

	Single Adult	Adult + Preschooler	Adult + One Preschooler & One School Age Child	Two Adults + One Preschooler & One School Age Child
Housing	$1,173	$1,465	$1,465	$1,465
Child Care	$0	$988	$1,426	$1,426
Food	$250	$380	$570	$784
Transportation	$301	$309	$309	$590
Health Care	$145	$389	$411	$468
Miscellaneous	$187	$353	$418	$473
Taxes	$485	$897	$1,040	$1,130
Earned Income Tax Credit	$0	$0	$0	$0
Child Care Tax Credit	$0	($50)	($100)	($100)
Child Tax Credit	$0	($83)	($167)	($167)
Monthly Income Needed for Sufficiency	**$2,541 ($14.44/hour)**	**$4,648 ($26.41/hour)**	**$5,373 ($30.53/hour)**	**$6,069 ($30.53/hour)**
Annual Income Needed for Self-Sufficiency	**$30,496**	**$55,774**	**$64,480**	**$72,833**

Note: The Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The Self-Sufficiency Standard assumes that all adults (whether married or single) work full-time and therefore includes the employment-related costs of transportation, taxes, and child care (when needed). The cost of child care varies, depending upon the age of the child.

Source: Center for Women's Welfare, University of Washington School of Social Work, Self-Sufficiency Standard for Los Angeles County, 2011.

- In California, the minimum wage is $9 per hour.[45] One parent working a full-time job earning $9 per hour makes a total of $1,512 per month,[46] leaving a self-sufficiency shortfall of $3,136 per month for single-parent families with a preschooler. Two parents working full-time jobs earning $9 per hour make a total of $3,024 per month, leaving a self-sufficiency shortfall of $3,045 per month for families with one preschooler and one school-age child (see Table 4).[47]

Income

- The five communities that have the lowest amount of economic hardship are along the coast in SPA 8 (Hermosa Beach, Palos Verdes Estates, Redondo Beach and Manhattan Beach) and SPA 5 (Malibu). The five communities that have the highest amount of economic hardship are inland in SPA 6 (South Los Angeles County communities including parts of South Los Angeles, Florence-Graham and Willowbrook) and SPA 7 (Walnut Park and Cudahy) (see Map 2). The Economic Hardship Index (EHI) combines six indicators related to housing, income, unemployment, education, and age.[48]
- Seventeen percent (17%) of families live below the Federal Poverty Level (FPL).[49]
- Out of 3.3 million households, almost half (49%) earn less than $50,000 per year and two thirds (67%) earn less than $75,000 per year (see Figure 4).[50]
- Of the roughly four million tax returns filed by residents, 19% (769,347) qualify as "low-income" and were eligible to receive the Earned Income Tax Credit (EITC), which averages $1,924 per claim. One third of people who file for the EITC do not claim their refunds, with unclaimed credits averaging $1,443.[51]

Employment

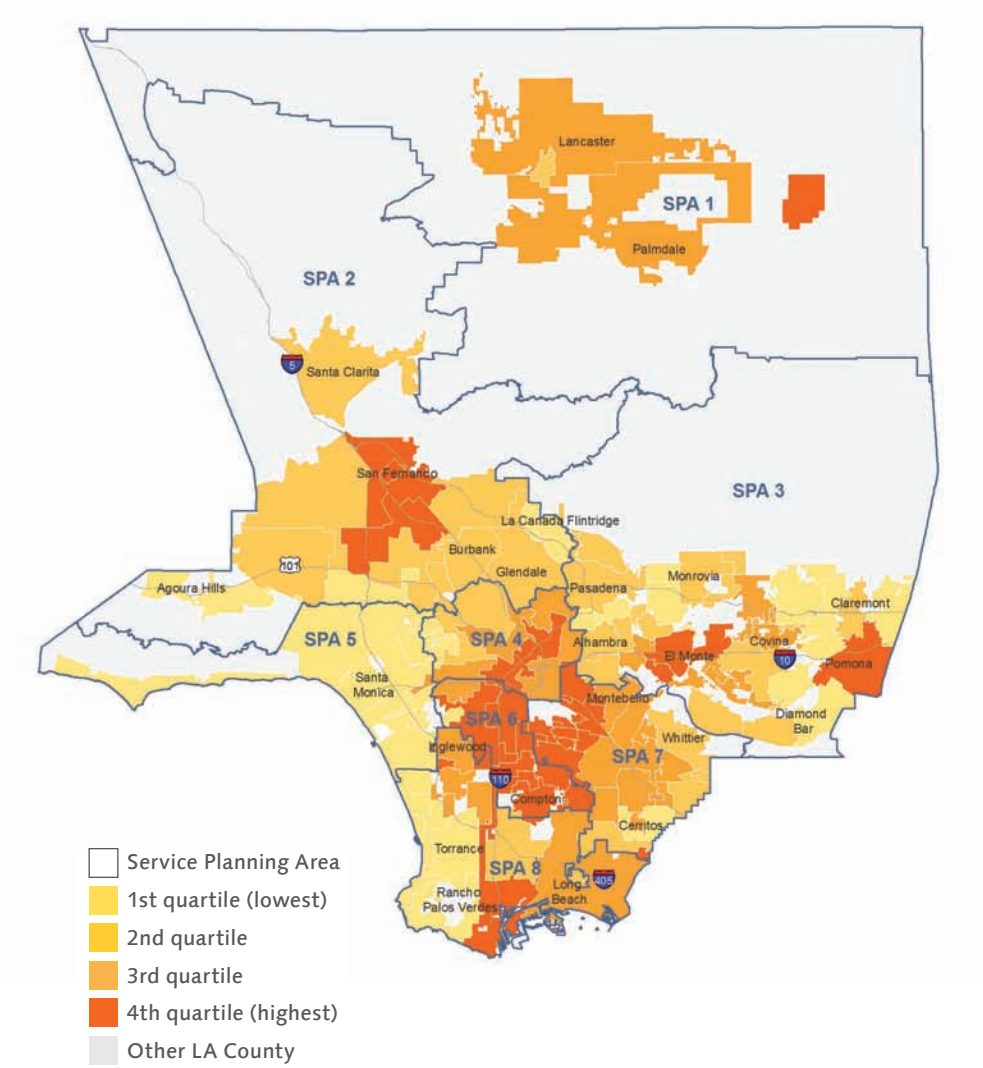
- Fourteen percent (14%) of adults are unemployed and looking for work.[52]
- The top industries that are projected to have the largest number of job openings in Los Angeles County from 2011 to 2017 are: 1) Office and administrative support; 2) Food preparation and serving; 3) Health care (health care practitioners, technicians and support); 4) Sales; 5) Education and training.[53]

Table 4 | **Self-Sufficiency Shortfall for Minimum Wage Earners by Household Composition, Los Angeles County 2011**

	Single Adult	Adult + Preschooler	Adult + One Preschooler & One School Age Child	Two Adults + One Preschooler & One School Age Child
Monthly Income Needed for Self-Sufficiency	$2,541	$4,648	$5,373	$6,069
Monthly Income if Earning Minimum Wage ($9/hour)	$1,512	$1,512	$1,512	$3,024
Monthly Shortfall Between Minimum Wage Income ($9/hour) and Self-Sufficiency Budget	**$1,029**	**$3,136**	**$3,861**	**$3,045**

Sources: 1) Center for Women's Welfare, University of Washington School of Social Work, Self-Sufficiency Standard for Los Angeles County, 2011; 2) Los Angeles County Department of Public Health, calculations for minimum wage monthly income, assuming $9/hour, and a work schedule of 40 hours per week, 52 weeks per year.

Map 2	Economic Hardship Index by City/Community and SPA, Los Angeles County



Map prepared by: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology
Note: The Economic Hardship Index is scored by combining six indicators:
1. Crowded housing (percentage 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 (percentage of the population under 18 or over 64 years of age)
6. Per capita income

Each component is equally weighed and standardized across all cities/communities. The index can range from 1 to 100, with a higher index representing a greater level of economic hardship.
Source: Data for the Economic Hardship Index is based upon U.S. Census Bureau, 2005- 2009 5 –Year American Community Survey, the City/Community boundaries are based upon the 2000 Census and the SPA boundaries are based upon the 2010 Census. Cities/Communities with <10,000 population are included in 'Other LA County.'

- Within these industry areas, the top five occupations that are projected to have the most job openings are waiters and waitresses, followed by cashiers, food preparation and serving workers, retail salespersons and mail clerks and mail machine operators (excluding postal service workers) (see Table 5).[54]

DIFFERENCES AND DISPARITIES

Income

- About two thirds of all households (67%) earn less than $75,000.[55] The lowest-earning quarter (24%) of households earn less than $25,000 per year, while the top ten percent earn over $150,000 per year.[56]
- Blacks (22%) and Latinos (22%) are the most likely to live below the Federal Poverty Level, followed by Asians (12%) and whites (10%).[57]
- People in SPA 5 have the highest median income ($86,572) compared to people in SPA 2 ($69,909), SPA 3 ($68,417), SPA 8 ($66,794), SPA 7 ($57,726), SPA 1 ($57,428), SPA 4 ($47,173), and SPA 6 ($36,400).[58]

Figure 4 Households by Income, Los Angeles County 2012

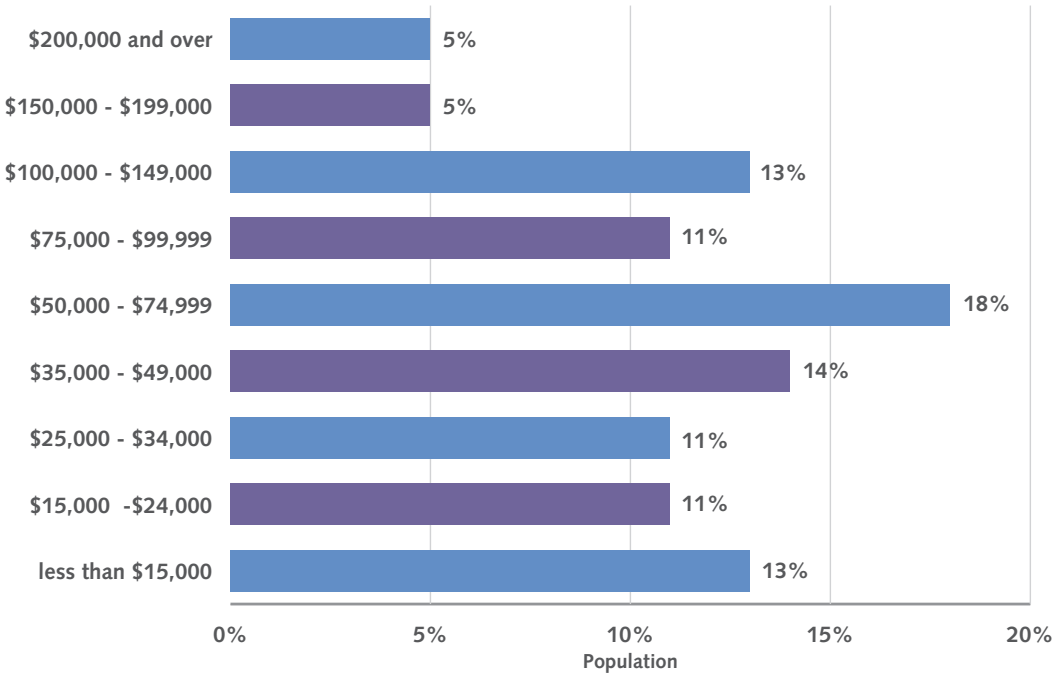


Table 5	Annual Wage for Top 10 Occupations by Projected Job Openings, Los Angeles County 2011 – 2017

Occupation	Median Annual Wage
Waiters and waitresses	$18,868
Cashiers	$20,017
Combined food preparation and serving workers	$18,953
Retail salespersons	$21,849
Mail clerks and mail machine operations, except postal	$28,069
Customer service reps	$35,296
Registered nurses	$85,178
Laborers and freight, stock, and material movers, hand	$23,147
Janitors and cleaners, except maids and housekeepers	$22,747
Counter attendants, cafeterias, concession, coffee shop	$19,217

Sources: Industry and Labor Market Intelligence for Los Angeles County, Los Angeles County Economic Development Corporation; 2013.

Employment

- SPA 1 has the highest percentage of adults who are unemployed and looking for work (17%), followed by SPA 6 (16%), SPA 4 (15%), SPA 3 (14%), SPA 7 (14%), SPA 2 (13%), SPA 8 (13%), and SPA 5 (8%).[59]

KEY POINTS

- When households earn insufficient income, families are typically forced to forego essentials such as medical care or healthy food, and/or live in overcrowded housing to make ends meet, all of which can negatively impact health.[60]
- Given the cost for a family to be self-sufficient, and in light of the fact that almost half of all households earn less than $50,000 per year, the number of families that are not earning enough to meet their basic needs is cause for concern.

- Increasing opportunities for residents to earn a wage that adequately supports their families is key to improving the quality of life – and health – of people in Los Angeles County. However, nine of the ten top occupations projected to create job openings in Los Angeles County through 2017 have a median annual wage well below the amount needed for self-sufficiency.
- Many of the basic costs for working families, including housing, child care, health care, transportation, and taxes are not considered – nor is location – when calculating the Federal Poverty Level (FPL).[61] Alternate tools such as the Self-Sufficiency Standard, are needed that more fully reflect families' basic needs and account for regional or local variation, which is particularly important for housing because housing costs vary widely. Such tools can inform policies and programs to help alleviate poverty and improve health.
- The Earned Income Tax Credit, along with other programs that provide families with assistance to cover food and other essentials, are often underutilized (see discussion in "Food Security and Food Environments"). However, even with this supplemental assistance, those families not earning enough to cover basic costs are not able to bridge the significant gap between their income and the cost of supporting a family.

b. Housing and Homelessness

INTRODUCTION

Having a safe and affordable place to live is interwoven with health. While high housing costs can cause difficulties for both low- and middle-income households, lower income families with high housing costs are particularly affected, as they may not have enough money to spend on other basic necessities, such as food, transportation, clothing and health care.[62] In addition, high housing costs may cause families to live in overcrowded housing, poor quality housing, or to be displaced to other areas, far from jobs and their support network. People in the County who live in poor quality housing face an increased risk for injury and illness.[63] Also, long commutes to work centers from outlying areas with more affordable housing have several costs, affecting family budgets, the environment, and physical and psychosocial health. Increased traffic means poorer air quality, and for commuters, less time for family, civic life, and stress-relieving recreation such as exercise.

Both affordability and quality of housing are public health concerns. Affordable housing in Los Angeles County has become increasingly scarce as wages have failed to keep up with rising costs of rental housing and mortgages.[64] Not only the poor, but also many middle class families in Los Angeles County, face difficulties paying their rent or covering their mortgage.[65] In dire situations, individuals and families may become homeless when they no longer can afford to pay their rent or mortgage.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Data identified with an asterisk (*) are statistically unstable; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[66] v) NHOPI = Native Hawaiian and Other Pacific Islanders.

Availability of Affordable Housing

- Fifty two percent (52%) of households pay 30% or more of their income on monthly housing costs.[67] Households that use more than 30% of their income to pay rent or their mortgage are considered "housing cost-burdened."

Quality, Safe Housing

- Of all households (3,218,511), 7% are overcrowded and an additional 5% are severely overcrowded. "Overcrowded" is defined as 1.0 to 1.5 occupants per room and "severely overcrowded" is defined as greater than 1.5 occupants per room.[68]

- Twenty three percent (23%) of households were built before 1978 and have peeling or chipping paint.[69] (Paint containing lead was banned for residential use in the United States in 1978 by the U.S. Consumer Product Safety Commission due to potential health risks, particularly for children).
- Twelve percent (12%) of households have pests such as cockroaches or mice.[70]
- Seven percent (7%) of households have mold.[71]
- Four percent (4%) of households do not have heat or hot water when they need it.[72]

Homeless Population

- The estimated number of homeless individuals on any given night is 39,463 in 2013, similar to the count in 2011 of 39,414.[73] Over four in ten homeless individuals (43%) are unsheltered (see Table 6).[74]
- In addition to these 39,463 homeless individuals, over 18,000 people are estimated to be "hidden homeless." The exact number is difficult to assess since these are individuals who do not sleep on the street or in shelters, but on private property, such as an unconverted garage, backyard, car or camper in a driveway.[75]
- More than a quarter (27%) of homeless individuals are chronically homeless,[76,77,78,79] having a disabling condition and living on the streets for more than 12 months or having four episodes of homelessness in the last three years.[80]
- One in three homeless adults has mental and/or physical disabilities.[81]
- Eight percent of adults with household incomes less than 300% Federal Poverty Level (<300%FPL) (324,000) were homeless or did not have their own place to live within the past *five* years. Four percent of adults (181,000) with household incomes less than 300% Federal Poverty Level (FPL) were homeless or did not have their own place to live within the past *two* years.[82] *Note: "Within the past two years" and "within the past five years" refers to data collected for the 2011 survey.*
- The cost to support a homeless person in permanent supportive housing is $16,913 per year, compared to $63,808 per year for a homeless person receiving multiple public services, including emergency medical care, paramedics, and time in jail (See Figure 5).[83]

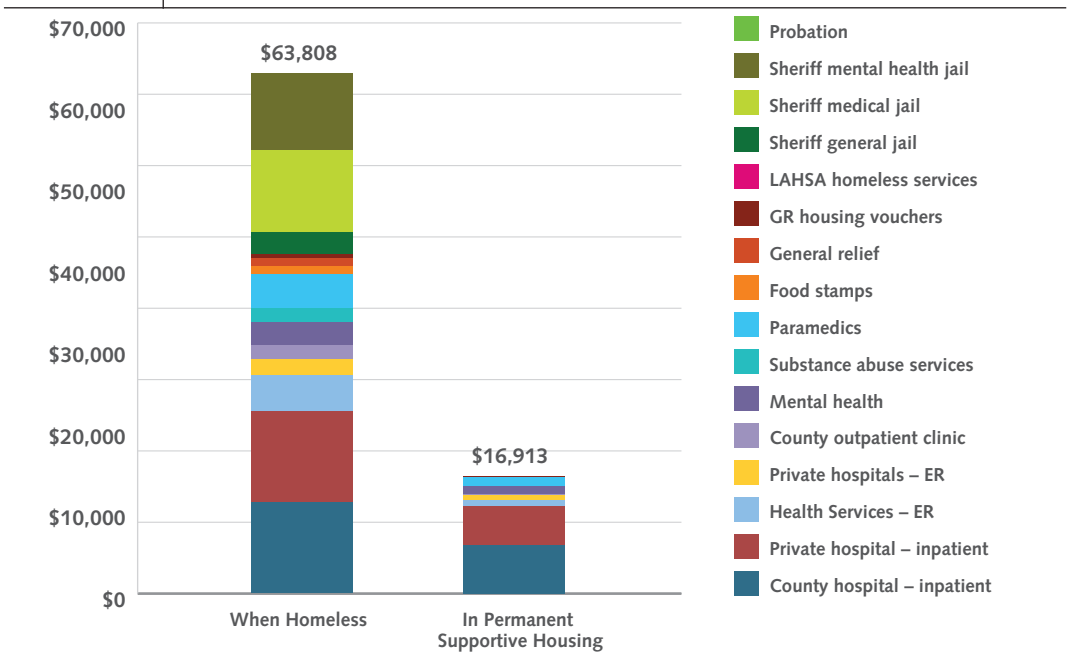
Table 6 | **Number of Homeless People on a Given Night, in Los Angeles County 2011 – 2013**

	Total	Sheltered	Unsheltered
2013	39,463	14,327	25,136
2011	39,414	18,587	20,827

Note: These totals do not include the approximately 18,000 people, who on a given night, are defined as "Hidden Homeless." "Sheltered" is defined as individuals and families in emergency shelters, transitional housing, safe havens, and hotels/motels that accept homeless vouchers; "unsheltered" is defined as an individual or family with a primary nighttime residence that is a public or private place not designated for or ordinarily used as a regular sleeping accommodation for human beings, including a car, park or abandoned building, bus or train station, airport or camping ground.

Source: 2013 Greater Los Angeles Homeless Count Key Findings for the Los Angeles Continuum of Care by Service Planning Area & Supervisorial District, The Los Angeles Homeless Services Authority, updated November 20, 2013.

Figure 5 Costs to Support a Homeless Person and a Person in Supportive Housing, Los Angeles County 2013



Source: The Source for Housing Solutions and Economic Roundtable, "Getting Home: Outcomes from Housing High Cost Homeless Hospital Patients, 2013.

DIFFERENCES AND DISPARITIES

Availability of Affordable Housing

- SPA 6 has the most households that pay 30% or more of their income on monthly housing costs (64%), followed by SPA 4 (56%), SPA 2 (54%), SPA 1 (52%), SPA 7 (50%), SPA 8 (49%), and SPA 5 and SPA 3 (48%).[84]
- More renters (59%) than homeowners (45%) pay 30% or more of their income on monthly housing costs.[85]

Quality, Safe Housing

- Over a quarter (26%) of Latino households live in overcrowded or severely overcrowded conditions, compared to 9% of Asian, 6% of black, and 2% of white households.[86]
- Twenty nine percent of white, 21% of Latino, 20%* of black, and 15%* of Asian/NHOPI households reside in housing that was built before 1978 and has peeling or chipping paint.[87]

Homeless Population

- The adult homeless population reveals disparities by race/ethnicity. Among adults (<300% FPL), blacks had the highest percentage of homelessness within five years and two years (21% - five years, 12% - two years), followed by whites (9%, 6%), Latinos (6%, 3%), and Asians/NHOPI (3%, <1%).[88]

- Disabled adults are significantly more likely to report a history of homelessness. Compared to adults without a disability, adults who report having a disability have more than double the rate of homelessness within the past *five* years (11% vs. 4%) and within the past *two* years (6% vs. 2%).[89] *Note: "Within the past two years" and "within the past five years" refers to data collected for the 2011 survey.*

KEY POINTS

Affordable Housing

- Essentially half of Los Angeles County residents qualify as "housing-cost burdened;" those who are paying more than 30% of their monthly income on rent or mortgage. High housing costs can lead to overcrowded housing, which differentially impacts Latino households, or can lead to acceptance of cheaper, substandard quality housing both of which are cause for public health concern in Los Angeles County.
- Housing costs are a major component of the overall cost of living for individuals and families in Los Angeles County where housing costs are high (see "Income and Cost of Living"). The availability of affordable rental housing options has a dramatic impact on the basic well-being of lower-income families.[90]
- Making affordable housing available for residents of Los Angeles County has the potential to improve health in our communities and positively impact quality of life.

Quality, Safe Housing

- Respiratory diseases such as asthma, childhood lead poisoning, and quality of life issues have been linked to the more than six million substandard housing units nationwide. Residents of substandard housing units are also at increased risk for fire, electrical injuries, falls, rodent bites, and other illnesses and injuries.[91]
- Healthy housing can support occupants throughout their life stages, promote health and safety, and support mental and emotional health. In contrast, inadequate or unsafe housing contributes to infectious diseases and injuries and can affect child development adversely.[92]
- Housing quality is also an indicator of neighborhood conditions since homes are linked to their surrounding neighborhoods. When there is blight, property values decrease, crime increases, and the cohesiveness and political power of communities wears down which directly and indirectly affect health.[93]

Homelessness

- Homeless people often have multiple vulnerabilities, such as being survivors of trauma as veterans or survivors of domestic violence, as well as having a disability, chronic illness, and/or behavioral health needs. Support services as well as housing are needed to bring stability to homeless people's lives.
- The public costs to provide permanent supportive housing for the chronically homeless are significantly lower than the cost of public services (i.e. emergency rooms, substance abuse treatment facilities, jail) associated with living on the streets or in emergency shelters. Permanent supportive housing not only significantly reduces chronic homelessness, but also saves taxpayers' money.[94]

c. Education

INTRODUCTION

Social and economic factors are the largest single predictor of health outcomes, more powerful than behavior, clinical care, and the physical environment.[95] Educational attainment is an essential component of these factors.[96]

Education is closely linked with health through three major pathways: health knowledge and behaviors, employment and income, and social and psychological factors.[97] Education increases knowledge and problem-solving skills, enabling people to make more informed choices about their personal behaviors. It also provides a pathway to employment, including increased earning power for high school and college graduates.[98] The inherent social and psychological benefits of education, including high levels of social support and perceived control over life circumstances, can also lead to improved health outcomes.[99] Simply put: people with more education are likely to engage in healthier behaviors, experience better health outcomes, and live longer.[100,101]

Many residents of Los Angeles County and communities across the nation face barriers to educational attainment. Most notably, research links lower socioeconomic status to lower academic achievement and slower rates of academic progress. Children from lower-income households and communities develop academic skills more slowly, and schools in lower-income communities are often under-resourced.[102,103] Effects of education on health expand into the next generation; the educational levels of parents impact lifelong trajectories in health outcomes for children.[104]

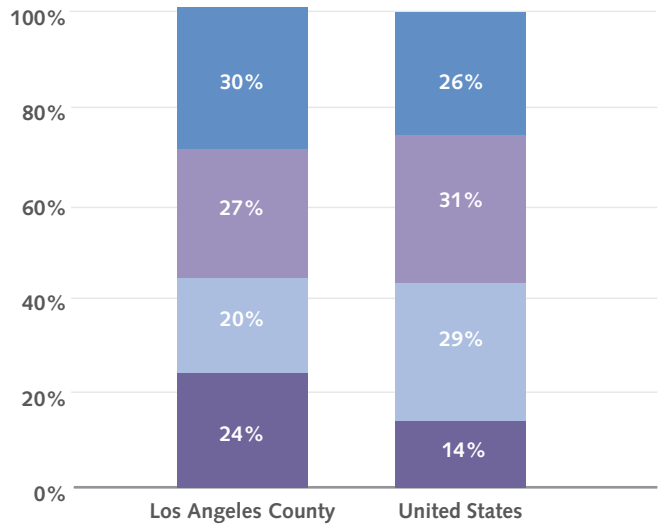
THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) Data identified with a (†) indicate that Black and Asian categories include persons reporting both Latino and non-Latino origin and therefore these categories are not mutually exclusive.

Educational Attainment

- Forty-four percent of adults have a high school diploma or less.[105] Fewer than one in three adults (27%) have completed some college or associate's degree, and 30% hold college or post-graduate degrees (see Figure 6).[106]
- Seventy-seven percent of high school students in Los Angeles County graduate in four years, compared to 80% at the state and national levels.[107,108,109]

Figure 6 Educational Attainment Among Adults in Los Angeles County and the United States



Note: Population is age 25 years and over.
Note: Percentages may not total to 100% due to rounding.
Source: Los Angeles County: U.S. Census Bureau, 2008-2012 American Community Survey 5-Estimates.
United States: U.S. Census Bureau, 2011 American Community Survey 1-Year Estimates.

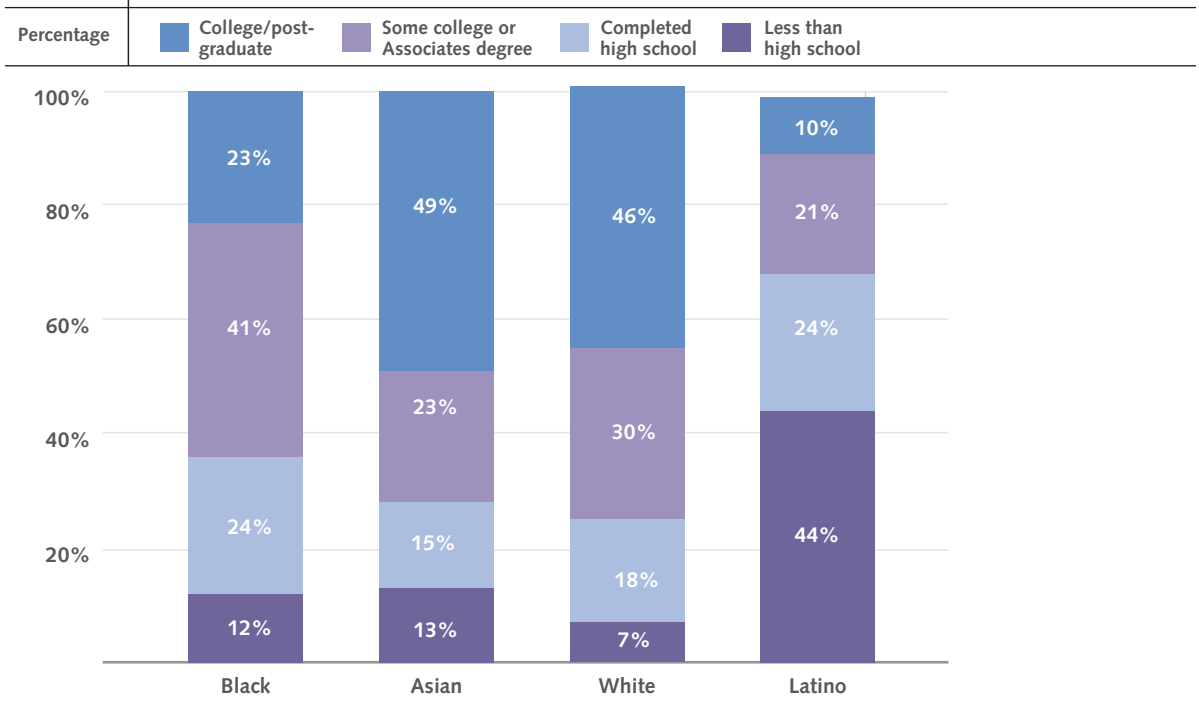
Los Angeles County Schools

- California's Academic Performance Index (API) score is a measure of a school's academic performance and growth. The scale for the API ranges from 200 to 1000, and the State Board of Education has established an API score of 800 as the target to which all public schools should aspire.[110] In Los Angeles County, 38% of elementary, middle, and high schools fall below API scores of 800.[111]
- Countywide, 1,726,388 children are enrolled in school. 91% are enrolled in public schools, and 9% are enrolled in private schools.[112,113]

DIFFERENCES AND DISPARITIES

- There are differences in educational attainment among racial/ethnic groups (see Figure 7). Among Latino adults, 44% have less than a high school diploma compared with 13% of Asian adults (not including Native Hawaiian or Other Pacific Islanders)†, 12% of black adults†, and 7% of white adults.[114]
- Latinos also have the lowest rates of holding college or post-graduate degrees: ten percent, compared to 23% of blacks†, 46% of whites and 49% of Asians†.[115]

Figure 7 Educational Attainment Among Adults in Los Angeles County by Race/Ethnicity, 2008-2012



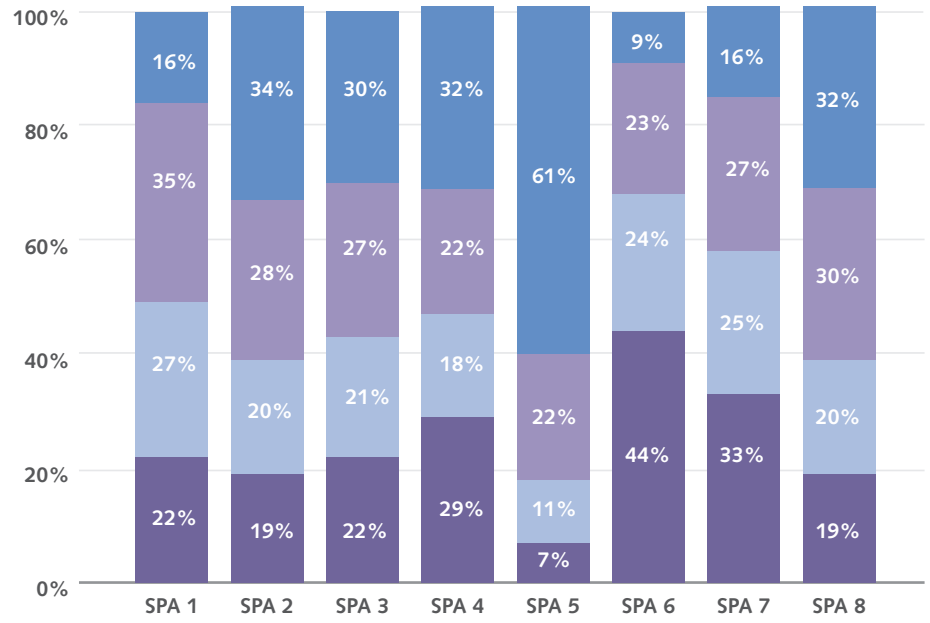
Note: Population is age 25 years and over.
Note: Percentages may not total to 100% due to rounding.
Source: 2008-2012 American Community Survey 5-Year Estimates, US Census Bureau.

- Educational attainment rates also vary across SPAs. SPA 5 has the largest proportion of adults who hold college or post-graduate degrees: 61% (see Figure 8).[116]
- Meanwhile, 44% of adults in SPA 6 have less than a high school diploma.[117] The percentage of adults who have less than a high school diploma is also higher in SPA 7 (33%) compared to the remaining SPAs (see Figure 8).[118]
- The high school graduation rate is 68% for blacks, 69% for American Indian and Alaska Natives, 73% for Latinos, 77% for Native Hawaiian or Other Pacific Islanders (NHOPI), 87% for whites and 94% for Asians.[119]

KEY POINTS

- Education is one of the most powerful predictors of health. Research consistently shows that health outcomes improve with increasing years of education.[120]
- Those with less education are more likely to have chronic diseases like heart disease and diabetes and are more likely to be disabled.[121]
- Educational attainment affects health across generations. Parental education not only affords social and economic advantages for parents – it impacts their children's health as well.[122]

Figure 8 Educational Attainment Among Adults in Los Angeles County by SPA, 2008-2012



Note: Population is age 25 years and over.
Note: Percentages may not total to 100% due to rounding.
Source: 2008-2012 American Community Survey 5-Year Estimates, US Census Bureau.

- Given that the vast majority of students attend public schools, it is essential to find countywide solutions to support school quality and resources.
- Los Angeles County has one of the highest proportions of people without a high school education of any metropolitan area in the United States.[123]
- County communities face wide disparities in educational attainment and opportunities among racial/ethnic groups and among SPAs.
- If Los Angeles County had the same levels of educational attainment as California's top-ranked county (Marin County), 32% of premature deaths per year would be averted.[124]
- The development of a cultural value for educational achievements is important because of the expected positive short and long-term impacts on the population.

d. Food Security and Food Environments

INTRODUCTION

Good nutrition is essential to the growth and development of children, helping to maintain a healthful weight while reducing the risk of many acute and chronic health conditions across the life span. Poor diet can result in nutrient deficiency, decreased attention span and work productivity, and weakened resistance to acute and chronic disease.[125,126] In a school setting, children who receive good nutrition are less absent and perform better on standardized tests.[127]

When a household is food-secure, all members have access at all times to safe, nutritionally adequate food for an active, healthy life, as well as the ability to acquire this food without having to steal, scavenge, or resort to emergency supplies.[128] Households with low food security experience food shortages that reduce the quality of their diet, while households with very low food security also face reduced food intake because the household lacks money and other resources for food.[129] Despite an abundant food supply in the United States, people in many Los Angeles County households face limited availability of safe and nutritionally adequate food and/or uncertain ability to obtain these foods.

The state of California administers several programs to help alleviate food insecurities and hunger and improve nutrition in low-income households. CalFresh (formerly known as Food Stamps) provides eligible families with monthly electronic benefits to purchase food. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides monthly checks for pregnant and breastfeeding women, infants and children ages 0-5 to purchase healthy foods that promote growth and development. Other programs include the school breakfast and lunch program, the Summer Food Service Program which provides meals to children when school is not in session, and the Child and Adult Care Food Program (CACFP) – which provides meals in child care centers, day care homes, adult day care centers, and homeless shelters.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Data identified with an asterisk (*) are statistically unstable; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[130] v) NHOPI = Native Hawaiian and Other Pacific Islanders.

Food Security and Food Environments

- In Los Angeles County, 18% of households with incomes <300% of the Federal Poverty Level (FPL) have low levels of food security, and an additional 13% have very low food security.[131]

- Among adults for whom it is somewhat or very difficult to access fresh fruits or vegetables, 77% cite high cost as the biggest barrier.[132] Other reasons include poor quality of produce (43%) and neighborhood stores not selling produce (28%*).[133]
- Among children 0-17, 82% live in a community that has "good" or "excellent" access to fresh fruits and vegetables, while 18% have "fair" or "poor" access to fresh fruits and vegetables.[134]
- While approximately one million low-income children are eligible for free or reduced school meals, only 62% of eligible low-income students participate.[135]
- Despite a record high number of 1.1 million individuals who receive CalFresh benefits, an additional 700,000 income-eligible residents do not participate in the program.[136]
- There are 495,084 individuals who participate in WIC programs.[137]
- Fifty-three percent of the 148 farmers' markets in Los Angeles County accept Women, Infants, and Children (WIC) benefits, and 39% accept Electronic Benefits Transfer (EBT) from people who participate in the CalFresh program.[138]

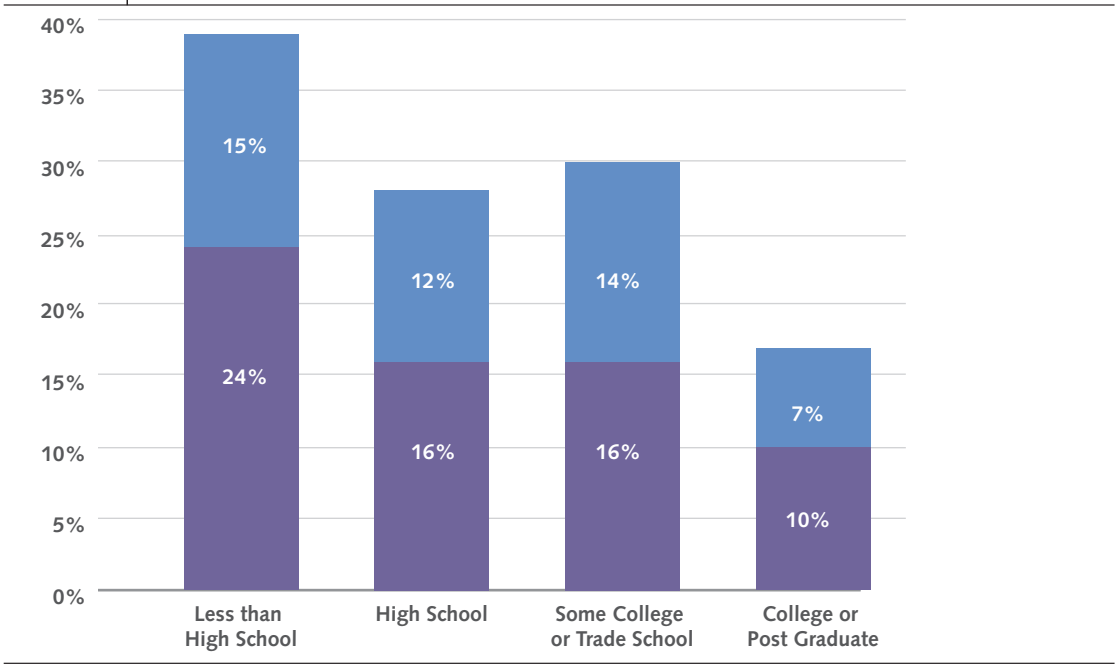
DIFFERENCES AND DISPARITIES

- The percentage of households with incomes <300% FPL and facing low or very low food security ranges from a high of 37% in SPA 8, followed by 33% in SPA 4, 31% in SPA 7, 30% in SPAs 2 and 6, 28%* in SPA 1, 27% in SPA 3 and 19%* in SPA 5.[139]
- Among adults in households <300% FPL, 40% of blacks are living in food-insecure households, followed by 33% of Latinos, 24% of whites, and 23% of Asians/NHOPI.[140] Also, 39% of adults in households <300% FPL and who have less than a high school education are food insecure (see Figure 9).[141]
- Black children 0-17 have the worst access to fresh fruits and vegetables, with 43% living in communities with only poor or fair access, compared to Latino children (19%), Asian/NHOPI children (11%), and white children (9%).[142]
- Predominantly white neighborhoods have three times as many supermarkets as predominantly black neighborhoods and nearly twice as many markets as predominantly Latino neighborhoods.[143]

KEY POINTS

- Almost one-third of all households in Los Angeles County do not have sufficient resources to buy adequate food supplies for themselves and their families. Rates of food insecurity are far higher than national rates. Large racial/ethnic, geographic, and income disparities exist among households experiencing food insecurity.
- Many neighborhoods of low-income residents and communities of color have an abundance of fast food venues, liquor stores, and convenience stores, but lack healthy food options, such as full-service grocery stores and farmers' markets.[144] Policies and environments that create easy access to healthy, affordable food are essential to positively impact people's eating behavior.[145]

Figure 9 Percent of Households <300% Federal Poverty Level with Food Insecurity by Educational Attainment, Los Angeles County 2011



Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- CalFresh plays a big role in mitigating poverty across the state.[146] However, only 60% of eligible families participate.[147] Improving participation requires a shift in public perception and an evolution of CalFresh administration practices, namely improving communication about the program's value while streamlining enrollment and administration.[148]
- While food insecurity impacts people of all ages, it is of particular concern for pregnant women, children, elderly persons and other nutritionally vulnerable groups. The Centers for Disease Control and Prevention have prioritized the reduction of household food insecurity and the elimination of very low food security among children.

e. Community Cohesion and Emergency Preparedness

INTRODUCTION

The social environment has a profound and powerful effect on individual health. One key dimension is the level of community engagement. As citizens participate in voting and volunteerism, they demonstrate commitment to the political process and confidence in social institutions, thereby helping to create inclusive and engaged places to live, learn, work and play. Nurturing community cohesion ultimately helps to create a healthier population, society, and workforce.[149]

This is particularly notable when it comes to emergencies. The geography of Los Angeles County exposes millions of people to the risk of potential disasters such as fires, floods, mudslides and earthquakes. Also, the County--densely populated and home to two of the nation's busiest ports--is consistently ranked as one of the most likely U.S. locations to become a terrorist target.[150] Community resilience to disasters focuses on the capacity of neighbors, neighborhoods, and communities to come together and assist one another during a disaster rather than relying solely on first responders, such as police and firefighters, and other outside assistance.

THE DATA

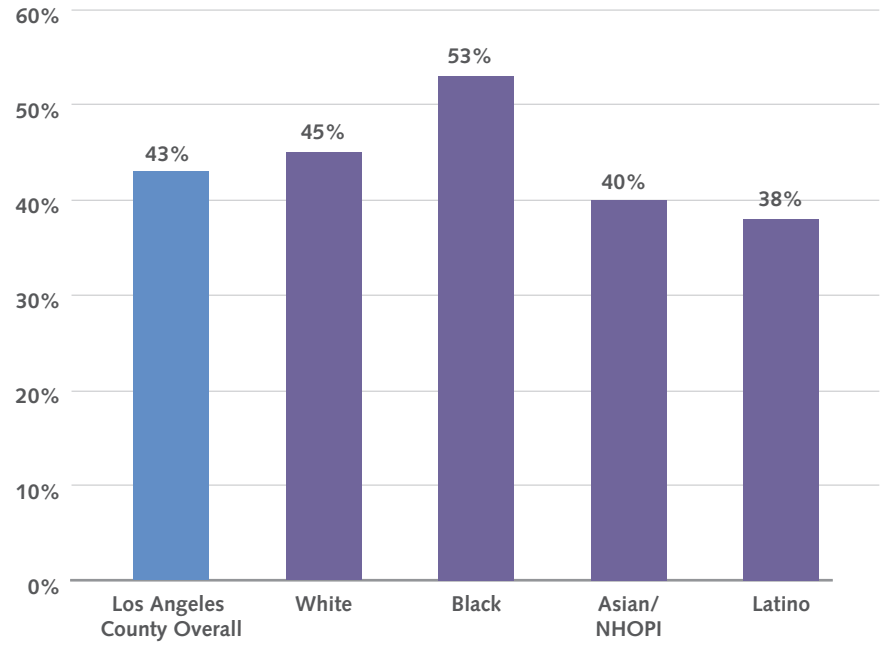
Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) NHOPI = Native Hawaiian and Other Pacific Islanders.

Community and Electoral Engagement

- Eleven percent of adults volunteer in their communities.[151]
- Fifty-seven percent of the total population (5,608,567 people) is aged 18 years and older and a U.S. citizen, and thereby eligible to vote.[152] The majority of these eligible voters reside in SPAs 2, 3 and 8.[153] Eighty-seven percent of people eligible to vote (4,871,021 people) are actually registered to vote.[154]
- Electoral engagement increased during the election of President Barack Obama in 2008. Half of the newly registered voters for that election were between the ages of 18 and 29, and this age group now comprises the largest group among Los Angeles County registered voters.[155,156]
- Registration for the 2012 General Election saw a nearly 10% increase from 2008, making Los Angeles County one of the largest election jurisdictions in the nation.[157]

Figure 10 | **Percent of Households that have a Family Emergency Plan by Race/Ethnicity, Los Angeles County 2011**

Percentage



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Emergency Preparedness

- Trust in the competency of a public health system contributes to community resilience in that it improves responses to recommendations before, during, and after disasters. The majority of households (43%) feel "somewhat confident" that the County's public health system can respond effectively to protect the public's health during an emergency. Twenty-six percent feel "not too confident," 17% feel "very confident," and 14% are "not at all confident."[158]
- Forty-six percent of households have a disaster supply kit[159] and 43% of households have a family emergency plan in place.[160]
- Thirty-eight percent of households describe themselves as being "somewhat" prepared to cope after a catastrophic disaster, compared to 31% feeling "not at all/not very" prepared and 31% being "mostly/completely" prepared.[161]
- More than one in four residents (26%) believes that their community is either "not too prepared" or "not at all" prepared.[162]

DIFFERENCES AND DISPARITIES

- Rates of community volunteerism vary across the County, ranging from 9% of SPA 2 adults to 17% of adults in SPA 5.[163]
- The likelihood of having a disaster supply kit increases with education: 33% of households with adults with less than a high school education have a kit, while 55% of households with adults with a college or graduate degree have a kit. SPA 7 households have the lowest proportion of adults with kits (34%).[164]
- Racial/ethnic differences exist among households with a disaster plan: 53% of households with black respondents and 45% of households with white respondents report having plans, compared to 40% of households with Asian/NHOPI respondents and 38% of households with Latino respondents (see Figure 10).[165]
- While 25% of whites described their community as "not prepared," communities of color are less confident: 44% of Latinos, 39% of blacks, and 37% of Asians/NHOPIs reported that their communities were not prepared to deal with emergencies.[166]

KEY POINTS

- Voter turnout in Los Angeles County is generally higher than participation nationwide, and the Los Angeles County electorate skews young. Few County adults report engaging in volunteer activities.
- Many County residents feel a valuable connection to their neighbors which is one measure of community cohesion.
- Los Angeles County is vulnerable to emergencies, both natural and man-made. Levels of household preparedness and community trust in the public health system vary by demographic characteristics such as education and income.
- Community resilience works hand in hand with emergency preparedness to assure stronger communities.[167]

III. PHYSICAL ENVIRONMENT

III. Physical Environment

a. Community Safety

INTRODUCTION

Violence and crime not only contribute to death and disability, they exacerbate various chronic diseases by inducing chronic stress and fear.[168] Continual stress and fear trigger unhealthy physical responses (e.g. high blood pressure),[169] and serve as obstacles to engaging in physical activity and walking in one's neighborhood, thus eliminating the health benefits of such activities.[170]

What constitutes and contributes to a "safe" community is far more than an absence of violent crime and a low density of alcohol outlets – the primary focus in this section. Crime risk factors –including poverty, unemployment, and inadequately resourced schools – coupled with protective factors, such as a strong community investment in violence prevention services and adequately resourced schools, combine to either promote or hinder community safety.[171]

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) NHOPI = Native Hawaiian and Other Pacific Islanders.

Violent Crimes

- The total number of violent crimes (for example, homicide, forcible rape, robbery, aggravated assault) and property crimes (for example, burglary, motor vehicle theft, larceny theft) has decreased yearly over a 10-year period between 2003 and 2012, from 84,670 to 44,556 for violent crimes and from 307,294 to 232,266 for property crimes.[172]
- From 2007 to 2011, there were a total of 3,696 homicides. More than three quarters of these homicides (76%) involved firearms.[173]

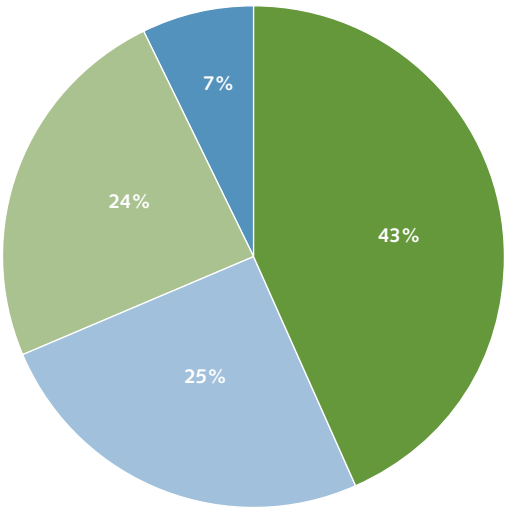
Perception of Safety

- Twenty-nine percent (29%) of parents/guardians rate the public safety of their communities as just fair or poor.[174]

Alcohol Presence and Alcohol-Related Harms

- There is an average of 16 alcohol outlets (on-and off-premises combined) per 10,000 people and about four alcohol outlets per square mile. This is slightly lower than the California average of 18 outlets per 10,000 people.[175] On-premises outlets are locations in which alcohol is consumed on site (bars and restaurants) and off-premises outlets are those where alcohol is sold to be consumed off site (liquor and grocery stores).

Figure 11	Death by Homicide by Age, Los Angeles County 2007 - 2011
	Ages 0-24 Ages 25-34 Ages 35-54 Ages 55+



Source: Deaths and Average Annual Death Rates by Demographic Group for Firearm Homicides and Other Homicides, Los Angeles County Residents, 2007 – 2011. Death Statistical Master File, California Department of Public Health, Office of Vital Statistics, July 1 [2007-2009] Smoothed Population Estimates, prepared by the Office of Heath Assessment and Epidemiology, Los Angeles County Department of Public Health, released 7/18/2013. July 1, [2010-2011] Population Estimates, prepared for County of Los Angeles, Internal Services Department, Social Services Systems Division. Prepared by LAC-DPH-IVPP, Feb 10, 2014.

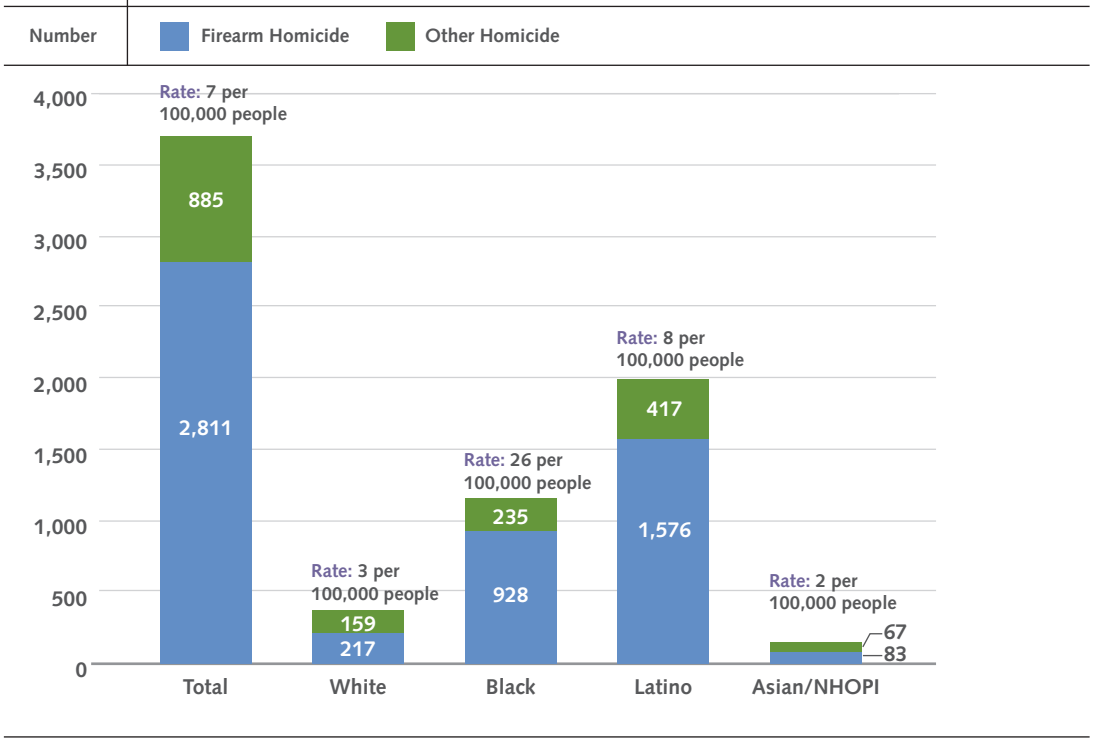
- Over a 5-year period (2007 to 2011), 415 people died and 16,478 people were injured in automobile crashes in which a driver was driving under the influence of alcohol (DUI) or alcohol was determined to be the primary cause. Los Angeles County's DUI injuries represent about one quarter of all DUI injuries in the state of California during this time period.[176]

DIFFERENCES AND DISPARITIES

Violent Crimes

- Of the 3,696 total homicides from 2007 to 2011, children and youth ages 0-24 are most often the victims (43%; 1,591 total deaths). Of these 1,591 child and youth victims, 176 were children ages 0-14 and 1,415 were youth ages 15 to 24 years. The data on victims in other age groups are as follows: people ages 25-34 (25%; 927 total deaths), ages 35-54 (24%; 892 total deaths) and ages 55+ (7%; 286 total deaths). In addition, males are more often victims (85%) than females (15%) (see Figure 11).[177]
- When homicide victims are broken down by race and ethnicity, blacks have the highest rate at 26 per 100,000 people (a total of 1,163 deaths; 32% of all homicides), followed by Latinos at 8 per 100,000 (a total of 1,993 deaths; 54% of all homicides), whites at 3 per 100,000 (a total of 376 deaths; 10% of all homicides) and Asians/NHOPI at 2 per 100,000 (a total of 150 deaths; 4% of all homicides) (see Figure 12).[178]

Figure 12 Number of Homicides by Race/Ethnicity, Los Angeles County 2007-2011



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Deaths and Average Annual Death Rates by Demographic Group for Firearm Homicides and Other Homicides, Los Angeles County Residents, 2007 – 2011. Death Statistical Master File, California Department of Public Health, Office of Vital Statistics, July 1 [2007-2009] Smoothed Population Estimates, prepared by the Office of Heath Assessment and Epidemiology, Los Angeles County Department of Public Health, released 7/18/2013. July 1, [2010-2011] Population Estimates, prepared for County of Los Angeles, Internal Services Department, Social Services Systems Division. Prepared by LAC-DPH-IVPP, Feb 10, 2014.

- Further, from 2007 to 2011, SPA 6 had the highest number of deaths by homicide (892) and the highest homicide rate (16 per 100,000), compared to SPA 5 which has the lowest number of homicides (44) and the lowest homicide rate (1 per 100,000).[179]

Perception of Safety

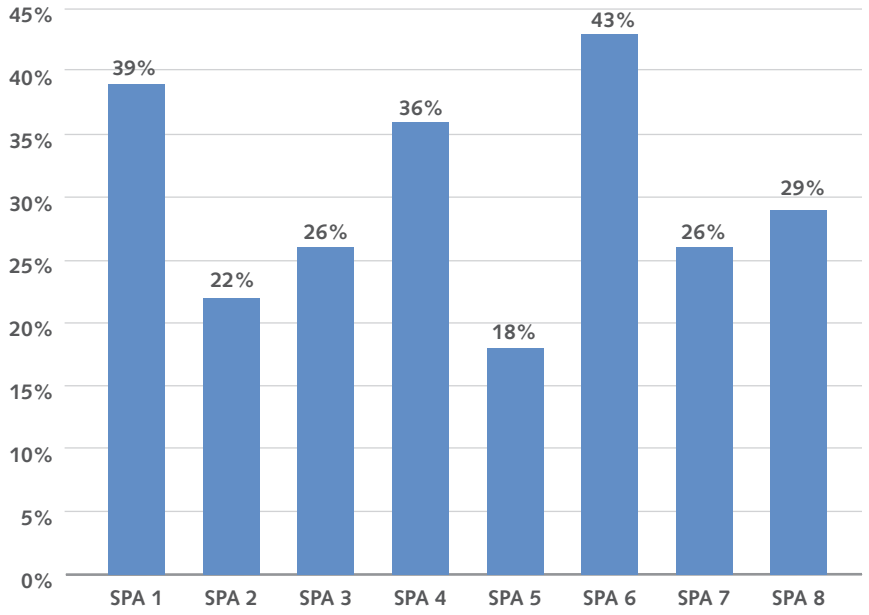
- Parents/guardians in SPA 6 are the most likely to feel that the public safety in their neighborhood is fair or poor (43%) followed by SPA 1 (39%), SPA 4 (36%), SPA 8 (29%), SPA 7 (26%), SPA 3 (26%), SPA 2 (22%), and SPA 5 (18%) (see Figure 13).[180]
- Almost half (49%) of black parents/guardians rate the public safety of their communities as fair or poor, compared to Latino parents/guardians (31%), Asian/NHOPI parents/guardians (26%) and white parents/guardians (19%).[181]

Alcohol Presence and Alcohol-Related Harms

- Alcohol outlet density varies widely among cities and communities in Los Angeles County, ranging from 0 to 47.3 (West Hollywood) on-premises alcohol outlets, and 0 to 23.8 (Commerce) off-premises alcohol outlets per 10,000 residents.[182] Communities with a high density of either on- or off-premises alcohol outlets are nine to ten times more likely to have increased rates of violent crimes, three times more likely to have increased rates of alcohol-involved automobile crashes, and five times more likely to have increased rates of alcohol-related deaths.[183]

Figure 13 | Perception by Parents/Guardians that Neighborhood Safety is Fair or Poor, Los Angeles County 2011

Percentage



Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

KEY POINTS

Violent Crimes

- Violence is a serious public health concern that tragically takes the lives of too many people in Los Angeles County. While crime has been decreasing countywide, some communities and populations are disproportionately affected by crime and violence. Youth ages 0-24 and black and Latino males are disproportionately impacted by violence and homicide.
- Communities that have high rates of violence also tend to have lower socio-economic status and higher risk for chronic disease overall. Many of the residents in such communities live with ongoing stress related to gang violence, underscoring the need for positive youth development and comprehensive gang violence prevention strategies.

Perception of Safety

- Many Los Angeles County residents do not feel their neighborhood is safe, with large disparities based on race/ethnicity and SPA. Living with ongoing stress and fear of crime can lead to detrimental physical responses in the body (i.e. high blood pressure). Further, fear of crime can prevent people from walking and biking in their neighborhood or engaging in physical activity at their local park, denying them the important health benefits of being physically active.[184]

Alcohol Presence and Alcohol-Related Harms

- A high density of either on-premises or off-premises alcohol outlets is associated with significantly higher rates of alcohol-related harms, including violent crime, alcohol-involved motor vehicle crashes, and alcohol-related deaths.[185]
- In addition, a high density of alcohol outlets increases alcohol consumption, alcohol-related hospital admissions, suicides, child maltreatment and neighborhood disturbances.[186] When alcohol outlets are close to schools, sales to minors is a critical concern. Communities can put strategies in place to address outlet density, create healthier retail outlets, and protect public health.

b. Livable Communities

INTRODUCTION

The health of individuals, families, and communities is influenced by the ways communities are designed and how readily people have access to the resources needed for healthy living. For example, improving access to safe parks and designing streets for safe walking and biking have been shown to increase people's physical activity levels, thereby reducing risks for heart disease, stroke, diabetes, depression, and some forms of cancer.[187,188] Although there have been significant reductions in air pollution in Los Angeles County since the 1980s, such as the elimination of Stage I and II level smog alerts, air quality remains an important public health issue. Community design can increase the risk of health problems caused by air pollution. For example, when people live in close proximity to major sources of air pollution, they are at a greater risk for developing respiratory illnesses.[189] Research in Los Angeles County and California has found that children who live or attend school close to a freeway are at a greater risk of developing cardio-respiratory illnesses such as asthma.[190]

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) NHOPI = Native Hawaiian and Other Pacific Islanders.

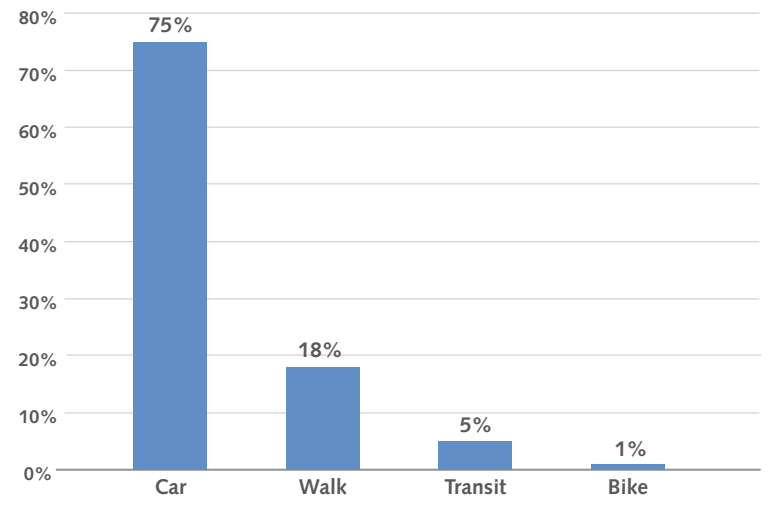
Access to Parks

- Just over half (52%) of Los Angeles County adults use neighborhood walking paths, parks, playgrounds and sports fields. Over one-third (34%) do not use the nearby park and 14% do not have these resources in their neighborhood.[191]
- Among the adults who have paths, parks and playgrounds in their neighborhood, 87% report it is very safe or somewhat safe to use these facilities.[192]
- Among children, 84% have easy access to a safe park, playground or other safe place to play.[193]

Transportation

- Nearly one out of five (19%) trips taken, by people age five and older, are on foot (18%) or by bicycle (1%), compared to 5% by transit and 75% by automobile (see Figure 14). For trips less than one mile in length, the number of people walking and biking increases further with 59% of people walking, 2% of people biking, 2% of people taking transit, and 36% driving.[194]
- School-aged children are walking and biking at even higher percentages than people ages 5 and older. Almost a third of Los Angeles County students (32%) walk to school, compared to 24% in California and 11% nationally.[195]

Figure 14 Trips Taken by Type of Transportation, Los Angeles County 2009



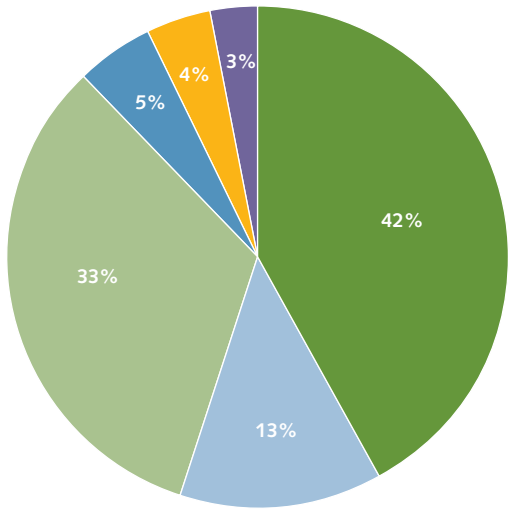
Source: Source: 2009 National Household Transportation Survey, Analysis of California Sample by Nancy McGuckin.

- However, one-third (33%) of all fatalities due to motor vehicle crashes in Los Angeles County are people who died while walking and biking.[196] See "Life Expectancy" section for more information about children and adults dying in automobile collisions.
- Twelve percent of residents spend one hour or more commuting to work.[197]
- Seventy-two percent (72%) of workers drive alone to work and only 7% use public transportation.[198]

Air Quality

- Nine percent of children have asthma.[199]
- Over 611,000 people (adults and children) live within 500 feet of a freeway.[200]
- There are 356 schools in Los Angeles County that are located within 500 feet of a freeway (preschools, public and private K-12, community colleges, and universities).[201]
- In 2005 there were an estimated 2,980 premature deaths from exposure to diesel emissions in California.[202]
- Three quarters (75%) of ozone-forming pollution in the South Coast Air Quality Management District (SCAQMD) comes from mobile sources: 42% from on-road vehicles (cars, trucks, motorcycles, etc.) and 33% from non-road sources (aircraft, motorboats, locomotives, construction equipment, etc.) (see Figure 15).[203] The SCAQMD encompasses all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties.
- From 2008 to 2012, the number of days in a given year registered as "unhealthy" on the Environmental Protection Agency's (EPA) Air Quality Index ranged from a low of 83 days (2010) to a high of 108 days (2009).[204]

Figure 15 Sources of Ozone-Forming Pollution, South Coast Air Quality Management District 2014



Source: South Coast Air Quality Management District, What SQAMD Does, Retrieved on 7/28/2014, www.aqmd.gov/home/about.

DIFFERENCES AND DISPARITIES

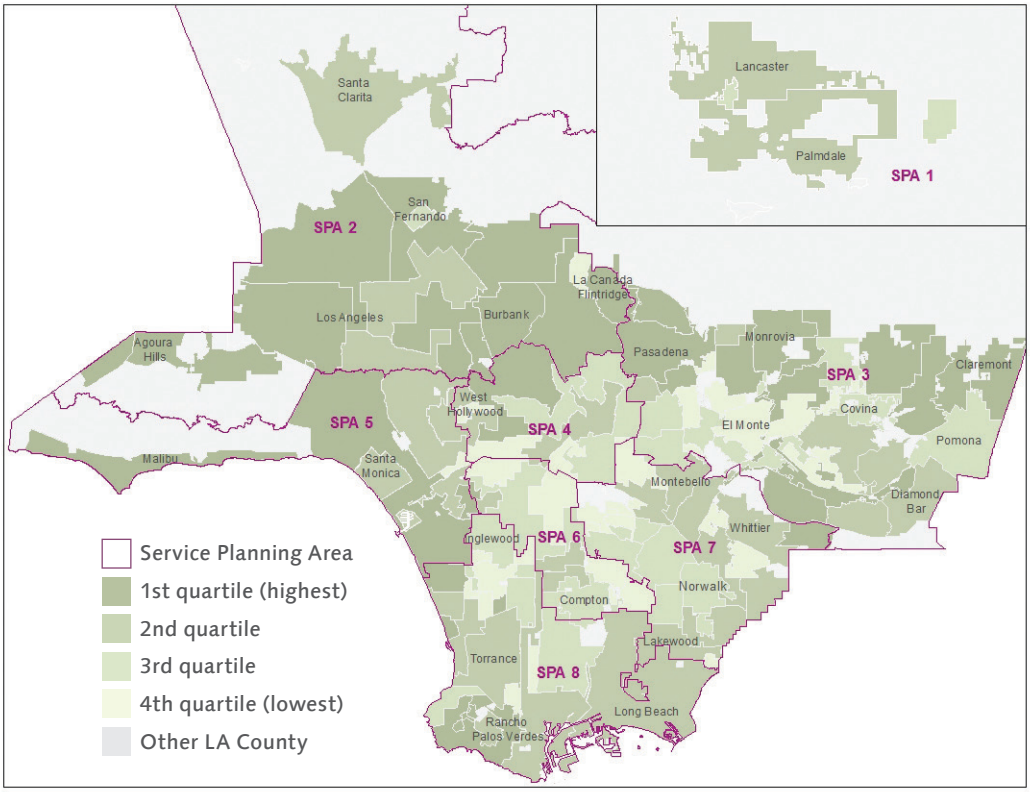
Access to Parks

- Black adults are least likely to use walking paths, parks, and playgrounds in their neighborhood, (43%) compared to white (49%), Asian/NHOPI (53%), and Latino (55%) adults.[205]
- Just over three quarters (76%) of black children ages 1-17 have easy access to a safe park or playground compared to Latino (82%), Asian/NHOPI (88%), and white children (92%).[206]
- SPA 1 has the most people without a local park, with almost a quarter of community members with no park nearby (24%), compared to SPA 4 (19%), SPA 6 (17%), SPA 2 (16%), SPA 8 (12%), SPA 3 (11%), SPA 7 (11%) and SPA 5 (10%).[207]
- The amount of park space in residents' communities differs greatly across the County. For example, the City of San Dimas, adjacent to the San Gabriel Mountain foothills in SPA 3, has 101 acres of park per 1,000 residents, while the unincorporated urban community of Walnut Park in SPA 7 has 0.1 acres of park per 1,000 residents (see Map 3).[208]

Air Pollution

- The CalEnviroScreen is a tool to measure the amount of toxic emissions that different communities are exposed to from multiple sources of pollution. One measure, the Pollution Burden Score, reveals that certain communities are exposed to air contaminants at higher levels than the County as a whole, putting some residents at a greater risk of developing associated health problems (see Map 4).[209]
- Some communities have many more people living within 500 feet of a freeway. For example, almost 21,000 people in the unincorporated community of East Los Angeles (total population of 126,496) live within 500 feet of a freeway, while 667 people in the City of Whittier (total population of 86,177) live within 500 feet of a freeway.[210]

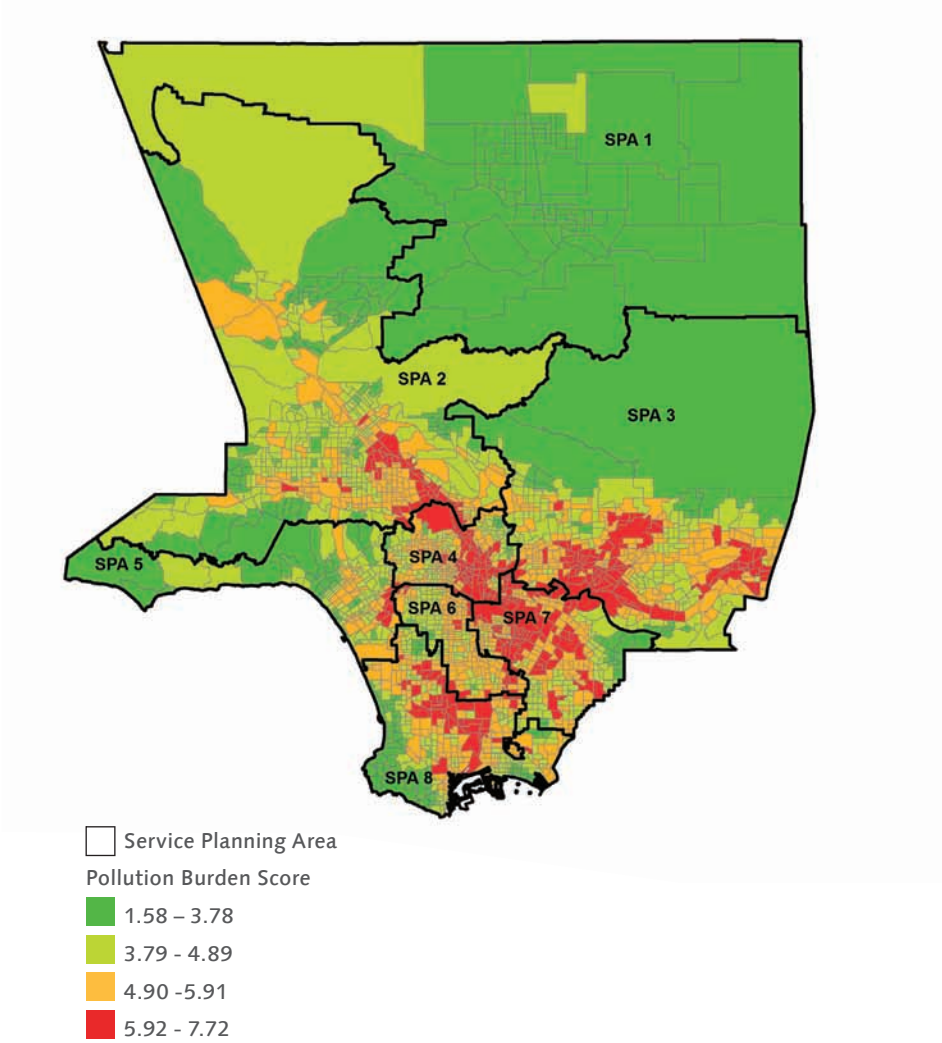
Map 3	Park Area Per Capita, Los Angeles County 2009



Map prepared by: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology
Notes: "Parks" area was approximated from Rand McNally/Thomas Bros. (2006) digital database, selecting from the following features: parks, beaches, historical parks, open spaces, recreational areas, ecological preserves/estuaries, forests, wilderness areas, and wildlife refuges. Only park areas located within city or community boundaries were included.
To account for the number of people that parks serve, park area per capita was used to indicate park acres in each city/community per 1,000 persons. Each city and community was then assigned a rank based on its park area per capita ratio, with 1 having the most and 127 having the least park area per capita.
Source: Ownership areas (2009) distributed by LA County ISD, the City/Community boundaries are based upon the 2000 Census and the SPA boundaries are based upon the 2010 Census.

- Black children have the highest rate of asthma (25%) compared to Latino (8%), white (7%) and Asian/NHOPI (4%) children.[211]
- The "goods movement" impacts the health of everyone, but particularly people living, working, and going to school near ports, freeways, rail yards, and other transportation hubs. Most of these areas are populated by low-income communities of color.[212] The "goods movement" refers to the process of transporting cargo containers from the ports via diesel trucks to connect with rail, in order to move products for sale throughout the County and ultimately throughout the nation.

Map 4	CalEnviroScreen 2.0 Pollution Burden Score, Los Angeles County 2014



Map prepared by: Los Angeles County Department of Public Health, Office of Planning, Evaluation, and Development
Note: The Pollution Burden Scores (ranging from 0=best to 10=worst) are derived from the average percentiles of Exposures indicators (ozone, PM2.5 concentrations, diesel PM emissions, pesticide use, toxic release from facilities, and traffic density) and Environmental Effects indicators (cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators and solid waste sites and facilities.)[213]
Source: California Communities Health Screening Tool (Cal EnviroScreen 2.0), Mapping Application of All Census Tracts and CalEnviroScreen 2.0 Scores, Updated 5/27/2014.

KEY POINTS

Access to Parks

- Proximity to recreational facilities and parks is one of the most important predictors of physical activity.[214,215] Disparities in access to park space – *safe* park space – exist throughout Los Angeles County, with the largest disparities displayed by region and by race/ethnicity. This means that some people have the opportunity to engage in safe physical activity in their neighborhoods while others do not, thus missing the health benefits that could be derived from physical activity.

- However, parks comprise more than the physical space they encompass. To utilize parks to their full potential, communities should invest in programs, facilities (i.e. swimming pools, soccer fields), and maintenance. In partnership with community based organizations, parks can provide educational classes on nutrition and healthy living, access to community gardens, and a range of activities for youth that can lead to positive youth development. When all these components of parks are thriving – with equitable investments to ensure parks in all neighborhoods benefit – parks play a pivotal role as a hub for community wellness.
- Only 30% of adults and 29% of children in Los Angeles County meet the federal guidelines for exercise each week.[216] Thus, park space, along with transportation systems that encourage people to be physically active, are important strategies for promoting health among Los Angeles County residents.

Transportation

- Walking and biking constitute almost 20% of all trips taken in Los Angeles County and are thus significant forms of transportation.[217]
- However, a disproportionate percentage of roadway fatalities involve pedestrians and bicyclists, indicating a need for increased safety by building streets for safer walking and biking.
- Enhancing pedestrian and bicycle infrastructure in the environment can prompt people to walk and bike more, and also improve automobile safety.[218, 219, 220,221]
- Children who walk or bike to school have higher daily levels of physical activity and better cardiovascular fitness than do children who do not actively commute to school.[222]
- A long drive to work not only contributes to air pollution, but also puts people with long commutes at a greater risk for obesity.[223]
- Americans who use transit walk an average of 24.3 minutes per day walking to and from transit.[224]

Air Pollution

- Well over half a million people in Los Angeles County live close to freeways, potentially impacting their health. People who live close to freeways and busy roads are at a greater risk of developing certain health problems from breathing in the air pollution caused by traffic, including lung damage for both adults and children and impaired lung growth in children.[225] One of the most harmful forms of air pollution affecting the respiratory tract is ground-level ozone, which can damage the lungs and exacerbate asthma in children.[226]
- Proximity to major sources of air pollution should be considered as part of land use planning.
- The County's air quality is affected by a major source of commerce, the ports of Los Angeles and Long Beach, the largest in the United States. The "goods movement" contributes significantly to the amount of pollution in Los Angeles County, particularly through diesel emissions which contain toxic contaminants including tiny particles called particulate matter (PM). As the region plans for future growth of the goods movement it is critical that the County find new forms of transportation to reduce the amount of pollution generated, and put in place land use patterns to protect the public's health.

IV. HEALTH CARE SYSTEM

IV. Health Care System

a.Hospital Infrastructure and Utilization

INTRODUCTION

In Los Angeles County, the hospital services infrastructure is diffusely distributed with no single hospital system or physician group having a dominant share of the marketplace. Most hospitals operate within a region, with some hospital systems having several sites. The system with the largest geographic coverage is Kaiser Permanente, which includes seven hospitals throughout Los Angeles County. Los Angeles County operates the second-largest public hospital system in the nation, with four hospitals currently open, and a fifth, the re-envisioned Martin Luther King, Jr. Community Hospital in South Los Angeles, scheduled to open in 2015. These two hospital systems, together with Providence Health and Services comprise the largest three hospital systems in Los Angeles County by market share, as measured by percent of all hospital discharges. Market shares between the three were similar in 2013: 8% for Providence Health and Services' six hospitals, 7.7% for the County's four public hospitals, and 7.6% for Kaiser Permanente seven hospitals.[227]

According to the Office of Statewide Health Planning and Development, of the 122 hospitals in the County, the majority are general acute care hospitals.[228] General acute care hospitals are hospitals providing 24 hour in-patient care with basic services: medical, nursing, anesthesia, surgery, laboratory, radiology, and pharmacy. This category did not include the Veterans Administration hospitals, mental health, and rehabilitation institutions. Slightly over half of the general acute care hospitals are non-profit.[229] Los Angeles County hospitals are also a major source of graduate medical education in the region and nationally. Major teaching hospitals include hospitals in the County public system, the Veterans Affairs hospitals, Cedars-Sinai, UCLA Health System, and Keck Hospital of USC.

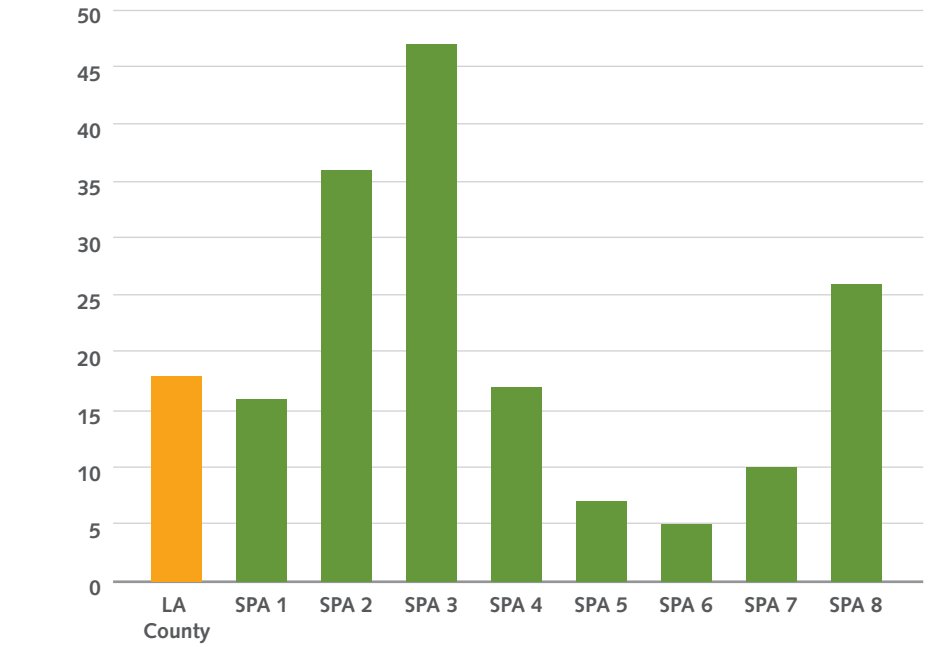
Los Angeles County has 78 hospitals with emergency departments. Among those hospitals, 14 are trauma centers and five are Level I trauma centers, which provide the highest level of emergency medical services available.[230] The allocation of emergency services when examined by number of treatment stations varies greatly by SPA (see Figure 16).

THE DATA

Notes: i) All the data presented are for Los Angeles County in 2012 unless otherwise stated; ii) SPA = Service Planning Area (refers to 8 subregions in LA County).

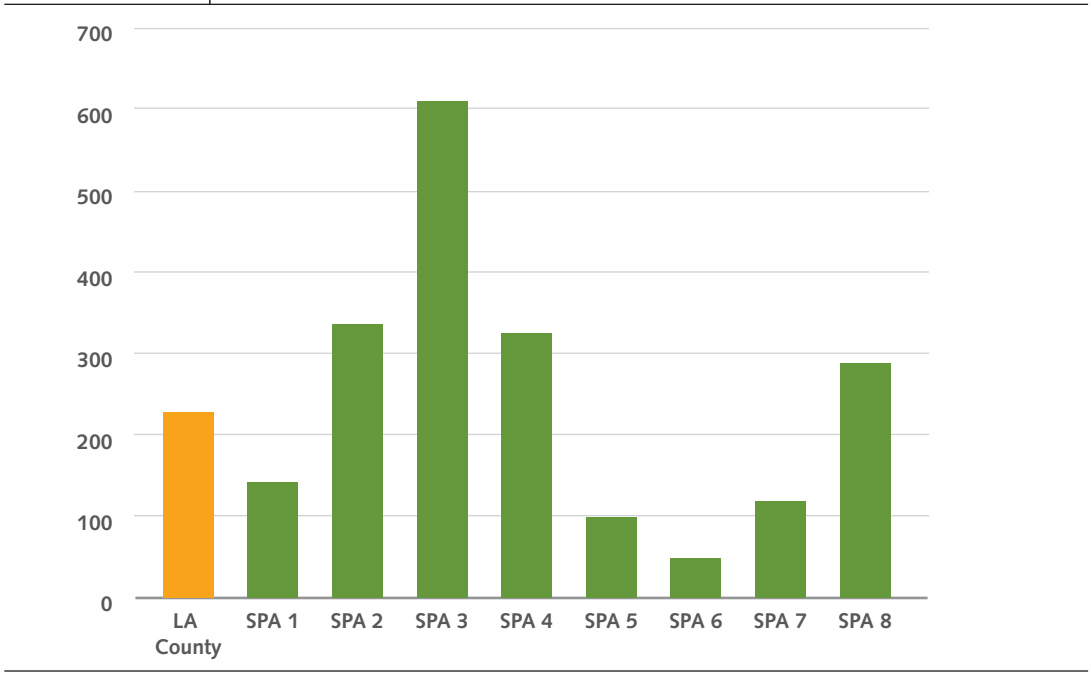
- There are a total of 98 general acute care Hospitals, 52 hospitals of which are non-profit.[231]
- Bed capacity is approximately 22,500 licensed beds, but this includes suspended beds; there is a 56% bed occupancy rate in the County, compared to 53% in California (see Figure 17).[232]
- The volume of patient care from Los Angeles County hospitals accounts for 29% (approximately 940,000 discharges) of patient discharges in California.[233]

Figure 16 | **Comparison by SPA of EMS Treatment Stations per 100,000 Population, Los Angeles County 2012**



Source: Office of Statewide Health Planning and Development, Hospital Annual Utilization Data, 2012 Final Database.

Figure 17	Comparison by SPA of Licensed* Hospital Beds per 100,000 Population, Los Angeles County 2012



*Licensed beds include suspended beds in the count.
Source: Office of Statewide Health Planning and Development, Hospital Annual Utilization Data, 2012 Final Database.

- Average length of stay at a hospital is 4.8 days, which is comparable to the State average of 4.5 days.[234]
- The ambulance diversion rate is 9.4%. This is the percentage of time hospitals closed their emergency department and diverted ambulances to other hospitals. Diversion rate is a measure often used to gauge demand for emergency services. It also reflects hospital bed capacity limits, since the lack of available beds can cause a backup of patients being admitted from the emergency department resulting in the need for diversion.[235]

b. Health Care Safety-Net

INTRODUCTION

Non-profit Hospitals: Disproportionate Share Hospitals and Community Benefit Programs

Providers serving the largest shares of uninsured and indigent patients in Los Angeles County are primarily the publicly-run health care system and private, non-profit community health clinics and hospitals. Of the 122 hospitals in Los Angeles County, 42 are disproportionate share hospitals (DSH) which qualify for additional Medicare payments due to having a substantial share of Medi-Cal or Medicare patients with Supplemental Security Income payments (SSI), a cash benefit program for low-income aged or disabled patients.[236] However, with health care reform, reductions in DSH payments to the disproportionate share hospitals began in 2014. The decreases in funding were created in anticipation of fewer uninsured patients and increased access to health insurance coverage. Since the majority of DSH payments are made to hospitals in urban areas and teaching hospitals, this change particularly affects Los Angeles County.

According to IRS rules, private non-profit hospitals are required to report community benefit activity to maintain charitable tax-exempt status. Adoption of the ACA brought about additional requirements for tax exempt hospitals: to perform a community health needs assessment every 3 years and to develop an implementation strategy to address the needs identified. However, California non-profit hospitals have been required to submit annual community benefit reports to the Office of State Health Planning and Development (OSHPD) and to perform a community health need assessments every three years.[237,238] Community benefit activities include uncompensated care, including shortfalls to the hospital when treating Medi-Cal or Medicare patients, funding for health research, education, and training, and cash or in-kind contributions to benefit the community, or other community health improvement activities.[239] In Los Angeles County, there are a total of 48 community non-profit hospitals required to submit community benefit plans.

The County-run Health System

Los Angeles County has the second largest publicly-run health care system in the nation. It consists of both public hospitals and an Ambulatory Care Network overseen by the Department of Health Services (DHS), at an annual operating budget of $3.5 billion dollars.[240] The County system is the major provider of trauma care, specialty care for the uninsured and indigent, and training for graduate medical education. The County also separately maintains public health clinics managed by the Los Angeles County Department of Public Health (LAC DPH). The public health clinics provide clinical services aimed at the prevention and control of communicable disease transmission. The County also provides mental health services through the Department of Mental Health (DMH), the largest municipal mental health department in the nation.

Four public hospitals are currently operated by Los Angeles County Department of Health Services (DHS), the Rancho Los Amigos National Rehabilitation Center in Downey and three

public teaching hospitals affiliated with the USC and UCLA medical education programs: LAC+USC Medical Center in Boyle Heights (600 beds), Harbor-UCLA Medical Center in Torrance (556 beds), and Olive-View UCLA in Sylmar (377 beds).[241,242, 243] A fifth hospital in the system, the new Martin Luther King Jr. Community Hospital facility in the Willowbrook neighborhood of South Los Angeles, is scheduled to open in 2015. Since the closure of MLK-Harbor Hospital in 2007, the site of the former hospital has served as a Multi-Service Ambulatory Care Center (MACC). The new Martin Luther King Jr. Community Hospital will be operated by a non-profit management structure in partnership with UCLA and will serve the area with a smaller capacity of 131 beds and a psychiatric urgent care center; no trauma level emergency services will be provided.[244]

The DHS system also includes an Ambulatory Care Network comprising of one school-based health clinic, 10 Health Centers, six Comprehensive Health Centers, and two Multi-Service Ambulatory Care Centers (MACCs) (full listing at http://dhs.lacounty.gov/wps/portal/dhs/locations/). The last three categories of ambulatory clinics are distinguished by the variety of specialty services provided. MACCs have the greatest number of specialty services including outpatient surgery, followed by the Comprehensive Health Centers, and Health Centers. The Ambulatory Care Network also includes a public-private partnership (PPP) where DHS provides funding for primary care patient visits at private, non-profit community health centers in the partnership.

LAC DPH operates 14 public health clinics through its Community Health Services division. Additionally, DPH's Substance Abuse Prevention and Control program operates the Antelope Valley Rehabilitation Center (AVRC). The public health clinics are located throughout the County, with at least one public health clinic in each of the eight service planning areas (SPAs) and most SPAs having two clinics, listing of clinics: http://publichealth.lacounty.gov/chs/phcenters.htm. The public health clinics provide immunizations, and testing and treatment for sexually transmitted diseases and tuberculosis. The public health clinics are a critical source of care for patients who might not otherwise seek treatment for communicable diseases. In a 2013 survey of clinic patients, only 38% of patients had health insurance and 73% were living below 133% FPL. DPH also administers for the County critical safety-net health care services from the California Children's Services (CCS), Ryan White, and substance abuse prevention and control programs.[245]

Community Health Clinics

Non-profit community health clinics are major providers of primary care and in many cases dental and mental health services in Los Angeles County for the uninsured and underserved. They are a major source of locally accessible and culturally-sensitive care for their communities. Community health clinics serving as sources of safety-net care are often Federally Qualified Health Centers (FHQCs), which are grantees of the Health Center Program under Section 330 of the Public Health Services Act. They can also be FQHC look-alikes which are community health clinics that meet the requirements of an FQHC but are not grantees but can participate in some benefits of that program. FQHCs are non-profit, stand-alone clinics located in areas designated medically underserved (MUA) or having a medically underserved population (MUP). An area is considered a Medically Underserved Area (MUA) using a formula that takes into account ratio of primary care physicians per 1,000 and the percentage of the population below poverty level, the percentage of the population 65 and over, and the infant mortality rate, called an Index of Medical Underservice. A Medically Underserved Population (MUP) involves the same formula but only among a population that has either economic or cultural and/or linguistic barriers to primary care services.

Community health clinics provide comprehensive primary care including enabling services such as transportation or translation services, offer a sliding fee scale, and serve regardless of ability to pay.[246]

The membership of the Community Clinic Association of Los Angeles County (CCALAC) is comprised of most of the community health clinics in Los Angeles County. According to CCALAC, its 54 members have over 200 clinical care sites in Los Angeles County.

Health Professional Shortage Area Designations

There are several designations provided by the Federal government, Department of Health and Human Services, Health Resources and Services Administration, for geographic areas where there is a shortage of providers. Called health professional shortage areas (HPSAs), HPSA designations are intended to provide incentives for providers to practice in underserved areas. Providers practicing in such areas can obtain Enhanced Medicare payments and are eligible to apply for loan forgiveness programs such as the National Health Service Corps, a scholarship program for providers willing to practice in underserved areas.

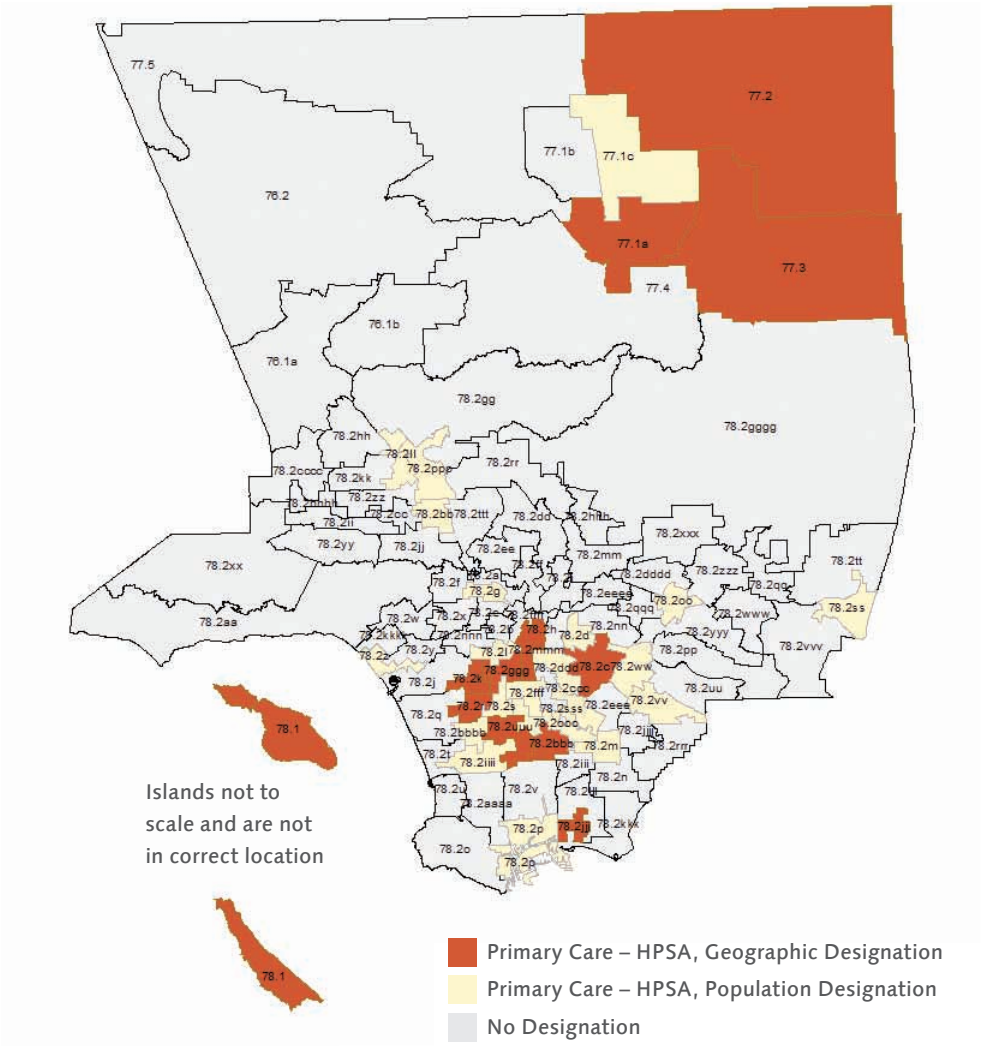
There are specific designations for primary care, mental health, and dental health professional shortage areas (HPSA). A primary care HPSA stipulates a population to primary care provider ratio of at least 3,500:1 or 3,000:1 with a high need population and barriers to accessing health care, such as lack of transportation. A dental HPSA is defined as the population to dentist ratio of no less than 5,000:1 or 4,000:1 in a population of high need. Mental health HPSAs, are defined utilizing various population to provider ratios. The provider supply ratios can either be for a core mental health provider, for psychiatrists alone, or a combination of both (either ≥30,000:1 psychiatrists, or ≥9,000:1 core mental health providers, or both ≥6,000: 1 core mental health providers and ≥20,000:1 psychiatrists. Core mental health providers are defined as psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists.[247]

Below are maps of the currently designated primary care, mental health and dental HPSAs in Los Angeles County (see Maps 5, 6, and 7). However, it should be noted that areas of HPSA shortage in Los Angeles County are likely underrepresented. HPSAs require an often arduous application process with designation with no guarantee benefits. For example, applications can require surveys of providers and population data for the geographic area under consideration. Assigned scores for HPSA designated areas determine provider competitiveness for the scholarship and loan programs and do not guarantee success. Consequently, establishing HPSAs usually are a result of a compelling need, such as a provider seeking to establish an FQHC, and therefore shortage areas may remain undesignated.

THE DATA

- The Los Angeles County Department of Health Service's Ambulatory Care Network facilities provide over one million visits annually including 463,000 primary care visits, 352,000 specialty care visits, and 242,000 urgent care/walk-in visits.[248]
- LAC+USC is the 8th largest hospital in the State in terms of licensed beds and visits there account for 3.4% of all patient discharges in 2013.[249]
- The safety-net mental health services that DMH provides are through 75 directly operated program sites and 100 co-located sites as well as approximately through 1,000 individual or agency providers in the community and serves an estimated 250,000 residents annually.[250]

Map 5	Primary Care Health Professional Shortage Area (HPSA), Los Angeles County 2014

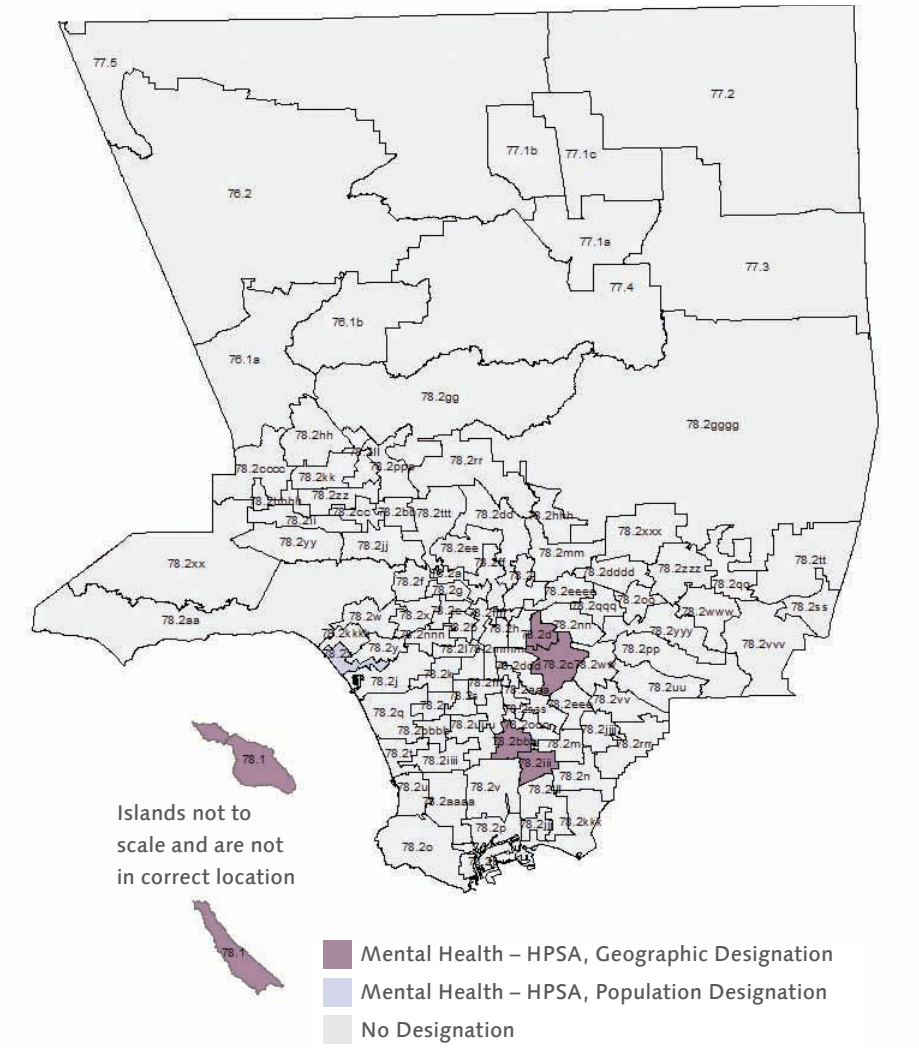


August 2014

Source: Office of Statewide Health Planning and Development

- Of the 42 Disproportionate Share Hospitals in Los Angeles County, 21 are located in medically underserved areas (MUA) and nine are serving a medically underserved population (MUP).[251]
- The 14 LAC DPH Public Health Clinics located throughout the County provide immunizations, testing and treatment for sexually transmitted diseases and tuberculosis and have approximately 160,000 visits per year.
- Among the 48 private, non-profit hospitals required to submit community health benefit reports, $2.5 billion was spent on community health benefits. On average, 18% of the hospitals' budgets were spent on community benefits and on average, 79% of community benefits funding was spent on clinical care.[252]

Map 6	Mental Health Professional Shortage Area (HPSA) Designations, Los Angeles County 2014

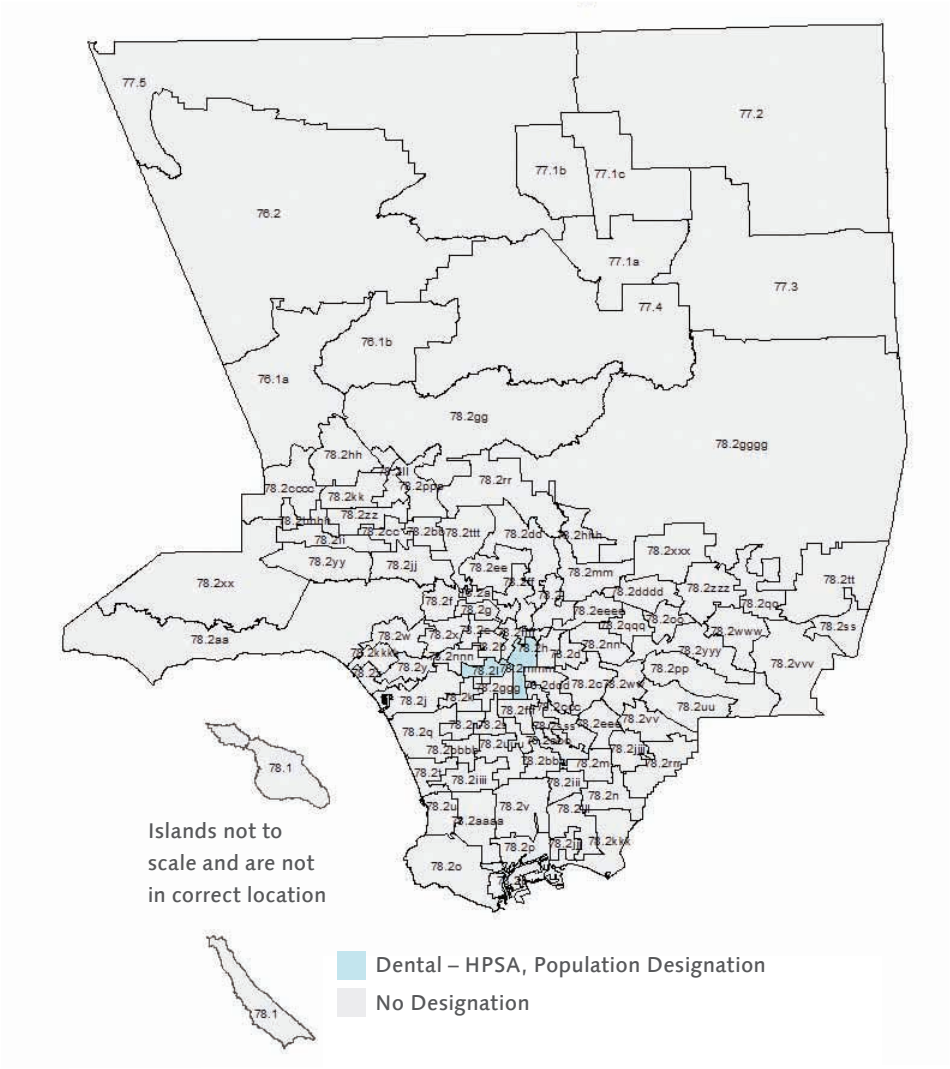


August 2014

Source: Office of Statewide Health Planning and Development

- According to a 2012 profile of its membership, Community Clinic Association of Los Angeles County reported just over four million encounters for 1.3 million patients with nearly two-thirds of them being women and 64% below the federal poverty level. Sixty percent of the patient population served was Latino and 44% did not speak English as their primary language. Medi-Cal was the largest payer (31%) but more than half of the patients served were uninsured (59%).[253]

Map 7	Dental Health Professional Shortage Area (HPSA) Designations, Los Angeles County 2014



August 2014

Source: Office of Statewide Health Planning and Development

- The Community Clinic Association of Los Angeles County's 2012 report on unmet need in Los Angeles County for community health clinics identified SPAs 3 (San Gabriel), 6 (South), and 7 (East) as having the most number of low-income residents unserved by an FQHC.[254]

c. Physician Supply

INTRODUCTION

The infrastructure for physician practices in Los Angeles County is dispersed among solo practices, group practices, and hospital employees. Compared to California, slightly more physicians in the County are in solo practice: 27% vs. 21%.[255] Further, 37% of Los Angeles County physicians in group practices are dispersed among small to midsized groups. Here also, Kaiser Permanente is a major presence with 14% of physicians in Los Angeles County employed in their system.[256,257]

For individuals, a primary care physician is their first contact for a new medical issue, a regular source of care, and coordinator of care for a wide variety of their health issues.[258] Primary care physicians have usually been defined as physicians in family practice, general internal medicine, pediatrics, or obstetrics/gynecology.[259] Access to primary care is important in reducing poor health outcomes, particularly for chronic conditions which should be regularly managed. Therefore, an adequate supply of primary care physicians is a component of ensuring access. A higher ratio of primary care physicians to the population has been associated with lower rates of mortality from heart disease, cancer, and stroke, as well as better self-reported health, and lower rates of low birth-weight and infant mortality. Studies comparing the health systems of industrialized nations reveal that those having health systems with greater orientation towards primary care have better population health outcomes and fewer health disparities.[260]

THE DATA

Note: All data are for Los Angeles County in 2012 unless otherwise stated.

- The primary care physician supply of 62 per 100,000 persons is just within guidelines of what the Council on Graduate Education recommends for primary care physician supply (at least 60 per 100,000). However, the distribution of primary care physicians within Los Angeles County is not equitable, leaving areas of medically underserved populations.[261]
- The specialist physician supply is 139 per 100,000 persons which exceeds the Council on Graduate Education recommendation of a maximum of 105 specialists per 100,000 persons.

d. Access to Medical and Dental Care

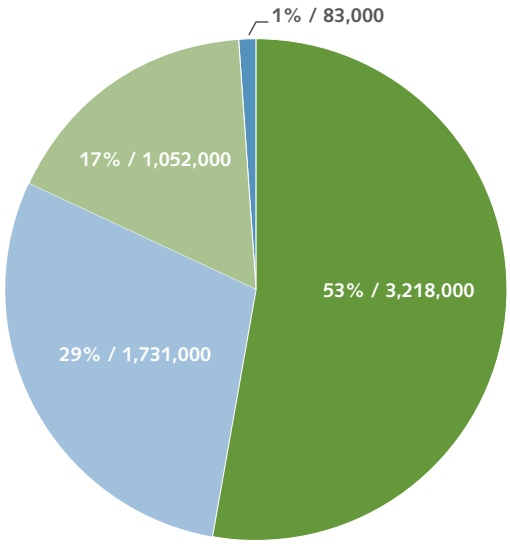
INTRODUCTION

Access to comprehensive, quality medical care is important for ensuring long and healthy lives for everyone. It requires three steps: gaining entry into the system, accessing a location where services are provided, and finding a trusted health care provider with whom the patient can communicate.[262] Barriers to access include lack of availability of services, high cost of services, and lack of insurance coverage.[263] When these and other factors impede service, patients face preventable hospitalizations, delays in receiving care, inability to get preventive services, and other unmet health needs.[264]

Insurance coverage is expected to improve as provisions of the Patient Protection and Affordable Care Act (ACA) expand Medi-Cal and offer a marketplace for individuals to purchase private health insurance in a regulated environment. Medi-Cal is expanding to increase health care coverage for many low-income adults under age 65 who were not previously qualified by changing the eligibility level to 138% of the Federal Poverty Level. About one million additional people in California will be eligible for Medi-Cal under the new rules.[265] In addition, the health care marketplace or "Exchange" established in California as part of the ACA will allow individuals who do not have coverage through their employer or a public entity to purchase it. Some people qualify for a subsidy based upon their income.

While insurance for oral health is distinct from general health coverage, oral health is a central component of overall health and well-being. Good oral health prevents diseases--ranging from cavities and gum disease to oral cancer—that cause pain and disability.[266] Fluoride in water helps prevent and even reverse tooth decay.[267] Community water fluoridation remains one of the great public health achievements of the twentieth century; it is an inexpensive means of improving the oral health of all residents in a community, and has led to improvements in oral health nationwide.[268,269]

Figure 18	Percent and Number of Adults 18-64 by Type of Insurance Coverage, Los Angeles County 2011
	Private · No Insurance · Medi-Cal · Medicare



Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

THE DATA

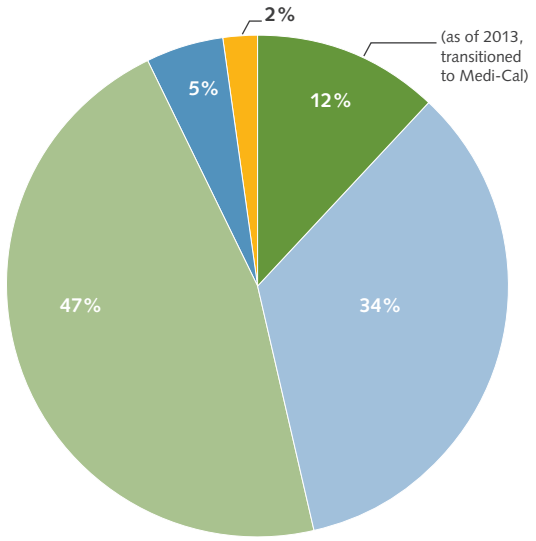
Notes: i) All the data in this section were collected prior to the implementation of the federal ACA. Due to changes in health care coverage as a result of the ACA, it is likely that the number of people in Los Angeles County who are now insured is lower and that overall access to medical care has improved; ii) All the data presented are for Los Angeles County, unless otherwise noted; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

Medical Care

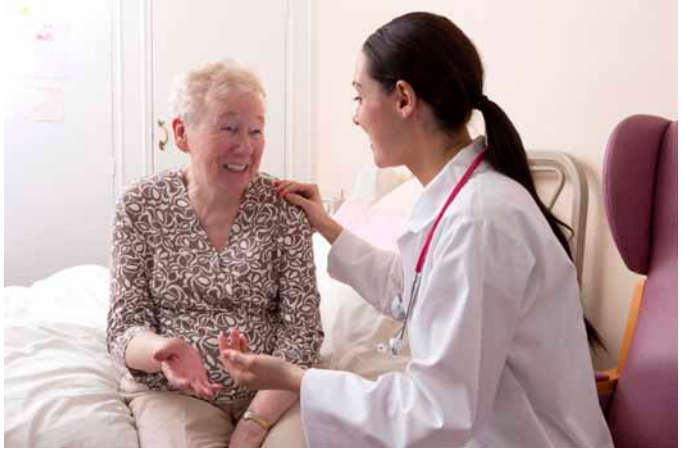
- Fifty-three percent of adults ages 18-64 have private health insurance, 18% are covered by public insurance (Medi-Cal: 17%; Medicare: 1%), and 29% are uninsured (see Figure 18).[270]
- For adults 65 and older, over a third (37%) have Medicare as their sole payer of health care, while 51% of older adults either have a combination of Medicare and private insurance (25%) or are "dually eligible" for both public health insurance programs, Medicare and Medi-Cal (26%).[271]
- Forty-seven percent of children ages 0-17 have private insurance, 48% are covered by public insurance (Medi-Cal: 34%; Healthy Kids or Healthy Families: 14%), and 5% - about 120,000 children - have no coverage at all (see Figure 19).[272] However, since the results of this survey, beginning in January 2013, children with medical coverage under Healthy Families were transitioned into Medi-Cal.
- Seventy-nine percent of adults and 95% of children have a regular source of medical care, meaning that they have a preferred place or provider from which they access care most often.[273]

- "Preventable hospitalizations" are often used as markers of poor access to medical care.[274] Without access to regular outpatient care to manage their chronic conditions, people can be hospitalized. In Los Angeles County, yearly hospital discharge rates for problems associated common chronic diseases are as follows:
  - Diabetes, Long-Term Complications: 141, higher than California's rate of 108 per 100,000[275]
  - Diabetes, Short-Term Complications: 46, similar to California's rate of 48 per 100,000[276]
  - Hypertension: 51, higher than California's rate of 33 per 100,000[277]
  - Pediatric Asthma: 70, lower than California's rate of 78 per 100,000[278]
- Thirty-two percent of adults—over two million people—and 12% of children have a somewhat difficult or very difficult time getting medical care when they need it.[279]
- Sixteen percent of adults and 6% of children are unable to afford to see a doctor for a health problem when needed.[280]
- Fifteen percent of adults and 6% of children are unable to afford their prescription medications.[281]

Figure 19 | **Insurance Type for Children Ages 0 – 17, Los Angeles County 2011**



Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.



Dental Care

- Fifty-two percent of adults and 22% of children do not have dental insurance.[282]
- Thirty percent of adults and 13% of children ages 3-17 are unable to obtain dental care, including check-ups, because they cannot afford it.[283]
- Fifty-six percent of adults and 77% of children (ages 2 – 17 years) visited a dentist or dental clinic within the past year.[284]

DIFFERENCES AND DISPARITIES

- Among adults ages 18-64, 43% of Latinos are medically uninsured, followed by 18% of Asians/NHOPIs, 16% of blacks, and 14% of whites.[285]
- Rates of medically uninsured adults ages 18-64 vary across SPAs. The highest rates are in SPA 6 (38%) and SPA 4 (36%), followed by SPA 7 (32%), SPAs 2, 3, and 8 (all 27%), SPA 1 (20%) and SPA 5 (13%).[286]
- Likelihood of adults ages 18-64 having health insurance increases with income and educational attainment. Nearly one-half (48%) with less than a high school education are uninsured, followed by 35% with a high school education, 23% with some college or trade school, and 11% with a college or post graduate degree. Rates of insurance follow a parallel pattern with income level.[287]
- Racial/ethnic minority adults have more difficulty accessing health care: 46% of Latinos, 31% of Asians/NHOPIs, and 27% of blacks compared to 14% of whites.[288] These differences also exist across geographic areas, ranging from 45% in SPA 6 to 17% in SPA 5.[289]
- Adult residents of SPA 5 and SPA 8 are most likely to access dental care (72% and 61%, respectively); rates of accessing dental care in the other SPAs range from 45% (SPA 6) to 58% (SPA 2).[290] Racial/ethnic disparities exist with 71% of white adults accessing dental care, followed by 61% of Asians/NHOPIs, 53% of blacks, 49% of American Indian and Alaska Natives, and 43% of Latinos.[291]
- Children living in households with an annual income of less than $35,000 demonstrate higher levels of untreated dental caries, dental needs, and lower rates of previous dental care.[292]

KEY POINTS

- Access to health care impacts overall health status, including quality of life and life expectancy.[293] When access is limited, people are less able to reach their full potential.[294,295]
- Uninsured people are almost twice as likely as those with health insurance coverage to report having trouble paying medical bills, and therefore may put off getting needed care and worry about not being able to afford health care services.[296]
- The ACA is expanding health coverage across the nation. In 2014, about 32 million Americans will have health insurance for the first time.[297] Despite the expansion, over 1 million residents (about 13% of the Los Angeles County population) are expected to remain without health insurance by 2019 when the ACA is fully implemented. The majority of the uninsured will be Latino, and undocumented residents (many of whom are Latino) who do not currently qualify for public health insurance programs.[298] With this large number of uninsured, Los Angeles County will fall short of the Healthy People 2020 goal of 100% medical insurance coverage.
- Undocumented immigrants are the least likely to have a usual source of care and to have seen a doctor in the past year. By avoiding or delaying preventative care, immigrants put themselves at risk of more severe and costly long-term illnesses.[299]
- Even for immigrants with health insurance, linguistic and cultural factors can impede their access to quality health care. Language barriers between immigrants and medical professionals can be overcome by providing culturally appropriate translation services.
- Despite ACA provisions that expand dental benefits for children, lack of access to dental care for all ages remains a public health challenge.

V. HEALTH STATUS OF ADULTS, CHILDREN, ADOLESCENTS & OLDER ADULTS

a. Healthy Mothers and Babies

INTRODUCTION

Improving the well-being of mothers, infants, and children is an important public health goal. Their well-being determines the health of the next generation and can help prevent future public health challenges for families, communities, and the health care system. The risk of maternal and infant mortality and pregnancy-related complications can be reduced by quality prenatal care and access to quality medical care before pregnancy as preconception health also impacts both outcomes. Further, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential.[300,301]

Public health efforts to improve maternal and infant health have focused on increasing access to and use of prenatal care early screening, treatment of health conditions, and preventive care such as vaccinations. While these strategies have improved maternal and infant mortality and pregnancy-related complications countywide, persistent disparities exist among minority and geographically underserved areas.

Recent efforts to address persistent disparities in maternal, infant, and child health have employed a "life course" perspective which recognizes that social, economic and environmental exposures and experiences are underlying causes of persistent inequalities in health across populations and across generations. Early experiences can shape an individual's future health and development, including exposure in utero as well as the health of the mother prior to conception. These experiences can result directly in a disease or condition, or make an individual more vulnerable or susceptible to developing a disease or condition in the future. Further, cumulative experiences can also influence an individual's future health and development. While individual episodes of stress may have minimal impact if they are isolated, the cumulative impact of multiple stresses over time may have a profound direct impact on health and development.[302]

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Data identified with an asterisk (*) are statistically unstable; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

Mothers & Pregnancy

- Before becoming pregnant, one in four women (26%) is overweight and one in five women (19%) is obese.[303]
- One in four women (26%) reports that she was depressed during pregnancy.[304]
- Eighty-two percent of women began prenatal care within the first trimester of their pregnancy,[305] higher than the Healthy People 2020 goal of 77.9%.[306]
- Less than half (47%) of all women who give birth receive a flu shot during pregnancy.[307]

Babies

- The infant mortality rate is almost 5 deaths per 1,000 live births,[308] lower than the Healthy People goal of 6 infant deaths per 1,000 live births.[309]
- Seven percent of live births are low birth weight (less than 2500 grams).[310]
- Approximately three out of every four mothers (74%) place their infants (three to seven months old) on their backs to sleep. Putting infants to sleep on their backs is an important factor in the prevention of Sudden Infant Death Syndrome (SIDS).[311]
- Nearly nine out of ten (87%) mothers initiate breastfeeding their infants,[312] surpassing the Healthy People 2020 goal of 81.9%.[313] However, less than half (45%) of mothers are continuing to breastfeed when their infants are six months old,[314] falling far short of the Healthy People 2020 goal of 60.6%.[315]

Children

Note: Information about children's health is included in several sections of this report; this section captures indicators related to child care and child safety.

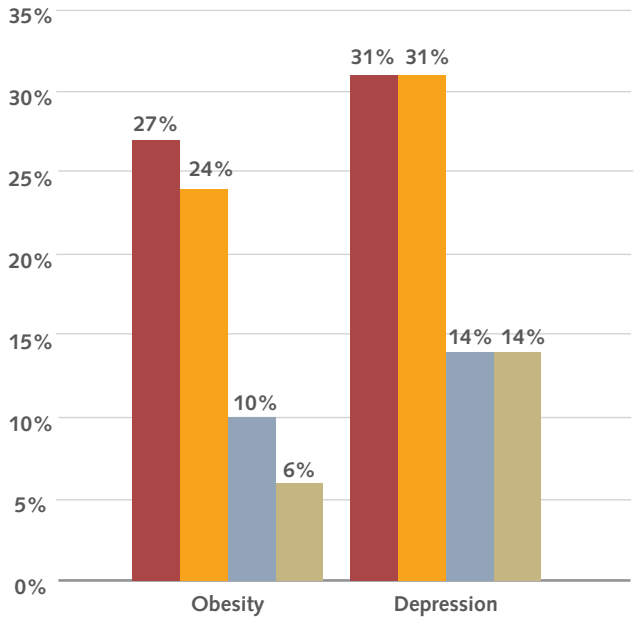
- Twenty seven percent (27%) of primary caretakers reported difficulty finding or keeping childcare on a regular basis for children 0-5 years old (Note: this excludes the 26% who reported not needing childcare).[316] The top two reasons for difficulty finding or keeping childcare are that it is too expensive (74%) and that caretakers are unable to find a provider with space available (45%).[317]
- There is a shortfall of almost 50,000 licensed childcare spaces (0-3 year olds) for working families in home-based small group child care and center-based care.[318]
- In 2010, Los Angeles County submitted 9,579 reports of child abuse to the California Department of Justice which constitutes 43% of all reports submitted. Of these child abuse reports, 4,012 (42%) were for physical abuse, 2,836 (30%) were related to mental abuse, 2,436 (25%) were for sexual abuse, and 202 (3%) were associated with severe neglect.[319]

DIFFERENCES AND DISPARITIES

Mothers &Pregnancy

- Black mothers have the highest prevalence of obesity (27%) before becoming pregnant, followed by Latina (24%), white (10%), and Asian/NHOPI (6%) mothers (see Figure 20).[320]
- Latina and black mothers (31% and 30% respectively) report higher rates of feeling depressed during pregnancy compared to Asian/NHOPI and white mothers (14%) (see Figure 20).[321]

Figure 20 Obesity Before Becoming Pregnant and Self-Reported Depression During Pregnancy by Race/Ethnicity, Los Angeles County 2010



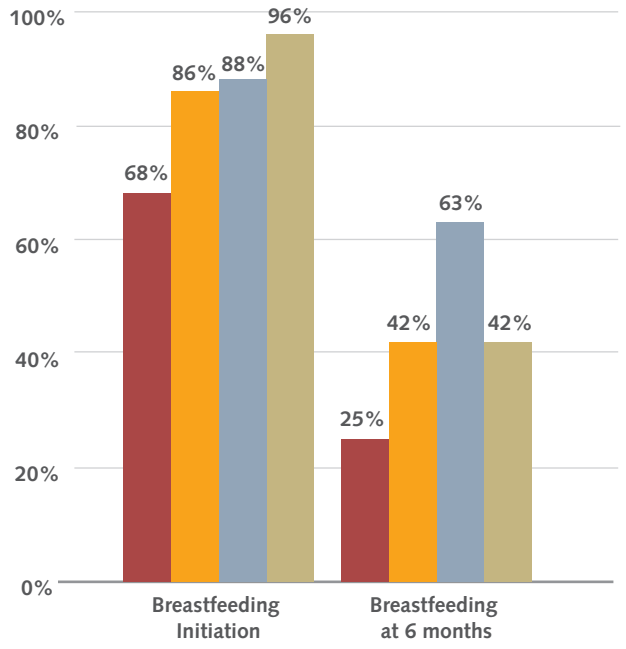
Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County Department of Public Health, Maternal, Child, and Adolescent Health Programs, Los Angeles Mommy and Baby Project, 2010 Surveillance Report.

- Mothers below 20 years of age report higher rates of suffering from depression during pregnancy (40%), followed by 20-24 year old (33%), 25-34 year old (23%), and 35+ year old (21%) mothers.[322]
- Women residing in SPA 2 access prenatal care during the first trimester of pregnancy at the highest levels (88%), followed by mothers living in SPA 5 (85%), SPA 3 (83%), SPA 7 (82%), SPA 8 (80%), SPA 4 (79%), SPA 6 (77%), and SPA 1 (67%).[323]

Babies

- White mothers are most likely to put their babies on their backs to sleep (83%), followed by Asian/NHOPI (79%), Latina (72%), and black mothers (64%).[324]
- Black infants in Los Angeles County are more than twice as likely to die during their first year of life in comparison to other infants, with a mortality rate of 10 per 1,000, followed by Latino (5 per 1,000), white (4 per 1,000), and Asian/NHOPI (3 per 1,000) infants (see Figure 22).[325]
- Asian/NHOPI mothers have the highest rates of initiating breastfeeding (96%) followed by Latina (89%), white (88%) and black mothers (68%).[326] However, white mothers are most likely to continue breastfeeding their infants until six months of age (63%) followed by Asian/NHOPI and Latina (both 42%), and black (25%*) mothers (see Figure 21).[327]

Figure 21 Breastfeeding by Race/Ethnicity, Los Angeles County 2011

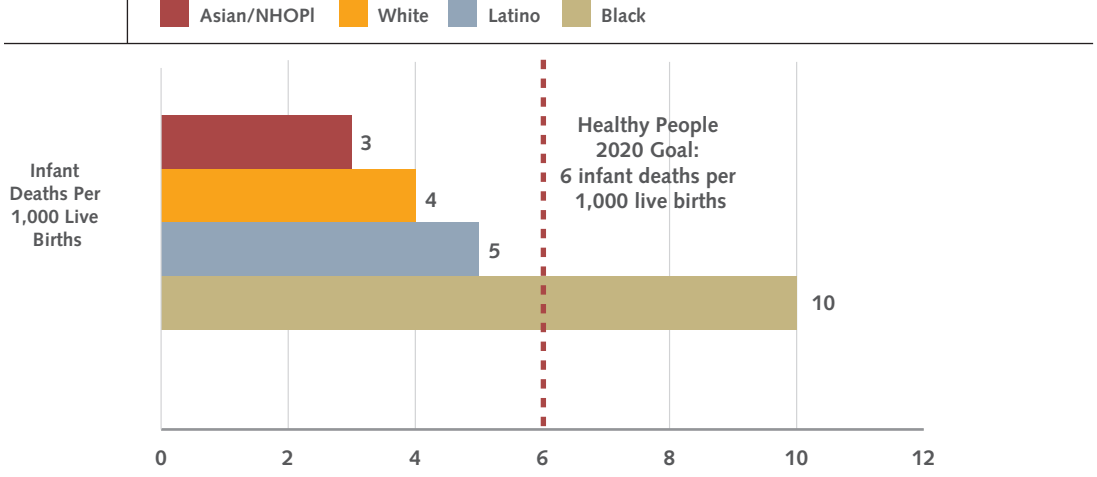


Note: NHOPI=Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Children

- Children (ages 0-5) whose primary caretakers reside in SPA 6 have the highest rates of difficulty finding childcare (37%), followed by caregivers in SPA 4 (30%*), SPA 7 (28%), SPA 2 (27%), SPA 3 (26%), SPA 5 (24%), SPA 8 (19%), and SPA 1 (18%*). Children whose primary caregivers are black have the highest rates of difficulty finding childcare (35%*), compared to Latinos (33%), Asians/NHOPIs (19%), and whites (13%).[328]
- Among primary caretakers of children 0-5 years old who report difficulty finding childcare, caretakers in SPA 1 most often cite cost as the biggest barrier to finding or keeping childcare on a regular basis (92%), followed by caregivers in SPA 2 (91%), SPA 7 (82%), SPA 4 (73%), SPA 3 (70%), SPA 8 (69%), SPA 5 (63%), and SPA 6 (55%) (see Figure 23).[329]

Figure 22 Infant Mortality Rate by Race, Los Angeles County 2011



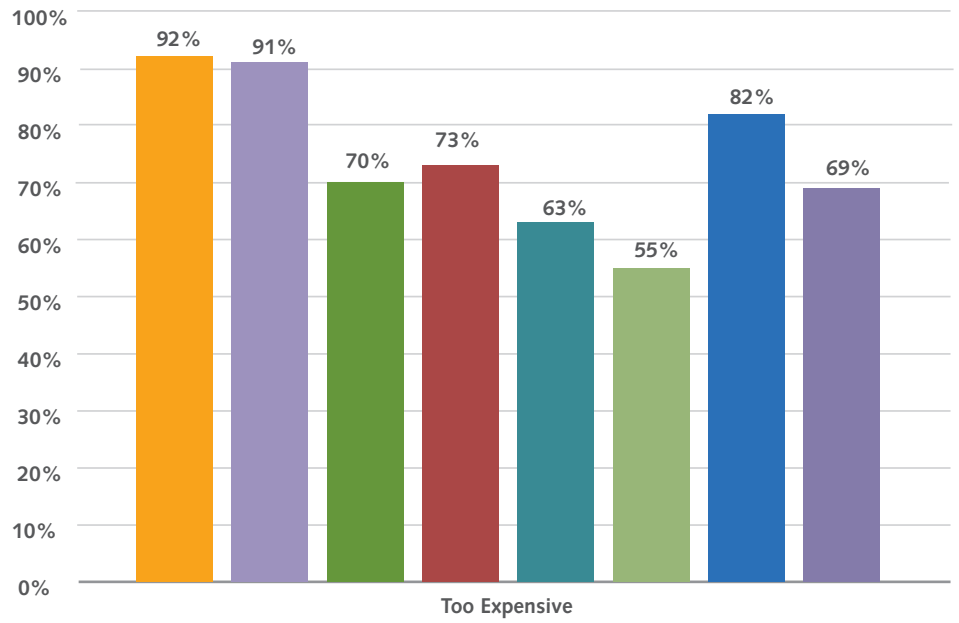
Note: NHOPI=Native Hawaiian or Other Pacific Islanders.
Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2011.

KEY POINTS

Mothers & Pregnancy

- Women who are overweight or obese before becoming pregnant and during their pregnancy are at increased risk for many health conditions including diabetes, chronic hypertension, labor and delivery complications, maternal mortality, and excess postpartum weight retention.[330,331,332]
- The baby of an overweight or obese mother has higher risks of newborn complications, death, birth defects, childhood obesity, and diabetes.[333,334,335]
- Depression is the second most common cause of hospitalization for women in the U.S., while the first is childbirth.[336,337] Untreated depression is the number one pregnancy complication and is also the leading factor of postpartum depression.
- Prenatal care can greatly improve a mother's chances of having a healthy pregnancy and baby. It is important to get prenatal care as soon as a woman finds out that she is pregnant, so that medical providers can monitor how the baby is doing and identify small problems before they become big ones.
- Pregnant women are at high risk for developing serious illness caused by seasonal influenza (flu) due to the physiological changes that occur during pregnancy. Flu during pregnancy can cause pregnancy complications and harm the unborn baby. Inoculation with an inactivated influenza vaccine (flu shot) is the most effective way to protect pregnant women and their unborn babies from influenza and its resulting complications.[338,339,340]

Figure 23 Percentage of Caretakers of Children 0-5 Years who Report Cost as the Biggest Barrier to Finding & Keeping Childcare by SPA, Los Angeles County 2011



Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Babies

- Infant mortality is one of the most important indicators of the health of a nation because it is the result of maternal health, quality of and access to medical care, socioeconomic conditions, and public health practices.[341] While the overall infant death rate in Los Angeles County is lower than the Healthy People 2020 goal, the death rate for black infants is more than double the rate for infants of other racial/ethnic groups.
- Low birth weight is a critical public health concern because low birth weight and very low birth weight (< 1,500 g) babies may have an increased risk for neonatal health conditions, such as respiratory distress syndrome or heart and intestinal problems.[342] Effects of low birth weight can also contribute to heart disease, diabetes, and high blood pressure later in life.[343]
- The majority of low birth weight births result from premature delivery or fetal growth restriction. These birth complications may arise from a number of maternal factors, including maternal high blood pressure, insufficient weight gain, and cigarette or illicit drug use during pregnancy.[344]
- Breastfeeding has been called 'the first vaccination' as it protects both mothers and children from illness. It is beneficial for children as it reduces illnesses such as diarrhea, ear infection, and pneumonia, and decreases their chance of developing asthma. Women who engage in breastfeeding have a lower chance of developing breast and ovarian cancers.[345]

- Many of the reasons that women stop breastfeeding before three months after their baby's birth are due to breastfeeding management problems that are preventable. These include difficulty breastfeeding, cracked, sore or bleeding nipples, and challenges producing enough milk. Many of these problems can be addressed through breastfeeding education and support, beginning prenatally and continuing while new mothers are in the hospital post-delivery and once they return home.[346]
- Hospitals can be designated as "baby-friendly" if they follow steps to promote breastfeeding, including informing mothers of the benefits of breastfeeding, showing mothers how to breastfeed and referring mothers to lactation support groups upon hospital discharge. When hospitals follow best practices for supporting new mothers' breastfeeding, mothers are more likely to initiate and continue to breastfeed.[347]

Children

- Finding childcare continues to be a burden for many working families, with cost a major barrier. Low-income working families face serious challenges locating full-day care, particularly for infants and toddlers. Availability of funding for subsidies has always been less than what is needed in Los Angeles County and is continuing to decrease with reductions to State and federal budgets.[348]
- Child maltreatment affects children's health now and later, and costs our country as much as other high profile public health problems. Neglect, physical abuse, custodial interference, and sexual abuse are types of child maltreatment that can lead to poor physical and mental health well into adulthood.[349]
- Children of color continue to be overrepresented in the child welfare system. Latino children have been the largest of all ethnic populations since 2001. Black children continue to be disproportionately represented but the percentage has declined over the past decade.[350]

b. Women's Health

INTRODUCTION

Women account for just over half of the population of Los Angeles County. They have longer life expectancies than men, are less likely than men to die of injuries from accidents and violence but are more likely to suffer from chronic diseases. In addition to distinct health needs related to biology, women also experience unique social and economic circumstances including expanded caregiving roles, lower incomes compared to men[351] and greater exposure to violence.

Often with little formal education, women in the County face the challenge of supporting or co-supporting a family with limited skills and therefore limited earning power. With half of women living in poverty, and almost one-half of women with a high school education or less, women face significant disadvantages that directly influence their health and wellness.[352] It is essential to create the conditions that will lead to healthy and prosperous women.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[353] iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

Poverty

- Over half of all women (51%) live in poverty or are hovering near poverty. Twenty seven percent (27%) of women have household incomes less than 100% of the Federal Poverty Level (FPL), and another 24% of women have household incomes between 100% – 199% of the FPL.[354]

Education

- One in four women (25%) has less than a high school education, one in five women (21%) has only completed high school, less than one in three women (29%) has completed some college, trade school or an associate's degree, one in six women (16%) has a college degree, and one in ten women has a post graduate degree (10%) (see Figure 24).[355]

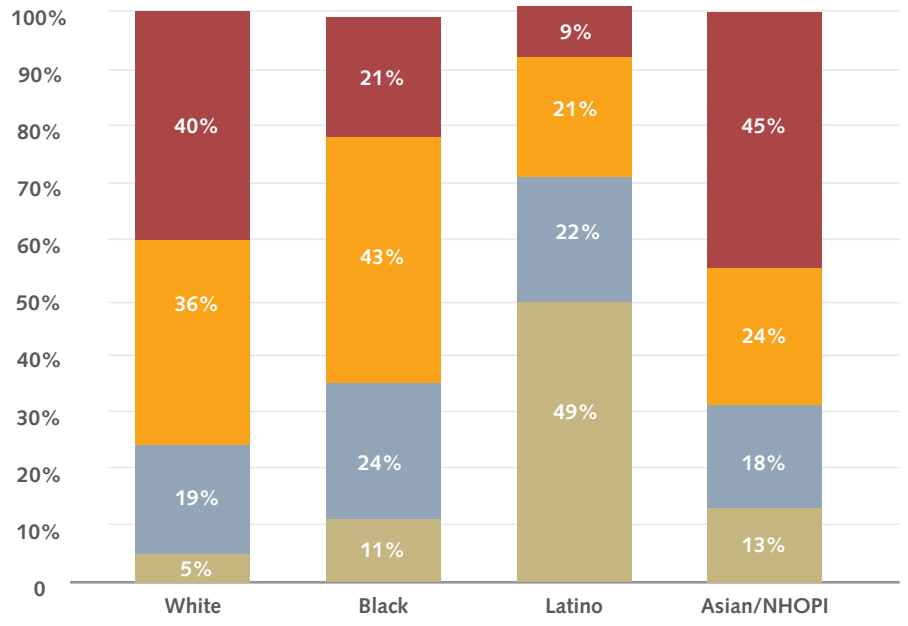
Health Status

- Twenty three percent (23%) of women report that their health is poor or fair.[356]

Depression

- Fifteen percent of women in the County report ever having been diagnosed with depression and 10% currently suffer with depression.[357]

Figure 24 Women's Educational Level by Race/Ethnicity, Los Angeles County 2011



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Note: Percentages may not total to 100% due to rounding.
Source: Los Angeles County Health Survey 2011, Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Preventive Health

- Eighty-six percent of women ages 21– 65 years have had a Pap test within the past three years, falling short of the Healthy People 2020 goal of 93%.[358]
- Eighty percent of women ages 50 – 74 years have had a mammogram in the past 2 years, almost reaching the Healthy People 2020 goal of 81%.[359]

Life Expectancy

- Women have a longer life expectancy than men (84.1 years versus 78.8 years) in 2010.[360]

Unintended Pregnancy

- Among mothers who had live births in 2010, 48% reported their pregnancy was unintended. This translates into 63,917 live births that were the result of unintended pregnancies.[361] An unintended pregnancy is a pregnancy that is mistimed, unplanned, or unwanted at the time of conception.[362]

Intimate Partner Violence

- Seventeen percent of women (533,000) report ever experiencing physical or sexual violence by an intimate partner since age 18.[363]
- Three percent of women (97,000) report physical or sexual violence by an intimate partner in the past year.[364]

- The rate of emergency room visits for intimate partner violence (treated and released home) is 10 per 100,000 women ages 18 and older, compared to 0.8 per 100,000 for men ages 18 and older.[365]

What Do Women Die from in Los Angeles County?

Leading Causes of Death

- Coronary heart disease is the leading cause of death for women of all races/ethnicities.[366]
- The second leading cause of death for women is stroke, followed by Alzheimer's disease, emphysema, and lung cancer.[367]
- Alzheimer's deaths have increased 105% in the past 10 years for all women. Alzheimer's disease kills more women than men, with a death rate for women of 26 deaths per 100,000 women as compared to 22 deaths per 100,000 men.[368]

Leading Causes of Premature Death (death before age 75)

Years of Life Lost (YLL) is a measure that estimates the average time a person would have lived had he or she not died prematurely. For the purpose of this report, premature deaths are those that occur prior to age 75.

- The leading cause of premature death for women is coronary heart disease for all races/ethnicities, except Asian/NHOPI women for whom breast cancer is the leading cause of premature death and coronary heart disease is the second leading cause of premature death.[369]
- The second leading cause of premature death for women is breast cancer, followed by lung cancer, stroke and liver disease.[370]

DIFFERENCES AND DISPARITIES

Poverty and Education

- Three quarters of all Latinas (75%) live in poverty or are hovering close to poverty, with household incomes at <100% of the Federal Poverty Level (FPL) or between 100 – 199% of the FPL, compared to 48% of all black, 41% of all Asian/NHOPI, and 23% of all white women (see Figure 25).[371]
- Almost one half (49%) of all Latinas have less than a high school education, compared to Asian/NHOPI (13%), black (11%), and white women (5%) (see Figure 24).[372]

Health Status

- More Latino women (31%) in the County report that their health is poor or fair compared to black (25%), Asian/NHOPI (20%), and white women (13%).[373]

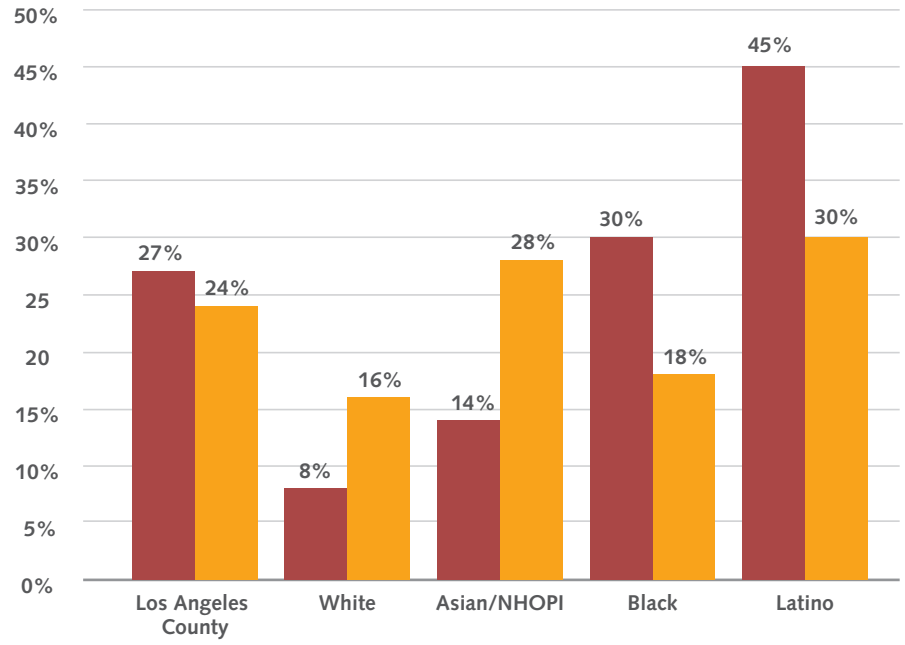
Depression

- Twenty percent of white women in the County have been diagnosed with depression, compared to black (18%), Latino (12%), and Asian/NHOPI women (8%).[374]

Preventive Health

- Asian/NHOPI women ages 21– 65 years have the lowest rate (69%) of having had a Pap test within the past three years, compared to white (86%), Latina (90%), and black women (92%).[376]
- Asian/NHOPI women ages 50 – 74 years have the lowest rate (70%) of having had a mammogram in the past two years, compared to white (79%), black (83%), and Latina women (85%).[377]

Figure 25 Women in Poverty: Household Income, Los Angeles County 2011



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County Health Survey 2011, Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health. Based on the U.S. Census 2012, Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL).[375]

Life Expectancy

- Asian/NHOPI women have the highest life expectancy (87.6 years) compared to Latino (85.6 years), white (83.1 years), and black women (78.9 years).[378]

Unintended Pregnancy

- Unintended pregnancy rates vary widely by race/ethnicity, Service Planning Area (SPA) and age group:
  - Among women who had live births in 2010, black mothers reported the highest prevalence of unintended pregnancy (60%), followed by Latino (57%), Asian/NHOPI (33%), and white (24%) women (see Figure 26).[379]
  - Women in SPA 6 and SPA 1 reported the highest prevalence of unintended pregnancy in 2010 (60% and 59% respectively), followed by SPA 7 (55%), SPA 4 (50%), SPA 3 (48%), SPA 8 (47%), SPA 2 (39%), and SPA 5 (26%).[380]
  - Women under 20 years of age reported the highest prevalence of unintended pregnancy (80%), followed by mothers 20-24 years of age (65%), mothers 25-34 years of age (42%), and mothers 35 years and older (35%) (see Figure 27).[381]

Intimate Partner Violence

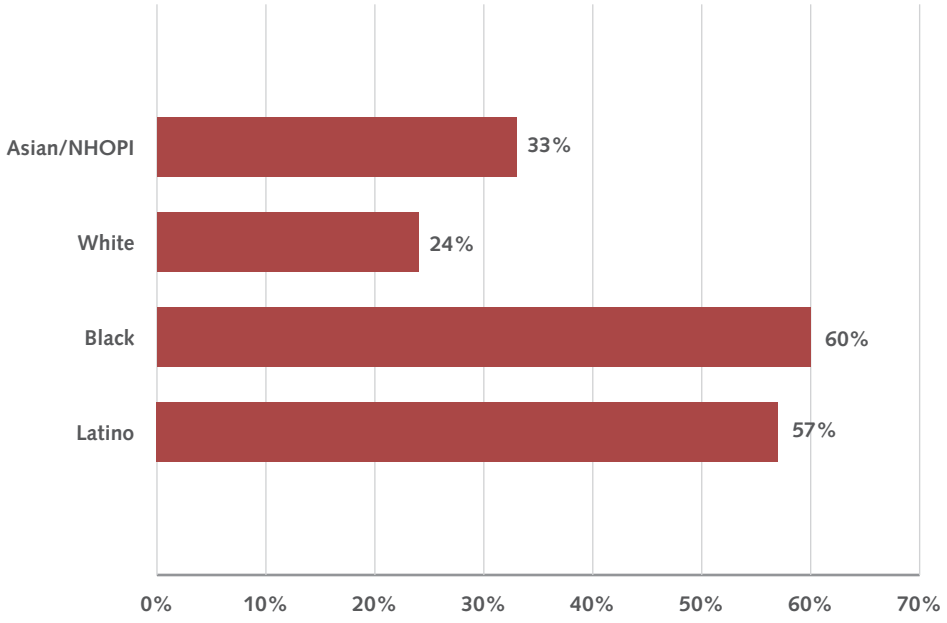
- Black women (24%), white women (20%), and Latina women (16%) report higher rates of ever experiencing intimate partner violence compared to Asian/NHOPI women (6%).[382]

What Do Women Die from in Los Angeles County?

Leading Causes of Death

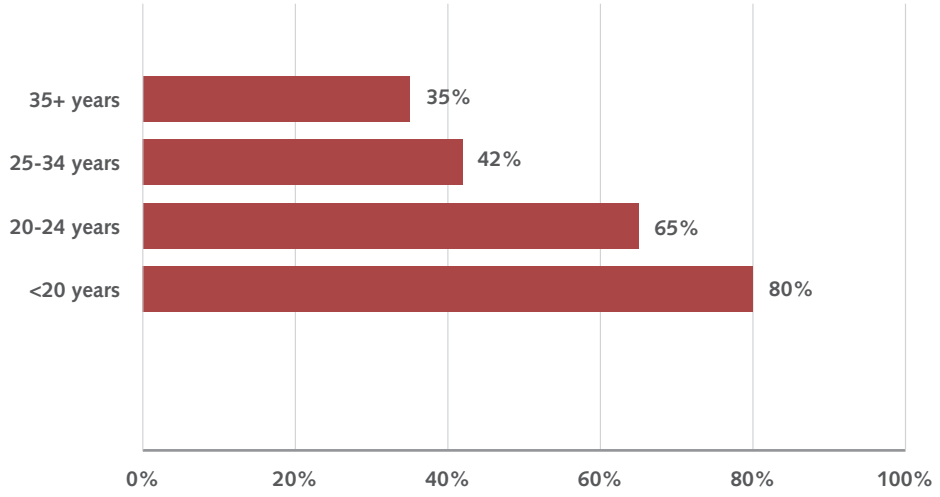
- Black women have the highest death rate of all women at 748 deaths per 100,000, compared to white (568 deaths per 100,000), Latino (440 deaths per 100,000), and Asian/NHOPI women (354 deaths per 100,000). The death rate for black women is also higher than the death rate for all men, which is 739 deaths per 100,000.[383]
- Younger women, ages 15-44, die primarily from injuries, rather than illness. The top causes of death for this age group are motor vehicle crashes, drug overdose, suicide, and homicide.[384]
- Diabetes is the third leading cause of death for Latino women of all ages, and is the top cause of death for Latino women ages 65-74. Diabetes is not among the top five leading causes of death for women of any other race/ethnicity.[385]
- The death rate for black women from breast cancer, 36 deaths per 100,000 females, is much higher than the overall County rate of 21.1 deaths per 100,000 females.[386]

Figure 26 | **Unintended Pregnancy by Woman's Race/Ethnicity, Los Angeles County 2010**



Note: NHOPI=Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County Department of Public Health, Maternal, Child, and Adolescent Health Programs, Los Angeles Mommy and Baby Project, 2010 Surveillance Report.

Figure 27 Unintended Pregnancy by Woman's Age, Los Angeles County 2010



Source: Los Angeles County Department of Public Health, Maternal, Child, and Adolescent Health Programs, Los Angeles Mommy and Baby Project, 2010 Surveillance Report.

KEY POINTS

Poverty and Education

- Too many women in Los Angeles County have household incomes so low that they are unable to meet their families' basic needs, which affects the well-being of all family members (see "Income & Cost of Living").
- Further, an alarming number of women in Los Angeles County are poor and without a high school degree, let alone a college degree. They face the challenge of supporting or co-supporting a family with limited skills and therefore limited earning power, which can negatively affect their own health as well as the health of their children. Ensuring that girls and women attain higher levels of education so that they have more career options and better economic security is key to improving the well-being of women – and children – in Los Angeles County.[387]

Unintended Pregnancy

- Unintended pregnancy is a major public health problem with nearly half of all births unplanned in Los Angeles County. Unintended pregnancy is associated with an increased risk of health problems for both the mother and baby. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing. Unintended pregnancy mainly results from the lack of, inconsistent, or incorrect use of effective contraceptive methods.[388]
- Given the importance of women's reproductive and sexual health, the federal Affordable Care Act presents an opportunity to expand access and use of birth control. The federal guidelines for coverage include Food and Drug Administration approved contraceptive methods, sterilization procedures, and patient education and counseling for all women with reproductive capacity, underscoring the significance of women's reproductive and sexual health.[389]

Intimate Partner Violence

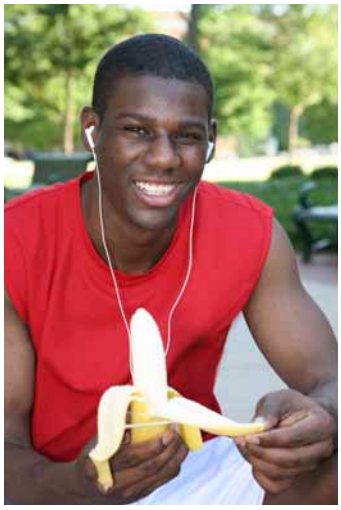
- Intimate partner violence (IPV) is a serious, preventable public health problem that affects millions of Americans. The term "intimate partner violence" describes physical, sexual, or psychological harm by a current or former partner or spouse. This type of violence can occur among heterosexual or same-sex couples, and does not require sexual intimacy. The public health goal is to stop IPV before it begins. Strategies that promote healthy behaviors in relationships are important, including programs that teach young people skills for dating and violence prevention.[390]
- The data on IPV is underestimated for several reasons. Many women find it difficult to report this violence because of the stigma, threat of retaliation from their batterer, financial constraints, fear of losing custody of one's children, issues of immigration status, language barriers, and cultural beliefs. In addition, typically the most "physically severe" cases are those that are identified by law enforcement or hospitals, and even these cases are not always reported as IPV.
- The federal Affordable Care Act presents an opportunity to identify and treat women who are victims of IPV; the law provides coverage for screening and counseling for interpersonal and domestic violence.[391]

What Do Women Die from in Los Angeles County?

- Chronic conditions such as coronary heart disease, stroke, and Alzheimer's disease remain the leading causes of death among women in Los Angeles County. Cancer and injuries are important leading causes of premature death among women in Los Angeles County. County-wide efforts to build communities that make it easy for people to eat healthy and engage in regular physical activity are a top priority – and will positively impact the health of all residents, not only women.
- Black women have the lowest life expectancy and highest mortality rates from many chronic medical conditions compared to other women in the County. Even though black women report better access to health care, they also face particular barriers to health such as high rates of exposure to violence, communicable diseases, and smoking, thus demonstrating the complex interplay of factors contributing to disparities.[392]
- A Center for Disease Control and Prevention (CDC) study found that despite having lower incidence rates, black women had a 41% higher breast cancer death rate. The CDC concluded that black women experience inequities in the medical system's response to breast cancer, including delays in diagnosis and treatment, leading to greater mortality.[393] Research at Harlem Hospital in New York City found that when black women were offered free and low-cost mammograms combined with a "patient navigation" program to lend one-on-one support to women to obtain insurance and understand medical recommendations during cancer treatment, the five-year survival rate for women diagnosed with breast cancer increased to 70 percent in 2000 compared to 39 percent in 1986.[394,395]

c. Adolescent Health

INTRODUCTION



During adolescence, youth establish patterns of behavior that can impact their future health.[396] Young people who do not have equal opportunities to make choices leading to good health may engage in unhealthy behaviors such as substance abuse and unsafe sexual behaviors. In addition, depending upon the neighborhoods they live in, adolescents can face great risks including homicide, the leading cause of death for adolescents in Los Angeles County.

Many sectors of society contribute to the health, safety, and well-being of adolescents. This mosaic of efforts engages multiple partners, including youth, health care providers/health care delivery system, policy makers, researchers, families, government agencies, community organizations, and schools.[397] Adolescents benefit from a wide range of services and opportunities that contribute to healthy social, emotional, and physical development. Appropriate youth development strategies are essential to enable adolescents to live, learn, and, when appropriate, earn in safe and supportive environments.[398]

Stakeholders whose activities have an impact on adolescent health and development need to collaborate. Healthy adolescents are keys to the success of other sectors' aims—for example, education and employment – thus cross-sectorial collaboration yields benefits to all.[399] Investing in quality youth development is an investment in the future of Los Angeles County and impacts all residents.

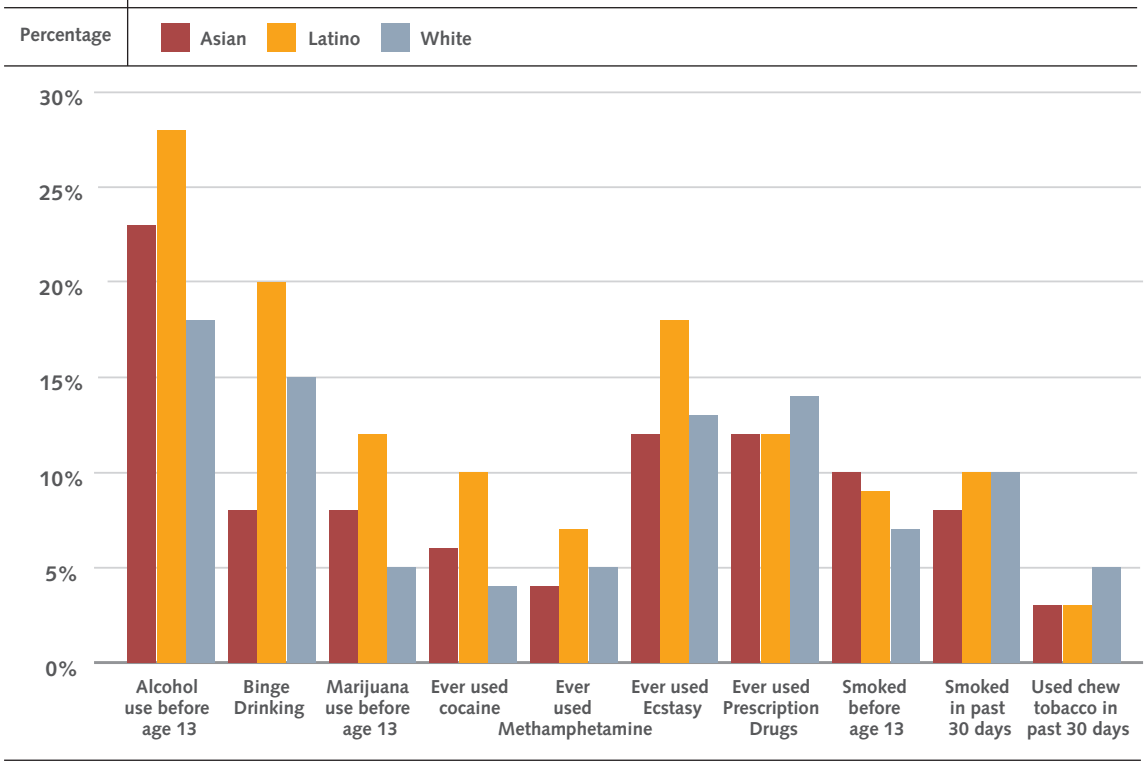
THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Different data sources define "adolescents" using various age ranges. Therefore, this report does not provide a specific age range to define "adolescent." The American Academy of Pediatrics defines adolescence as ages 12 to 18;[400] iii) Sometimes the data are not available for adolescents alone; instead they are combined with younger children or young adults. Therefore the terms "children", "youth", "adolescents", and "young adults" are all used in this section; iv) Data identified with an asterisk (*) are statistically unstable; v) SPA = Service Planning Area (refers to 8 subregions in LA County); vi) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[401] vii) NHOPI = Native Hawaiian and Other Pacific Islanders.

Poverty

- Over half of all children and adolescents ages 0-17 (51%) live at or near the poverty level: twenty four percent live in households with incomes less than 100% of the Federal Poverty Level (FPL) and another 27% live in households with incomes between 100% – 199% of the FPL.[402]

Figure 28 Percentage of Students (Grades 9-12) Who Have Used Alcohol and Drugs, Los Angeles Unified School District 2011



Note: Due to small sample size (fewer than 100 respondents), these data do not include black and NHOPI (Native Hawaiian or Other Pacific Islander) students.
Source: 2011 Youth Risk Behavior Survey (YRBS), Grades 9-12, Los Angeles Unified School District, Centers for Disease Control and Prevention.

Health Coverage

- Ninety-five percent of children and adolescents ages 0-17 have some type of health insurance, compared to 71% of adults ages 18-64.[403]

High School Graduation Rate

- Seventy-seven percent of high school students graduate in four years,[404] below the Healthy People 2020 goal of 82.4%.[405]

Substance Use

- Over one-quarter (26%) of high school students report having their first drink of alcohol (other than a few sips) before age 13 years.[406]
- Eighteen percent of high school students report binge drinking (having had five or more drinks of alcohol within a couple of hours, on one or more of the past 30 days).[407]
- Twelve percent of high school students report having tried marijuana before age 13 years.[408]
- During their lifetime, 16% of high school students report having used ecstasy, 9% report having used cocaine, and 7% report having used methamphetamine.[409]

- Twelve percent of high school students report having taken prescription drugs without a doctor's prescription.[410]
- Nine percent of high school students report having smoked a whole cigarette for the first time before age 13 years.[411]
- Nine percent of high school students report having smoked cigarettes on one or more of the past 30 days.[412]
- Four percent of high school students report having used chewing tobacco, snuff, or dip on one or more of the past 30 days.[413]

Pregnancy and Sexual Behaviors

- The adolescent fertility rate is 28 live births per 1,000 females ages 15-19.[414]
- Adolescents and young women who are younger than 20 years of age have the highest percentage of unintended pregnancy (80%), compared to women ages 20-24 (65%), 25-34 (42%), and 35+ (35%).[415] An unintended pregnancy is a pregnancy that is mistimed, unplanned, or unwanted at the time of conception.[416]
- Thirty nine percent of high school students report ever having sexual intercourse and 26% report they are currently sexually active (have had sexual intercourse with at least one person during the three months before the survey).[417]
- About one in five (21%) sexually active high school students report not using any method to prevent pregnancy and 39% report not using a condom during their last sexual intercourse.[418]

Sexually Transmitted Diseases (STDs)°

- Forty-seven percent of sexually active adolescents were screened for STDs† in the last year.[419]
- In 2012, among adolescents ages 15-19, there were:
  - 1,590 cases of gonorrhea, for a case rate of 227 (per 100,000 population).[420]
  - 10,816 cases of chlamydia, for a case rate of 1,546 (per 100,000 population).[421]
  - Twenty-two cases of primary and secondary syphilis, for a case rate of 3 (per 100,000 population)[422] and 26 cases of early latent syphilis for a case rate of 4 (per 100,000 population).[423]
- Sixty seven youth ages 13-19 were diagnosed with HIV or AIDS in 2012.[424] Youth ages 13-19 years represented 4% of new HIV diagnoses.[425]
- Less than 2% of people living with HIV were under 20 years of age in 2012.[426]

°STD numbers exclude cases in cities of Long Beach and Pasadena
†Does not include testing for HIV

Mental Health

- In 2011, 14% of high school students seriously considered attempting suicide and made a plan about how they would attempt suicide.[427]
- Approximately one out of ten (11%) high school students have attempted suicide one or more times.[428] For 4% of high school students, a suicide attempt resulted in treatment by a doctor or nurse.[429]

What do Adolescents Die from in Los Angeles County?

- In 2010, there were 780 deaths among youth ages 15-24. Of those deaths for whom the gender was known, 604 were males and 171 were females.[430]
- The top five leading causes of death for youth ages 15-24 in 2010 were: homicide (241 deaths), followed by motor vehicle crashes (116 deaths), suicide (89 deaths), drug overdose (57 deaths), and leukemia (24 deaths).[431]
- 15-24 is the age group with the highest rate of death by homicide and the highest rate of death by motor vehicle crashes out of all age groupings in the County.[432]

DIFFERENCES AND DISPARITIES

High School Graduation Rate

- Asian students have the highest high school graduation rate (93%), followed by Filipino (91%), white (85%), NHOPI (75%), Latino (71%), and black (66%) students.[433]

Substance Use

- Male high school students report higher rates of smoking cigarettes on one or more days in the past month (11%), compared to female students (7%).[434]
- A higher percent of male high school students (8%) report having used methamphetamine during their lifetime, compared to female students (5%).[435]
- Latino high school students report higher rates (20%) of having had five or more drinks of alcohol within a couple of hours, on one or more day in the last month, compared to white (15%) and Asian (8%) students (see Figure 28).[Δ436]
- A higher percentage of Latino students report having used ecstasy in their lifetime (18%), compared with white (13%) and Asian students (12%) (see Figure 28).[Δ437]
  [Δ]*Data for black students are not available due to a low number of survey respondents.*

Pregnancy and Sexual Behaviors

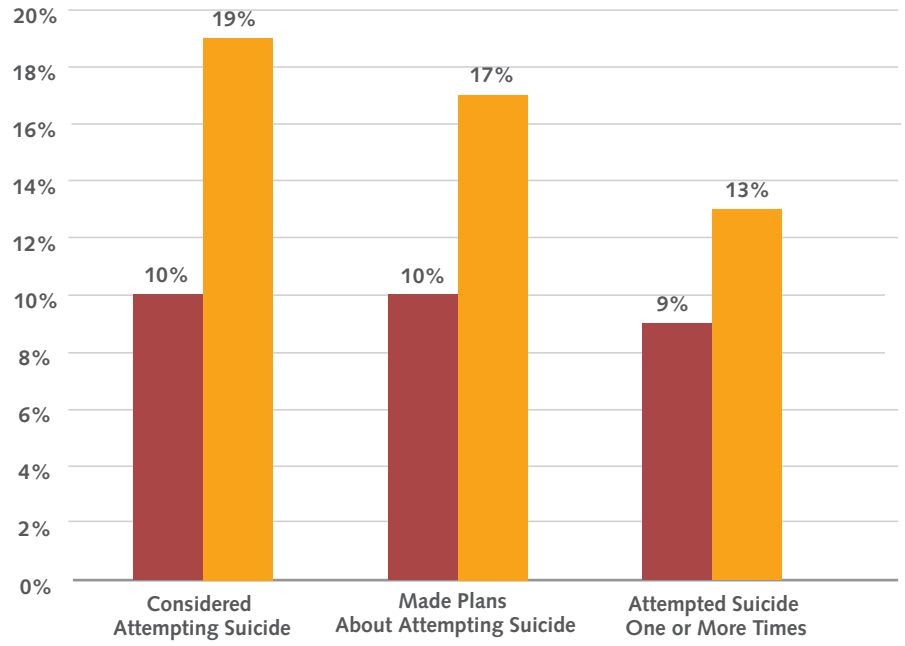
- Latino adolescents have the highest fertility rate (40 per 1,000), followed by black (30 per 1,000), white (5 per 1,000), and Asian/NHOPI (3 per 1,000) teens.[438]
- Adolescents in SPA 6 have the highest fertility rate (51 per 1,000), followed by adolescents in SPA 4 (36 per 1,000), SPA 1 (34 per 1,000), SPA 7 (31 per 1,000), SPA 8 (26 per 1,000), SPA 3 (22 per 1,000), SPA 2 (19 per 1,000), and SPA 5 (6 per 1,000).[439]
- Twenty three percent of 9th grade students report ever having sexual intercourse, compared to 36% of 10th graders, 52% of 11th graders, and 61% of 12th graders. Similarly, 9th graders report the lowest rates of being currently sexually active (12%), compared to 24% of 10th graders, 35% of 11th graders, and 45% of 12th graders.[440]
- Sexually active female high school students report higher rates of not having used a method to prevent pregnancy (25%) during their last sexual intercourse, compared to sexually active male high school students (18%).[441]

Sexually Transmitted Disease (STDs)°

- Among all female adolescents, black teens ages 15-19 have the highest rates of chlamydia with 7,131 cases (per 100,000 population), compared to 1,803 cases (per 100,000 population) for Latinas and 777 cases (per 100,000 population) for whites ages 15-19.[442]
- Among all female adolescents, the highest number of cases and highest case rate for gonorrhea is in blacks ages 15-19 years with 524 cases (1,736 cases per 100,000).[443] Latina females in this age range had 262 cases (129 cases per 100,000) and white females had 60 cases of gonorrhea (86 cases per 100,000).[444]
- Among all male adolescents, blacks ages 15-19 have the highest case rates for both chlamydia (2,391 cases per 100,000 population) and gonorrhea (944 cases per 100,000 population). This compares to Latinos (455 chlamydia cases per 100,000 population and 102 gonorrhea cases per 100,000 population) and whites (179 chlamydia cases per 100,000 population and 72 gonorrhea cases per 100,000 population) of the same age range.[445]

°STD numbers exclude cases in cities of Long Beach and Pasadena.
No data are available for Asian/NHOPI adolescents.

Figure 29 Percentage of Students (Grades 9-12) Who Have Considered, Planned For, and Attempted Suicide, Los Angeles Unified School District 2011



Source: 2011 Youth Risk Behavior Survey (YRBS), Grades 9-12, Los Angeles Unified School District, Centers for Disease Control and Prevention.

Table 7 Leading Causes of Death for Adolescents Ages 15-24 by Gender and Race/Ethnicity, Los Angeles County 2010

Race/Ethnicity	#1 Cause		#2 Cause		#3 Cause	
	Male	Female	Male	Female	Male	Female
White (147 total deaths)	Drug overdose (29 of 105)	Drug overdose (8 of 42)	Motor vehicle crash (17 of 105)	Motor vehicle crash (7 of 42)	Suicide (9 of 105)	Suicide (6 of 42)
Latino (431 total deaths)	Homicide (130 of 346)	Motor vehicle crash (14 of 85)	Motor vehicle crash (56 of 346)	Homicide (11 of 85)	Suicide (44 of 346)	Leukemia (8 of 85)
Black (148 total deaths)	Homicide (77 of 121)	Homicide (8 of 27)	Motor vehicle crash (13 of 121)	Suicide (<5 of 27)	Suicide (9 of 121)	Motor vehicle crashes (<5 of 27)
Asian/NHOPI (49 total deaths)	Homicide (6 of 32)	Suicide (<5 of 17)	Suicide (6 of 32)	Motor vehicle crash (<5 of 17)	Motor vehicle crash (<5 of 49)	Lymphoma (<5 of 27)

Note: Five additional adolescent deaths were unable to be classified by gender and race/ethnicity and are not included in this table.
Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. Mortality in Los Angeles County 2010: Leading causes of death and premature death with trends for 2001-2010. October 2013.

Mental Health

- A higher percentage of female high school students have seriously considered attempting suicide (19%) compared to their male counterparts (10%), and have made a plan about how they would attempt suicide (females: 17%; males: 10%) (see Figure 29).[446]

What do Adolescents Die from in Los Angeles County?

- Latino male adolescents ages 15-24 have the largest number of deaths by homicide (#1 cause; 130 deaths), compared with blacks (#1 cause; 77 deaths), Asians/NHOPI (#1 cause; 6 deaths), and whites (0) (see Table 7).[447]
- White male and female adolescents (ages 15-24) are the only racial/ethnic group to have death by drug overdose in their top five leading causes of death males: #1 cause (29 deaths); females: #1 cause (8 deaths) (see Table 7).[448]
- While fewer female adolescents ages 15-24 die from homicide compared to males, homicides are among the top three causes of death for black female adolescents (#1 cause; 8 homicides) and Latina female adolescents (#2 cause; 11 homicides) (see Table 7).[449]

KEY POINTS

High School Graduation Rates

- Only 77% of high school students are graduating in four years, and the rate is lower for black and Latino students. Without a high school degree, the chances of earning a self-sufficient income are much lower. Further, as described in "Education," health improves as educational attainment rises. Implementing strategies to increase the number of high school students who graduate and seek higher education or vocational training is essential to the future of Los Angeles County youth.

Substance Use

- During adolescence, young people may start smoking or using other substances. This puts teenagers at risk for the associated health problems and injuries that occur with smoking, drinking and using other illicit substances. Further, behaviors begun in childhood and adolescence can be difficult to stop as adults. People who initiate substance use as an adolescent are much more likely to develop a substance use disorder, such as alcohol dependence, as an adult.[450]

Pregnancy and Sexual Behaviors

- Latino and black adolescents have significantly higher fertility rates than their white and Asian/NHOPI peers. The task of raising a child as a teenage mother can be daunting, and without adequate support from one's family and social network, adolescent mothers can face challenges raising their children in a stable, nurturing environment. Further, pregnant teens are more likely to give birth to preterm or low birth weight infants.[451]
- The social and economic toll of adolescent pregnancy is high, as teen mothers are less likely to complete high school compared to their peers, making it more difficult to secure a stable future for themselves and their children.[452,453] Teen mothers are also more susceptible to violence, abuse, and neglect. Further, children of teen mothers are more likely to have poorer academic performance or behavioral and emotional challenges.[454]

Sexually Transmitted Diseases

- Adolescents are at high risk for sexually transmitted disease infection and can experience long-term complications if these sexually transmitted diseases are not treated properly. For example, chlamydia can cause infertility in women.
- With such high rates of sexually transmitted disease in the adolescent population, screening for sexually transmitted diseases is vital to treat disease and prevent transmission.
- High prevalence of STDs among teenagers can be attributed to many factors, including a lack of information about the risks of transmission from unprotected intercourse, an inability to access and pay for care and treatment, and concerns about confidentiality.
- School-based programs that incorporate STD and HIV education into their curriculum can help increase STD and HIV awareness among students.[455]

What do Adolescents Die from in Los Angeles County?

- Four of the five leading causes of death for adolescents are preventable (homicide, motor vehicle crashes, suicide, drug overdose) but top causes differ by race/ethnicity with minority youths more likely to die from homicide. Multi-sector evidence-based strategies are critically needed in the County to prevent adolescents from dying due to violence, poor road safety, suicide, and drug overdose.
- Key violence prevention strategies include educational and recreational opportunities for children and adolescents, such as after-school programs, community-based violence prevention approaches, community policing, and building neighborhoods that discourage violence with well-lit streets and a lot of pedestrian traffic.[456]

Mental Health

- Health care providers and other adults who interact with youth, as well as the general public need to be educated that suicide is preventable.[457]
- Access to mental health and substance abuse services, positive youth development programming, and strategies that foster connectedness in the schools are keys to preventing negative mental health outcomes.[458]

d. Health of Older Adults

INTRODUCTION

In Los Angeles County, people 65 years and older ("older adults") currently account for more than one million residents and the number of older adults is projected to double by 2030, reaching 2.2 million or 19% of the total population.[459] This aging population is diverse and includes people of various racial/ethnic groups, immigrants, grandparents taking care of grandchildren, and more.

As people age, health and economic security are paramount to a quality life. Since many older adults are on a fixed income, it can be difficult for them to make ends meet, thus raising concerns about their ability to access the services and basic amenities necessary for good health, including nutritious food, safe, affordable housing, and transportation. Surviving older adult spouses can become economically vulnerable given high out-of-pocket medical costs at end of life and the potential reduction of income from benefits after the death of a spouse. Poverty disproportionately affects older adult women since they tend to outlive men and have reduced social security benefits because they did not earn as much as men.[460]

Quality health care and a regular source of care are vitally important to older adults since aging is often accompanied by complex medical conditions which may be treated with multiple medications. Nationally, about 91% of older adults have at least one chronic condition such as diabetes, arthritis, or hypertension, and 73% have at least two.[461] These medical conditions can seriously compromise quality of life for older adults and can lead to hospitalizations and a loss of independent living.[462] Quality of life and the ability to live independently for older adults is measured along a spectrum, taking into account ability to perform "activities of daily living" (ADLs) such as toileting, eating, bathing, transferring and "instrumental activities of daily living" (IADLs) such as meal preparation, handling finances, or taking medications.[463] With increased life expectancy, long term management of chronic illnesses has become a critical issue. By promoting healthy aging, including effective management of chronic diseases, the disability, diminished mobility, or suffering often associated with chronic illnesses can be reduced or delayed for later in life.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[464] iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

Financial Status of Older Adults

- A single older adult needs $24,359 and an older adult couple needs $31,599 to meet basic needs for one year in Los Angeles County (excluding the city of Los Angeles). This includes housing (one bedroom), food, transportation, health care, and other miscellaneous expenses.[465] These costs are even higher in the city of Los Angeles at $24,640 for a single and $31,840 for an older adult couple.[466] These costs are based on the unique characteristics of older adult households which include the expenses of essential necessities in order to maintain independence and not fall into poverty.
- In California, the 2011 median annual Social Security payment for a single older adult was $12,523 and for a couple, $20,483.[467]
- Twelve percent of older adults live in poverty.[468]

Health Status

- Thirty percent of adults ages 65 and older report their health is fair or poor.[469]
- Thirty-seven percent of people ages 65 and older report having a disability.[470]

Access to Care

- Nearly all (98%) of older adult population is insured, covered by public programs (e.g. Medi-Cal and Medicare), private insurance or some combination.[471]
- The majority of older adults report having a regular source of care (94%), are able to afford to both see a doctor for a health problem when necessary (96%) and are able to afford prescription medications when needed (93%).[472]

Mental Health

- Eleven percent of adults ages 65 and older report ever having been diagnosed with depression, similar to 12% of all adults.[473]
- Fifty-seven percent of older adults believe they receive sufficient social and emotional support compared with 64% of adults overall.[474]

Older Adults as Caregivers

- One in five (20%) adults (about 1.4 million people in the County), serve as care givers to an aging adult or to an adult that has a long-term illness or disability.[475] Nearly one in five (19%) caregivers is 65 years or older.[476]
- Four percent of grandparents are the primary guardians for their grandchildren.[477] This often unexpected responsibility of caring for a grandchild costs approximately $9,000 per year for children under the age of 18.[478]

Preventive Health

- Of adults 65 to 75 years, 74% are current with their colorectal cancer screening (based on U.S. Preventive Services Task Force guidelines.[479]

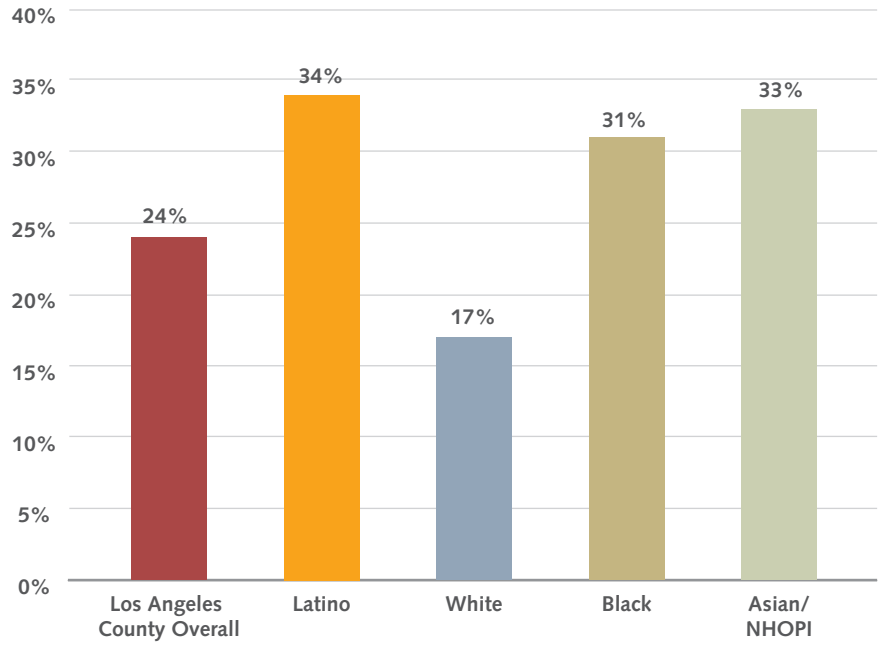
- Among adults who should take aspirin daily to prevent heart attack or stroke (recommended for some men ages 45 and older and women ages 55 and older), about half (46%) of adults ages 65 and older follow this recommendation.[480]
- Sixty-one percent of adults 65 years of age and older report receiving a dose of pneumococcal vaccine,[481] compared to the Healthy People 2020 objective of 90% coverage for this age range.[482]
- Fifty-seven percent of adults ages 65 years and older have been screened or tested for osteoporosis.[483]

Chronic Disease

- Twenty-four percent of adults 65 and older have been diagnosed with diabetes.[484]
- More than half a million adults ages 65 and older suffer from hypertension, corresponding to a prevalence of 58%.[485]
- About four in ten (39%) adults 65 and older are overweight and an additional 19% are obese.[486]
- Among adults 65 years and older, 18% have ever been diagnosed with osteoporosis.[487]

Figure 30 | **Prevalence of Diabetes Overall and by Race/Ethnicity for Ages 65 and Older, Los Angeles County 2011**

Percentage



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Injuries from Falls

- Falls are the leading cause of injury-related death for older adults. Adults age 65 and older account for 10% of the Los Angeles County population, but constitute 63% of fall hospitalizations and deaths.[488]
- In 2009, there were over 20,000 hospitalizations and over 300 deaths due to falls among adults 65 and older.[489]

Health Behaviors

- Walking is the most commonly reported form of physical activity among older adults.[490] One third (33%) of older adults use the walking paths, parks, playgrounds, or sports fields in their neighborhoods.[491]
- Only 21% of adults ages 65 and older meet federal activity guidelines for adults,[492] which recommend 150 minutes of moderate intensity activity weekly and muscle strengthening activities on at least two days per week.[493] Fifteen percent of adults 65 and older engage in no physical activity at all, and 65% are active but do not meet guidelines.[494]
- Eighteen percent of adults ages 65 and older consume five or more servings of fruit and vegetables daily.[495]

Leading Causes of Death

- Coronary heart disease is the number one killer of adults ages 65 and older as it is for adults overall, killing over 10,000 adults of all ages annually.[496]
- Other major causes of death for adults ages 65-74 are lung cancer, emphysema/Chronic Obstructive Pulmonary Disease (COPD), stroke, and diabetes.[497]
- For adults ages 75 and older, the leading causes of death after coronary heart disease are stroke, Alzheimer's disease, emphysema/COPD, and pneumonia/influenza.[498]
- Alzheimer's disease has been the fifth-leading cause of death overall since 2009. Over the last decade, the number of deaths from Alzheimer's disease has more than doubled from 905 in 2001 to 2,242 in 2010.[499]

DIFFERENCES AND DISPARITIES

Chronic Disease

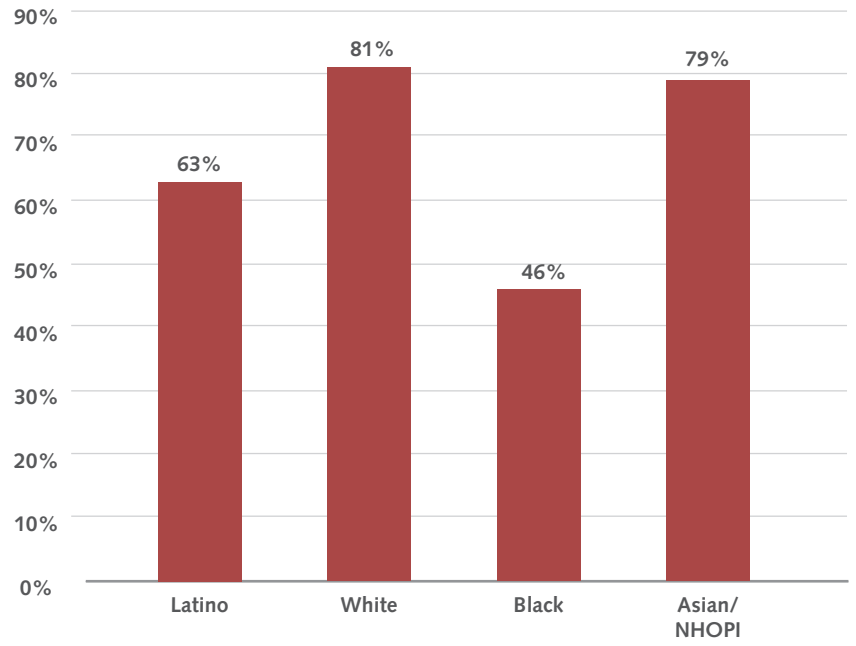
- Among adults age 65 years and older, diabetes prevalence differs by race/ethnicity: 34% of Latinos, 33% of Asians/NHOPIs, and 31% of blacks reported being diagnosed with diabetes, compared to 17% of whites (see Figure 30).[500]
- Black older adults have the highest prevalence of hypertension (75%), followed by Asians/NHOPIs (62%), Latinos (56%), and whites (53%).[501]
- The prevalence of osteoporosis is over four times higher in women (27%) than in men (6%).[502] Among women, Asians/NHOPIs (38%) have the highest rate of osteoporosis, followed by whites (26%), Latinas (23%), and blacks (18%).[503]

Preventive Health

- More white older adults (68%) receive Pneumococcal vaccinations compared to blacks (55%), Asians/NHOPI (54%), and Latinos (52%).[504]

Figure 31 | **Percent of Women (ages 65+) Ever Screened or Tested for Osteoporosis, Los Angeles County 2011**

Percentage



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- Among women 65 years and older, 81% of whites, 79% of Asians/NHOPIs, 63% of Latinas, and 46% of blacks, have been screened or tested for osteoporosis (see Figure 31).[505]

Mental Health

- Among adults, fewer older adults ages 65 years and older believe they receive sufficient social and emotional support (56%) compared to all adults (64%).[506]

KEY POINTS

- The population of Los Angeles County is aging and the number of older adults is growing. This necessitates an investment in healthy aging to ensure that older adults have the highest quality life possible.
- Staying active, strength training, and maintaining a healthy weight are important throughout life. This is particularly important as people age since retaining mobility can ensure greater independence in daily activities, minimize depression, and reduce harmful falls that are often preventable.

Financial Status of Older Adults

- Many older adults are on a fixed income and may rely almost exclusively on Social Security for income. Given that the cost of living for older adults significantly exceeds the average Social Security income in California, many older adults are likely not able to adequately support themselves, with potential adverse effects on their health and quality of life. In addition, older adults may remain in the work force, postponing retirement to supplement their income.

Access to Care

- The majority of older adults have health insurance and a regular source of care. The Patient Protection and Affordable Care Act can play a role in improving older adults' health status by ensuring high quality care through its preventive care benefits, including an annual wellness visit, and improved prescription drug coverage. Yet, there are barriers to care including an expected shortage of physicians and other aging service professionals, an aging provider workforce, and the need for greater diversity in the workforce.[507] In addition, the needs of older adults are specialized and despite being insured, their out of pocket costs for premiums, deductibles, co-payments, and medications can be high.

Older Adults as Caregivers

- Older adults who serve as caregivers for another adult or for grandchildren need additional financial and emotional support. For those who serve as primary guardians for their grandchildren, due to existing rules, grandparents are not permitted to receive the same government benefits to care for their grandchildren who are part of the foster care system as non-relative guardians would. Without financial support for a child's food, transportation, and housing, this additional economic burden on older adults can put their own health, and the health of their grandchild, in jeopardy.

Chronic Disease

- Older adults are living longer, often with chronic diseases. This means that healthy aging is an important public health goal so that the disability and suffering that often accompany chronic illnesses can be reduced.
- Healthy aging includes strong management of chronic diseases, coordinated, quality medical care with a distinct focus on preventive measures, a caregiving infrastructure, and safe age-friendly environments.

Injuries from Falls

- Fall prevention is a key focus area to improve the health of older adults, and includes education for older adults and their caregivers, balance strengthening for older adults, and maintaining a living environment that promotes safe mobility.

e. Mental Health

INTRODUCTION

The Centers for Disease Control and Prevention (CDC) defines mental health as a state of successful performance of mental function resulting in productive activities, fulfilling relationships, and the ability to adapt to change and cope with challenges.[508] It follows that mental health is a key part of individual, family, and community well-being.[509]

Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning.[510] These disorders result from an interaction of social influences and environmental and genetic factors throughout the lifespan.[511] Mental illness, which refers collectively to all diagnosable mental disorders, can disrupt a person's thinking, feeling, mood, ability to relate to others, and daily functioning.[512] There is also a close relationship between mental health and physical health.

Mental illness does not discriminate; it affects people of every age, race, and socioeconomic status.[513] However, many adults facing mental illness remain undiagnosed, whether for fear of judgment or discrimination, lack of knowledge, or lack of access to mental health care.[514] However, treatment does exist and can provide relief from symptoms for most people diagnosed with mental illness.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) NHOPI = Native Hawaiian and Other Pacific Islanders.

Mental Health Status and Quality of Life

- Ten percent of adults are at risk of major depression.[515] Twelve percent report ever having been diagnosed with depression, and 8% report currently having depression.[516]
- Eleven percent of adults report ever having been diagnosed with anxiety, and 6% report currently having anxiety.[517]
- Sixty-four percent of adults believe they receive sufficient social and emotional support.[518]
- On average, adults report three days per month in which their mental health is not good.[519]
- On average, adults report having two days per month when their regular daily activities are limited due to poor mental and/or physical health.[520]

Access to Mental Health Care

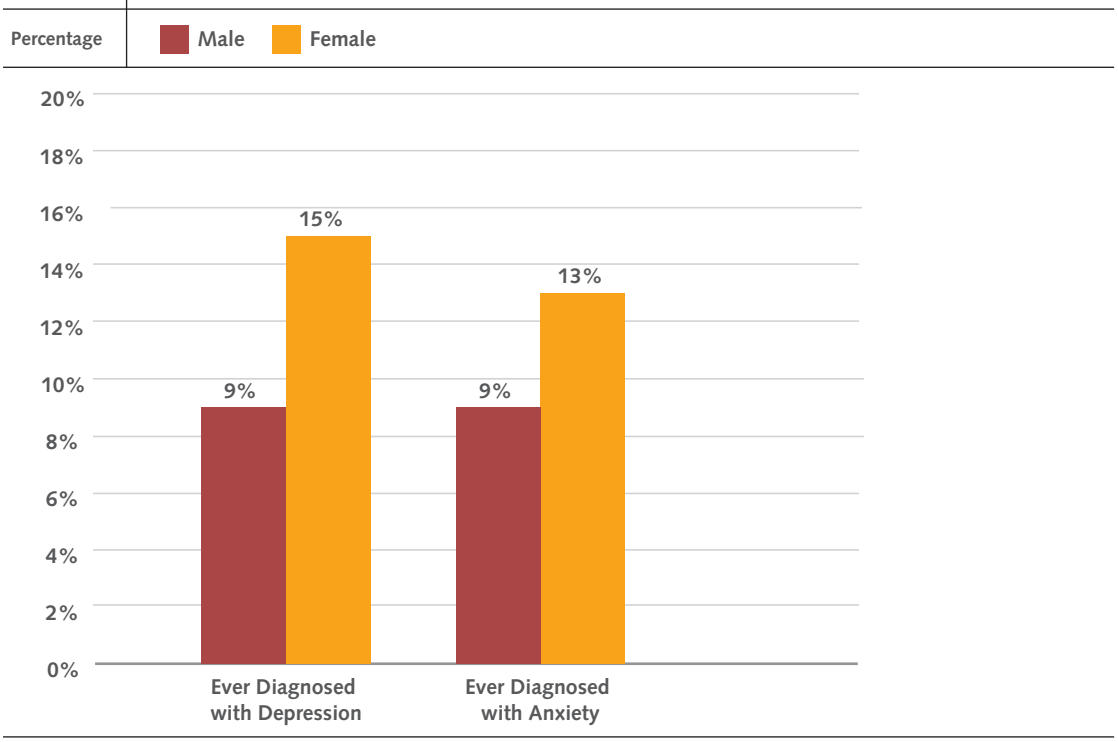
- Eight percent of adults (over half a million) tried to access mental health care within the past year. Among those adults, 37% had difficulty accessing mental health care.[521]
- Forty-five percent of the low income population with an estimated need for mental health services received publicly funded mental health services last year.[522]

DIFFERENCES AND DISPARITIES

Mental Health Status and Quality of Life

- Adults in SPAs 5 and 8 report on average the lowest number of days per month in which their mental health is not good – 2.0 days and 2.9 days, respectively - followed by SPA 3 (3.0 days), SPA 4 (3.4 days), SPA 7 (3.5 days), SPA 2 (3.6 days), SPA 1 (3.8 days), and SPA 6 (4.0 days).[523]
- Homosexual and bisexual adults report more days per month (5.1 days) in which their mental health is not good compared to 3.3 days for heterosexual adults.[524] Homosexual and bisexual women report the highest average number of days at 6.4 days per month of fair of poor mental health.[525]
- The number of days per month in which adults' regular daily activities are limited due to poor physical or mental health is higher among those ages 50 and older compared to those younger than age 50.[526]

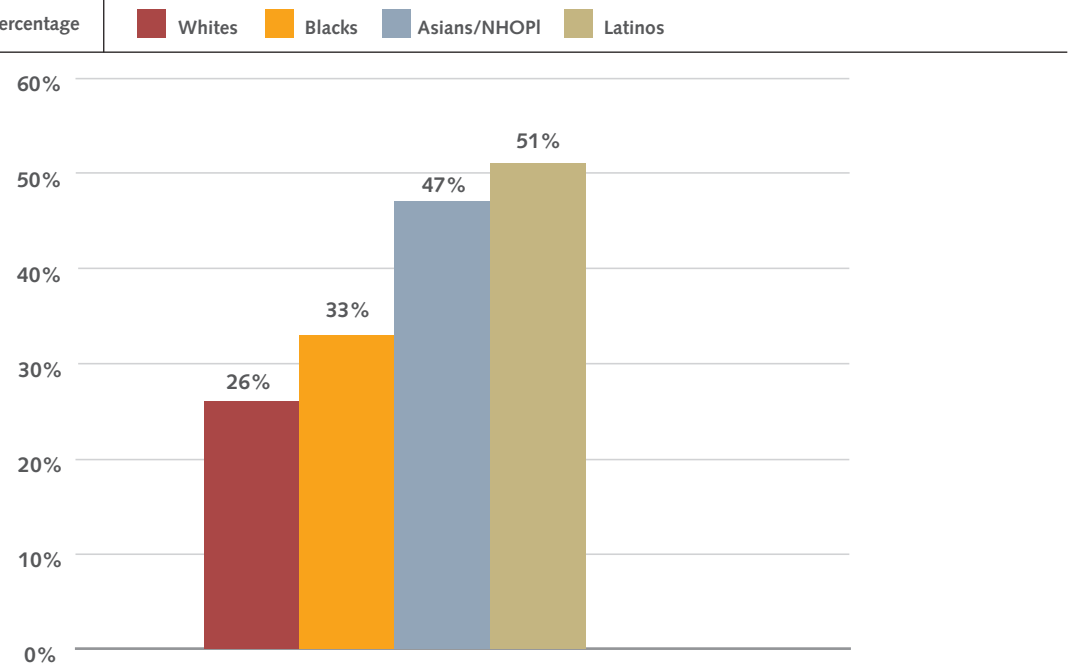
Figure 32 Depression and Anxiety Diagnoses by Gender, Los Angeles County 2011



Source: Los Angeles County Health Survey 2011; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- Seventy-nine percent of white adults state they receive sufficient social and emotional support compared to 61% for blacks, 57% for Asian/NHOPIs and 56% for Latinos.[527]
- Women are more likely than men to report ever having been diagnosed with depression and anxiety (see Figure 32).[528]
- Seventeen percent of whites report ever having been diagnosed with depression compared to 16% of blacks, 10% of Latinos and 7% of Asian/NHOPI adults.[529]
- Fifteen percent of blacks report ever having been diagnosed with anxiety, followed by 14% of whites, 11% of Latinos and six percent of Asian/NHOPI adults.[530]

Figure 33 Adults Reporting Difficulty Accessing Mental Health Care by Race/Ethnicity, Los Angeles County 2011



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Note: Data is among the 8% of adults who reported they tried to access mental health care in the past year.
Source: Los Angeles County Health Survey 2011; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Access to Mental Health Care

- There are marked disparities in accessing mental health care among adults. Four percent of Asians/NHOPIs and 5% of Latinos tried to access mental health care within the past year, compared to 11% of whites and 12% of blacks.[531]
- Asians/NHOPIs and Latinos have higher rates of difficulty accessing mental health care compared to whites and blacks (see Figure 33).[532]

KEY POINTS

- Poor mental health can affect an individual's ability to engage in health-promoting behaviors; for example, depression is associated with increased risk for practicing unhealthy behaviors such as alcohol use or smoking.[533] Conversely, problems with physical health (such as chronic disease) can negatively impact mental health and decrease an individual's ability to recover from the physical condition.[534]
- Despite the prevalence of mental illness, more than one in three (37%) adults who attempt to access mental health care in Los Angeles County report difficulty doing so.[535]
- While effective treatments and interventions are available, mental disorders are under-recognized and under-treated.
- Despite the importance of mental health, mental health services are rarely afforded a place of primacy in our current health care systems. Insurers–including Medicare and Medi-Cal—have historically provided markedly less generous benefits for mental health than for physical health conditions.[536] This unequal coverage has a negative impact on individual health and well-being, and generates high economic burdens for individuals and families.
- In recent years, numerous efforts have started to bring mental health coverage into balance with other medical care benefits.[537] Most recently, the Affordable Care Act defined coverage of mental health and substance abuse treatment as one of the ten essential health benefits.
- Efforts are needed to increase screening for and treatment of depressive disorders in primary health care settings, and to facilitate linkages between mental health and social support services.[538] The improvement of mental health through prevention and increased access to quality treatment are both national and local priorities.[539,540]

VI. PREVENTIVE SERVICES

a. Preventive Care

INTRODUCTION

Preventing disease is instrumental in contributing to a long and healthier life with less injury and disability. Preventive medical services can help people avoid illness or detect illness early, before conditions advance and become more dangerous, difficult, and costly to treat. While there are specific healthy behaviors people can engage in to prevent illness and disease (discussed in "Health Behaviors"), preventive health measures such as screening, immunization, and counseling are key strategies for medical providers to employ in order to prevent disease and detect and treat illness before it advances.

The important role prevention plays in our health and the health of our communities is underscored in the Surgeon General's National Prevention Strategy, which aims to improve health and wellness through prevention.[541] Prevention is also a critical component of the Patient Protection and Affordable Care Act (ACA). To ensure cost is not a barrier to prevention, the ACA requires most health plans to cover a set of preventive services, including vaccinations and screenings, at no cost to the patient. This is a unique opportunity to expand preventive services.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) SPA = Service Planning Area (refers to 8 subregions in LA County); iii) NHOPI = Native Hawaiian and Other Pacific Islanders.

Colorectal Cancer Screening

- Sixty-five percent of adults ages 50 to 75 are *current* with their colorectal cancer screening (based on U.S. Preventive Services Task Force guidelines).[542] This falls short of the Healthy People 2020 goal set at 70.5%.[543]

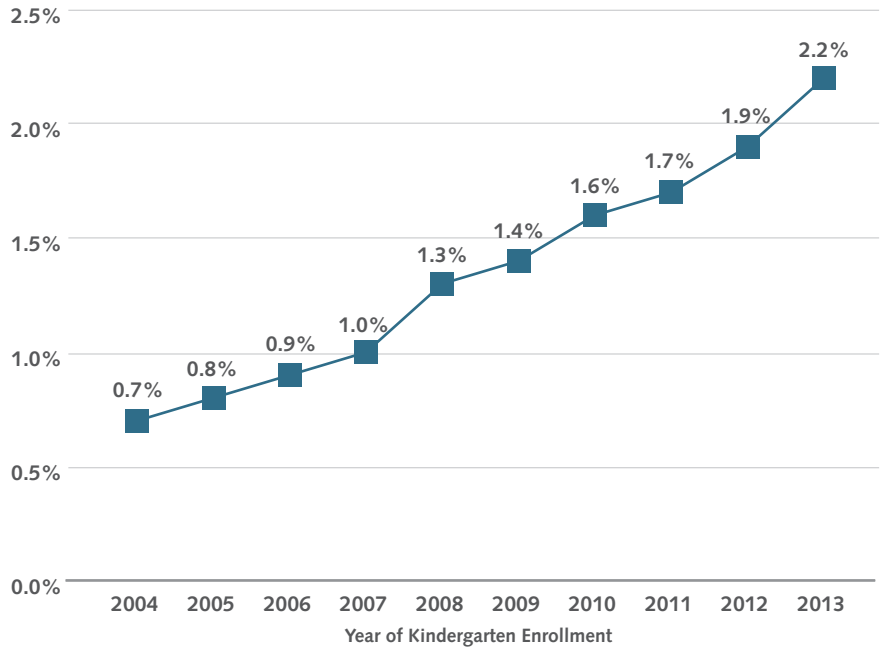
Tobacco Cessation Counseling

- Thirteen percent of adults currently smoke cigarettes.[544]
- Of those adults who currently smoke cigarettes and saw a health professional in the last year, 47% were advised to quit.[545] The United States Preventive Services Task Force recommends that clinicians ask all adults about tobacco use and provide cessation interventions for those who use tobacco.[546]

Aspirin Use

- Among the recommended age groups– men ages 45-79 and women ages 55-79 – 34%[547] of adults take aspirin every day or every other day. This is recommended for certain adults to prevent cardiovascular disease.[548]

Figure 34 Percent of Kindergarten Enrollees Who are Exempt from School Immunization Requirements Due to Their Parents'/Guardians' Personal Beliefs, Los Angeles County 2004 – 2013



Note: PBE = Personal Beliefs Exemption.
Note: Excludes schools located in Long Beach and Pasadena and schools with enrollment of less than 10 students.
Sources: Los Angeles County Department of Public Health, Immunization Program, 2011 Annual School Immunization Assessment: Preschool, Kindergarten, and 7 – 12th Grade; California Department of Public Health, Immunization Branch, 2012-2013 Kindergarten Immunization Assessment Results; California Department of Public Health, Immunization Branch, 2013-2014 Kindergarten Immunization Assessment Results.

Childhood Immunizations

- During the 2013-2014 school year, 88% of Los Angeles County kindergarten entrants received all required vaccine doses, leaving 12% not fully protected against diseases that could spread in school settings.[549]
- There has been a slow decrease in vaccine coverage levels between 2004 and 2013, as more parents have filed Personal Beliefs Exemptions (PBE) to exempt their children from school immunization requirements. In 2013, 2.2% of parents filed a PBE in Los Angeles County for kindergarten enrollees,[550] a 16% increase from 2012 and a 214% increase from 2004 (see Figure 34). While the Los Angeles County PBE rate has increased significantly, it remains lower than the 2013 California PBE rate of 3.2%.[551]

Influenza Vaccination

- Thirty-four percent of adults over the age of 18 years received an annual influenza vaccination in 2011.[552] This is below the Healthy People 2020 target of 70% for adults 18 and older.[553]

- Sixty-four percent of adults ages 65 years and older received an annual influenza vaccination in 2011.[554]

Pneumococcal Vaccination

- Sixty-one percent of adults 65 years of age and older report receiving a dose of pneumococcal vaccine,[555] below the Healthy People 2020 objective of 90% coverage for this age range.[556]

DIFFERENCES & DISPARITIES

Colorectal Cancer Screening

- A lower percentage of adults ages 50 to 75 in SPA 7 (57%) and SPA 6 (58%) are *current* with their colorectal cancer screening (based on U.S. Preventive Services Task Force guidelines) compared with their peers in other SPAs: SPAs 2 and 4 (both 65%), SPA 3 (66%), SPA 8 (70%), SPA 1 (71%), and SPA 5 (72%).[557]

Tobacco Cessation Counseling

- Smokers who are 40 years and older report higher rates of being advised to quit smoking by their health care providers compared to younger adults. For adults ages 25-29, 36% were advised to quit smoking, compared to 37% of adults ages 30-39, 56% of adults ages 40-49, 65% of adults ages 50-59, 67% of adults ages 60-64, and 61% of adults 65 and older.[558]
- Latino smokers report lower rates of being advised to quit smoking by their health care providers (34%) compared to Asian/NHOPI (51%), white (57%) and black (56%) smokers.[559]
- Lower rates of providers counseling smokers in tobacco cessation are seen in SPA 6 (35%) and SPA 7 (34%) compared to the other SPAs: 48% in SPA 3, 50% in both SPA 2 and SPA 4, 53% in SPA 1, 55% in SPA 8, and 60% in SPA 5.[560]

Aspirin Use

- Use of aspirin to prevent cardiovascular disease for certain age-specific adults is lowest among Asian/NHOPIs (24%), followed by Latinos (31%) and whites and blacks (both 38%).[561]

Childhood Immunizations

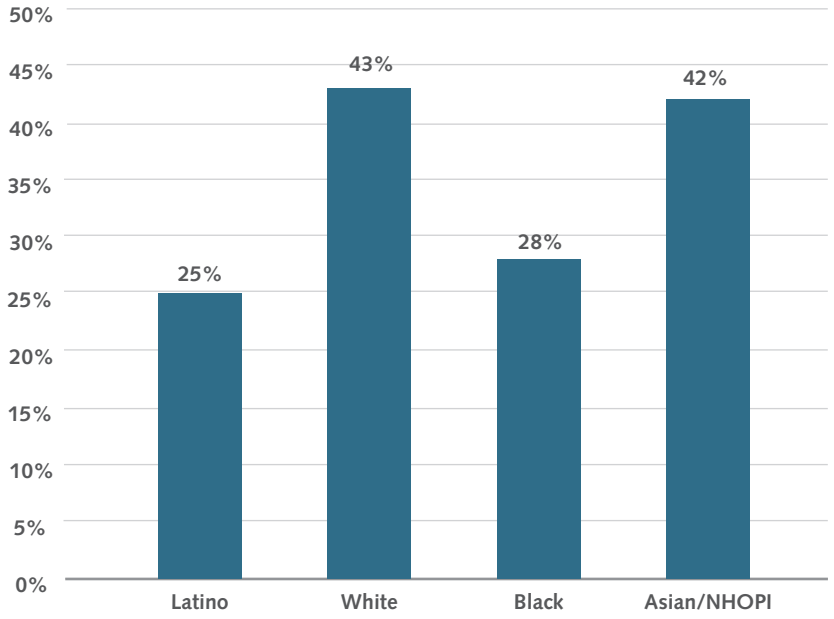
- For the 2013-2014 school year, 9.4% percent of kindergarten students in schools in SPA 5 have a PBE on file, followed by kindergarten students in schools in SPA 1 (3.5%), SPA 2 (3.3%), SPA 8 (1.9%), SPA 3 (1.7%), SPA 4 (1.3%), SPA 7 (0.9%) and SPA 6 (0.3%).[562]

Influenza Vaccination

- Most deaths and hospitalizations from influenza occur in people 65 years and older.[563] However in the 2012-2013 influenza season, almost half (49%) of the 70 deaths countywide were people under the age of 65 years.[564] High blood pressure and overweight/obesity are contributing factors to death.[565]
- Influenza vaccination rates vary by race and ethnicity, as Latino and black adults have lower rates of vaccination (25% and 28%, respectively) than white (43%) and Asian/NHOPI (42%) adults (see Figure 35).[566]

Figure 35 Percent of Adults Who Report Being Vaccinated Against Influenza in thePast Year by Race/Ethnicity, Los Angeles County 2011

Percentage



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

KEY POINTS

Many diseases, chronic and infectious, can be prevented or controlled with timely screening to provide early diagnosis and treatment.

Tobacco Counseling

- Cigarette smoking is the leading preventable cause of death in the United States.[567] For those already smoking, medical providers can help by providing or referring patients to smoking cessation counseling, recommending nicotine patches, and providing education.
- Smoking increases one's risk for numerous health problems and is a risk factor for four of the five leading causes of death in Los Angeles County: cardiovascular disease, stroke, lung cancer, and emphysema (COPD). Quitting smoking can greatly reduce the risk of these ailments. If one stops smoking, risks for cancers of the mouth, throat, esophagus, and bladder decrease by half within 5 years.[568]

Childhood Immunizations

- California laws requiring students to receive selected immunizations before school entry have generally resulted in high rates of immunization and low levels of most vaccine-preventable diseases.

- An increasing number of parents in Los Angeles County are using the Personal Beliefs Exemption allowance to exempt their children from mandatory vaccinations. This creates a small, but growing, number of students who are at increased risk for vaccine-preventable diseases such as measles and pertussis. A study of the 2010 pertussis resurgence in California in which 9,120 cases were reported statewide and 972 cases were reported in Los Angeles County – a 50 year high[569] – concluded that the number of nonmedical exemptions may have contributed to the number of cases seen.[570]

Influenza & Pneumococcal Vaccination

- Annual flu vaccinations are recommended for all individuals six months of age and older, as vaccination is the most effective way to prevent influenza and its complications. Influenza is a preventable condition that averages over 200,000 hospitalizations and causes a loss of 44 million days of productivity each year nationwide.[571] Although it disproportionately affects the very young and older adults, anyone can become sick with the flu and pass it on to others. Influenza can cause a number of complications, such as sinus infections, pneumonia, and even death.
- Pneumococcal disease is a respiratory infection that can lead to a number of serious infections, the most common of which is pneumonia, which kills about 1 in 20 people who are infected.[572] The CDC recommends that all adults who are 65 years of age and older receive a dose of pneumococcal vaccine due to their increased risk, as well as younger adults at high risk for the disease, such as smokers, people with asthma, and those with certain chronic conditions or who are immunosuppressed.
- Influenza and pneumonia combined are among the top ten causes of death in Los Angeles County. Vaccination against these diseases is the best protection.

VII. HOW LONG DO WE LIVE AND WHY?

a. Life Expectancy

INTRODUCTION

Measuring life expectancy and examining key causes of death can help determine how people are dying, who is dying prematurely and how these deaths can be prevented. Life expectancy is the average age that a population is expected to live and is one measure used to describe the overall health status of a population. Nationwide, life expectancy has risen steadily over the last century, but chronic diseases are threatening that trend. There is now concern that children may not live as long as their parents for the first time in many generations, due to the rise of chronic illnesses and conditions such as obesity.[573]

In Los Angeles County, life expectancy can differ depending upon gender, race/ethnicity, and where you live. There is also a correlation between economic hardship and life expectancy. People who are poor, less educated, and have less social support have a higher risk of death and generally experience more health problems.[574] In addition to death by illness, too many lives are tragically lost as a result of violence and injuries including homicides and automobile collisions. It is of utmost importance to public health to implement effective prevention strategies that foster safe and healthy communities for all Los Angeles County residents, protecting them from harm and encouraging healthy living to promote a long and high quality life.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Mortality data are from 2010; iii) Life expectancy data are not rounded iv) SPA = Service Planning Area (refers to 8 subregions in LA County); v) NHOPI = Native Hawaiian and Other Pacific Islanders.

Life Expectancy

- Life expectancy in Los Angeles County during 2010 was 81.5 years.[575] This has increased since 2001 when life expectancy was 78.8 years.[576]
- There were 56,538 deaths countywide in 2010.[577]

Leading Causes of Death

- Coronary heart disease (narrowing of the arteries that limits the flow of oxygen to the heart) is the leading cause of death in the United States,[578] California,[579] and Los Angeles County.[580] It is the number one cause of death among all racial and ethnic groups for both men and women.
- The top four leading causes of death – coronary heart disease, stroke, lung cancer, and emphysema/chronic obstructive pulmonary disease (COPD) – have remained unchanged for the last ten years (see Table 8).[581]
- While the single most common cause of death is coronary heart disease, when all deaths caused by different types of cancer are added together, cancer collectively kills the most people (13,860 deaths from all types of cancer combined in 2010). Of deaths caused by cancer, the top three types are lung cancer (2,941 deaths), colorectal cancer (1,285 deaths), and breast cancer (1,116 deaths).[582]
- Over the last decade, the number of deaths from Alzheimer's disease has more than doubled from 905 in 2001 to 2,242 in 2010.[583] This reflects the aging population and increased awareness of the disease.[584]

Table 8	Leading Causes of Death, Los Angeles County 2010

Leading Causes of Death	Number of Deaths	Death Rate^	% of Deaths
Coronary Heart Disease	12,635	138	22%
Stroke	3,278	36	6%
Lung Cancer	2,941	33	5%
Emphysema /COPD	2,622	30	5%
Alzheimer's Disease	2,242	25	4%

Note: ^Age-Adjusted death rate per 100,000 population.
Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology, Mortality in Los Angeles County 2010: Leading causes of death and premature death with trends for 2000-2010. October 2013.

- Although not a leading cause of death overall, poisonings have been increasing and have been one of the top two causes of injury-related death since 2009. In 2010, there were 792 poisoning deaths, a rate of 7.8 deaths per 100,000 people. Most poisonings are caused by over-the-counter, prescription, and illegal drugs.[585]

Leading Causes of Premature Death and Years of Life Lost

Years of Life Lost (YLL) is a measure that estimates the average time a person would have lived had he or she not died prematurely. For the purpose of this report, premature deaths are those that occur prior to age 75.

- Coronary heart disease is the leading cause of premature death, in addition to the leading cause of death (see Table 9).[586]
- Homicide is the second leading cause of premature death countywide after coronary heart disease.[587] The average age at death from homicide was 32 years.[588] The majority of homicides are caused by firearms.[589]
- Suicide is the third leading cause of premature death.[590] The suicide rate has changed little between 2002 and 2011 while homicides decreased during this time. Recently, between 2009 and 2011, the number of suicides (2,338) has exceeded the number of homicides (1,986).[591]
- In 2010, there were 625 deaths involving motor vehicle collisions, making them the fourth leading cause of premature death.[592]

DIFFERENCES & DISPARITIES

Life Expectancy

- Life expectancy varies by race/ethnicity. There is a ten year difference between the population with the highest life expectancy, Asians/NHOPI (85.8 years), and the population with the lowest life expectancy, blacks (75.6 years) (see Figure 36).[593]
- There are also gender differences in life expectancy. The life expectancy for men is 78.8 years and for women it is 84.1 years (see Figure 36).[594]

- Communities across Los Angeles County also experience disparities in life expectancy. SPA 5 has the greatest life expectancy at 84.9 years while SPA 1 and SPA 6, have the lowest at 78.8 and 78.3 years, respectively (see Table 10).[595]

Leading Causes of Death

- Blacks have the highest rate of death from coronary heart disease (208 per 100,000 people), followed by whites (151 per 100,000), Latinos (111 per 100,000), and Asians/NHOPIs (98 per 100,000).[596]
- Black and Latino males are the only two ethnic groups for whom homicide is among the top five causes of death. Homicide is the third cause of death for black males (45 deaths per 100,000) and the fifth cause of death for Latino males (11 deaths per 100,000). Homicide is the leading cause of death for 15-24 year olds in the County, affecting black and Latino males most significantly.[597] (Homicide is discussed further in "Community Safety").[598]
- Motor vehicle collision deaths (car occupants, pedestrians, and bicyclists) are decreasing, yet disproportionately affect young people. Motor vehicle collisions are the second leading cause of death for children ages 5 to 14 years and for adolescents and young adults ages 15 to 24 years.[599]

Leading Causes of Premature Death

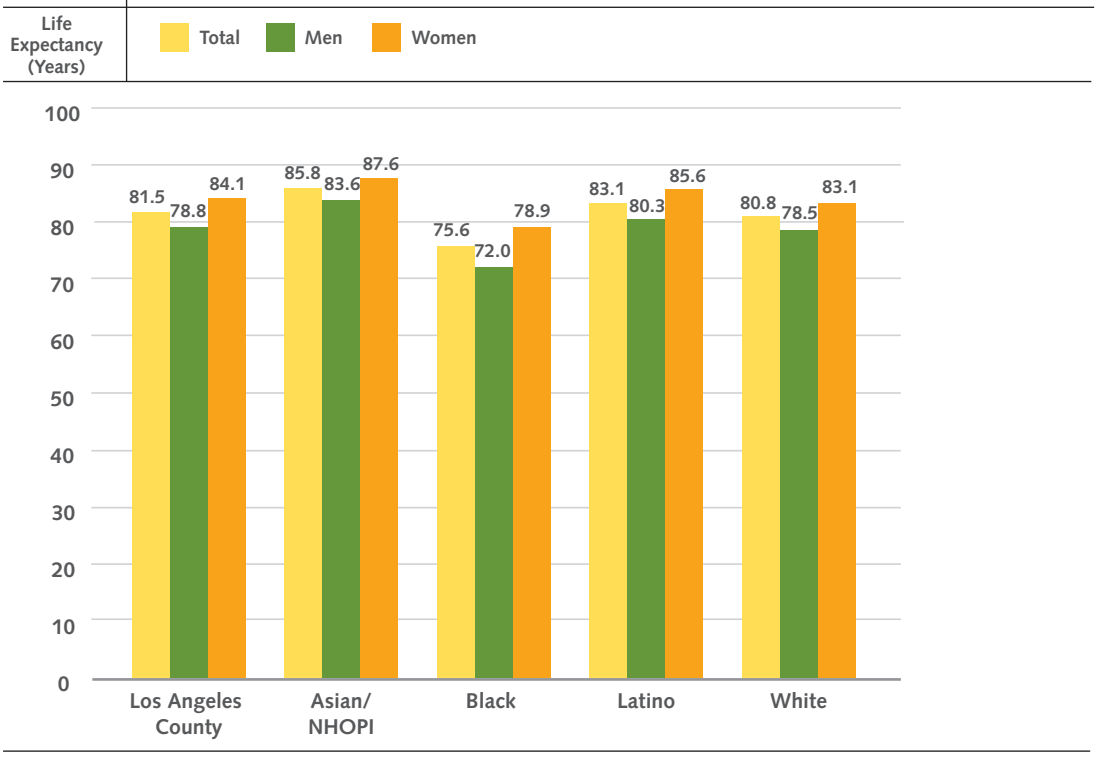
- Coronary heart disease is the main cause of premature death in all SPAs with the exception of SPA 6, in which homicide is the leading cause.[600]
- Homicide is among the top five leading causes of premature death for six SPAs, with SPA 6 most affected (#1 cause), followed by SPA 7 and SPA 8 (#2 cause), SPA 4 (#3 cause), and SPA 1 and SPA 3 (#5 cause).[601]
- Motor vehicle collisions are among the top five leading causes of premature death, with SPA 1 and SPA 6 most impacted (#3 cause), followed by SPA 2, SPA 3, and SPA 7 (#4 cause).[602]

Table 9 | **Leading Causes of Premature Death in Los Angeles County and the Years of Life Lost, 2010**

Leading Causes of Premature Death*	Years of Life Lost**
Coronary Heart Disease	57,607
Homicide	28,442
Suicide	22,390
Motor Vehicle Crash	19,750
Liver Disease	19,425

Note: *Death before age 75 years.
Note: **Excludes infants less than 1 year of age and persons of unknown age.
Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology, Mortality in Los Angeles County 2010: Leading causes of death and premature death with trends for 2000-2010. October 2013.

Figure 36 Life Expectancy by Gender and Race/Ethnicity, Los Angeles County During 2010



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County Department of Public Health, L.A. HealthDataNow!

- Suicide is among the top five leading causes of premature death for white males (#2 cause) and females (#5 cause), Asian/NHOPI males (#2 cause) and females (#5 cause), and Latino males (5th cause).[603] (Access to mental health services is included in "Mental Health").
- Whites are the only race/ethnic group for whom drug overdose is among the top five leading causes of premature death (#3 cause).[604]

KEY POINTS

- Far too many people die prematurely either from preventable health conditions or from preventable violence and injuries.
- Eliminating the significant disparities associated with life expectancy and premature death are key public health goals for Los Angeles County to ensure that all residents have the opportunity to live a long, high quality life.
- To promote public health, bold prevention strategies are critically needed to build vibrant and safe communities for all Los Angeles County residents, protecting them from harm and encouraging healthy living to enable a long and healthy life.

Life Expectancy

- Eliminating the significant disparities associated with life expectancy and premature death is a key public health goal for Los Angeles County to ensure that all residents have the opportunity to live a long, high quality life.

Leading Causes of Death and Premature Death

- A healthy lifestyle, including not smoking, engaging in regular physical activity, and healthy eating can reduce the risk of life-threatening diseases such as coronary heart disease and stroke, the leading causes of death. Creating healthy neighborhoods throughout the County, thus making healthy living easy, will require a commitment from – and collaboration among – multiple stakeholders, including city and County leaders, school district officials, community organizations, faith-based institutions, and others.
- Homicide is a serious public health concern. Youth, particularly black and Latino males, are disproportionately impacted. Violence prevention measures are needed to provide youth positive alternatives, and increase the safety of communities.
- Los Angeles County is seeing a decrease in motor vehicle deaths.[605] However, automobile collisions are still the second leading cause of death for children and older youth 5 to 24 years of age. Motor vehicle collisions can be reduced further with appropriate street design that lowers the speed of automobiles and better protects children and adults who walk and bike.[606]
- To prevent suicide, strategies are needed that focus on the mental health issues that at-risk populations face.[607] The Patient Protection and Affordable Care Act offers an opportunity to improve mental health care in our County by requiring that mental health services are an essential health benefit.

Table 10 | **Life Expectancy by SPA, Los Angeles County 2010**

Service Planning Area	2010 Life Expectancy
SPA 1: Antelope Valley	78.8
SPA 2: San Fernando	82.4
SPA 3: San Gabriel	82.3
SPA 4: Metro	81.9
SPA 5: West	84.9
SPA 6: South	78.3
SPA 7: East	81.6
SPA 8: South Bay	80.6

Source: Los Angeles County Department of Public Health, L.A. HealthDataNow!

b. Chronic Diseases

INTRODUCTION

Significant progress has been made in decreasing the impact of chronic disease. Still, chronic diseases such as heart disease, cancer, stroke, chronic obstructive pulmonary disease (COPD), and diabetes persist as the leading causes of death and are among the major causes of premature death (death before age 75) in Los Angeles County. In addition, Alzheimer's disease is on the rise and likely to dramatically increase over the next several decades given the projected growth of the older adult population in the County. Chronic disease is a major cause of disability, which can jeopardize one's ability to work, add emotional and economic stress to family life, and significantly decrease quality of life overall. Nationwide, 75% of health care dollars go to treating chronic diseases.[608] As our population ages and lives longer, prevention and management of chronic illnesses take on an even more vital role.

Fortunately, many chronic diseases can be prevented or delayed. Having a regular source of care and coordinated care is important both for early detection and management of chronic diseases. Furthermore, when people engage in regular physical activity, eat healthy foods, and refrain from tobacco use and excessive alcohol consumption, they reduce the likelihood of developing a chronic disease. The communities that people live in can either encourage – or discourage –these healthy behaviors. Neighborhoods promote health when they offer access to safe parks, grocery stores that sell healthy and affordable foods, safe, quality housing, good jobs, quality schools, and health care facilities. Creating communities in Los Angeles County where all people have access to a healthy neighborhood environment is necessary to prevent chronic disease, improve public health, and build a strong future for all County residents.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Regarding trend data on obesity, diabetes and hypertension: Two methodological changes implemented in the 2011 LACHS, adding cellular telephone households and adopting an improved weighting methodology should be considered when comparisons are made between 2011 data and data from prior survey years; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) The Federal Poverty Level (FPL) corresponds to annual incomes for a family of four (2 adults, 2 dependents) of $23,283 (100% FPL), $46,566 (200% FPL), and $69,849 (300% FPL);[609] v) NHOPI = Native Hawaiian and Other Pacific Islanders.

Overweight/Obesity

- Over 60% of adults are either obese (24%) or overweight (37%).[610] Obesity is defined as a Body Mass Index (BMI) of greater than or equal to 30, and overweight is defined as a BMI of greater than or equal to 25 and less than 30. BMI is a proxy measure for body fatness based upon height and weight. Though the County meets the Healthy People 2020 goal to reduce adult obesity to 31%,[611] the obesity rate remains much too high.

- The percent of adults who are obese has steadily increased from 14% in 1997 to 24% in 2011.[612] This dramatic increase has occurred for men and women alike, and across racial/ethnic groups.
  Note: 1997 Obesity and overweight estimates (beginning in January 2011) may differ from previous estimates, as the 1997 indicator has been updated to be comparable to subsequent survey years.
- Twenty-two percent of youth are obese.[613] Though the rates of childhood obesity are now leveling off and possibly beginning to decline,[614] the County has a long way to go to reach the Healthy People 2020 goal of 14.6% for childhood obesity.[615]

Diabetes

- The age-adjusted percentage of adults ever diagnosed with diabetes increased from 7% in 1997 to 10% in 2011, a nearly 50% relative increase during this time period.[616] Diabetes among adults is increasing for all racial/ethnic groups.
- Obesity is the main preventable risk factor for type 2 diabetes which accounts for more than 90% of all cases of diabetes.[617]

Hypertension (High Blood Pressure)

- Approximately one in four adults (24%) in Los Angeles County has ever been diagnosed with hypertension (high blood pressure).[618] Although lower than the Healthy People 2020 goal to reduce hypertension to 26.9% of adults,[619] the rate has been increasing for more than a decade. In 1997, just 16% of Los Angeles County adults were diagnosed with hypertension[620] (Data are not age-adjusted).

Heart Disease

- Thirty percent of adults have two or more of the following risk factors for heart disease: obesity, diabetes, hypertension, high cholesterol, current cigarette smoker, and no aerobic activity.[621]
- As discussed in "Life Expectancy," coronary heart disease, the most common type of heart disease, is the leading cause of death and premature death in Los Angeles County. The percentage of men and women who are living with coronary heart disease is similar (6% of men and 5% of women).[622]

Caregivers

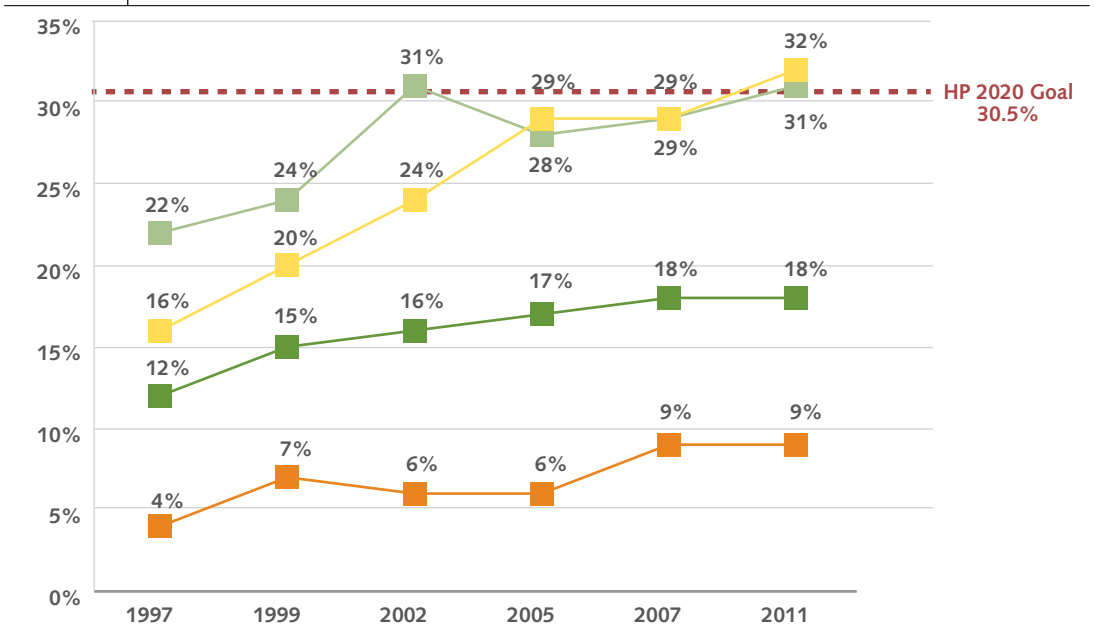
- One in five (20%) adults (about 1.4 million people in the County) serves as a caregiver to an aging adult or an adult with a long-term illness or disability.[623] About one fourth (26%) of those who are cared for have Alzheimer's disease or other memory loss.[624]

DIFFERENCES AND DISPARITIES

Overweight/Obesity

- The younger adult age groups show the largest increases in obesity. Between 1997 and 2011, the rate of obesity almost doubled, from 9% to 17%, for 18-29 year olds. For those ages 30-39 years, the obesity rate more than doubled, from 13% to 28%.[625]
  Note: 1997 Obesity and overweight estimates (beginning in January 2011) may differ from previous estimates, as the 1997 indicator has been updated to be comparable to subsequent survey years.
- The adult obesity rate is higher among Latinos (32%) and blacks (31%) than among whites (18%) and Asians (8%). (No data are available for NHOPI adults only) (see Figure 37).[626]

Figure 37 Percent of Obese Adults by Race/Ethnicity, Los Angeles County 1997 – 2011



Note: Asians and NHOPI (Native Hawaiian or Other Pacific Islanders) are combined into one racial/ethnic category in this chart.
Note: Two methodological changes implemented in the 2011 LACHS, adding cellular telephone households and adopting an improved weighting methodology should be considered when comparisons are made between 2011 data and data from prior survey years.
Note: For 2002 data, estimates may differ from prior estimates as new weights were utilized beginning March 2006.
Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology, Trends in Obesity: Adult Obesity Continues to Rise, September 2012.

- Adults with less formal education have higher rates of obesity. For example, 32% of adults with less than a high school education are obese, compared to 16% of adults who have a college or post-graduate degree are obese.[627]
- Obesity rates are higher among people with lower household incomes: 30% of adults at 0-99% of Federal Poverty Level (FPL) are obese, compared to 20% who have incomes at 200% or above the FPL.[628]
- NHOPI children have the highest prevalence of obesity (33%), followed by Latino (27%), black (21%), white (12%), and Asian children (11%) (see Figure 38).[629]

Diabetes

- The highest rate of adult diabetes is among Latinos (14%), followed by blacks (12%), Asians/NHOPIs (10%), and whites (7%) (see Figure 39).[630]
- Adults living at less than 100% of the FPL have a higher rate of diabetes (14%) compared to adults living at higher than 100% FPL and lower than 200% FPL (12%) or above 200% FPL (8%).[631] *Note: data are age-adjusted.*

Hypertension (High Blood Pressure)

- Adults who have ever been diagnosed with high blood pressure is highest among blacks (39%) compared to 27% of whites, 25% of Asians, and 18% of Latinos.[632] (No data are available for NHOPI adults).

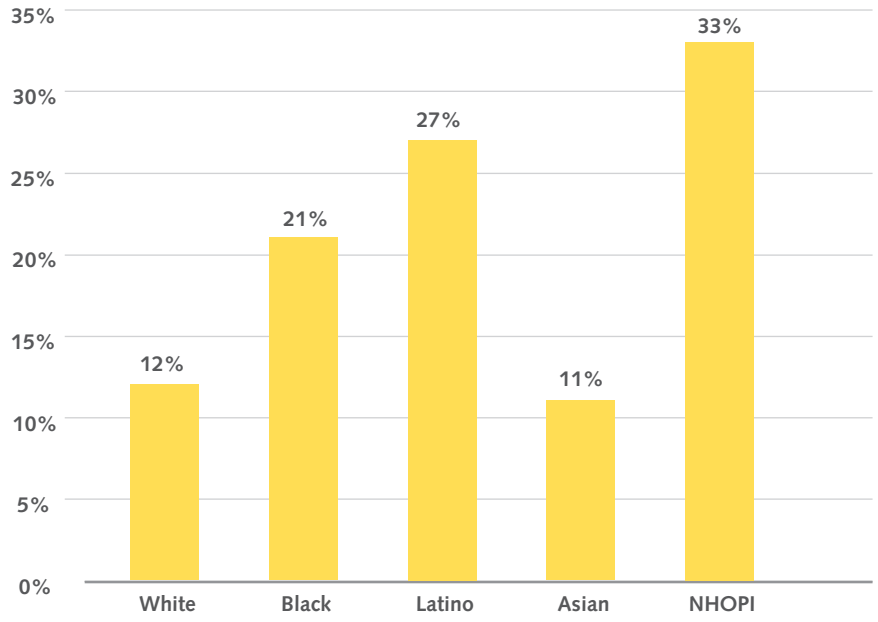
Heart Disease

- Blacks have the highest rate of death from heart disease (208 per 100,000 people or 1,721 deaths/year), followed by whites (151 per 100,000 or 6,845 deaths/year), Latinos (111 per 100,000 or 2,555 deaths/year), and Asians/NHOPIs (98 per 100,000 or 1,451 deaths/year).[633]

Caregivers

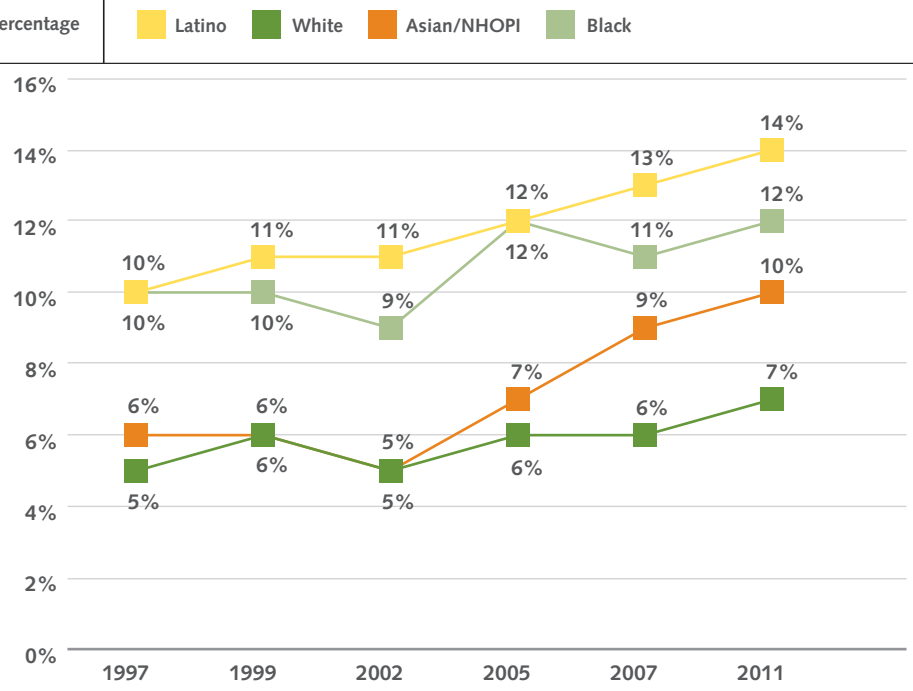
- A higher percentage of adults who serve as caregivers also currently have depression (14%) compared to adults who are not caregivers (7%).[634]
- Adults who are caregivers average six days per month of poor mental health, while non-caregivers average three days per month.[635]

Figure 38 | **Percent of Obese Children by Race/Ethnicity, Los Angeles County 2010**



Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: Los Angeles County public school children, grades 5, 7 and 9. Prepared by the Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology, Epidemiology Unit; Data obtained from the 2010 California Physical Fitness Testing Program, California Department of Education.

Figure 39 Percent of Adults (18+) Ever Diagnosed with Diabetes, Los Angeles County Health Survey 1997 – 2011



Note: Age-adjusted percentage according to the 2000 U.S. standard population aged 18 years and older.
Note: Asians and NHOPI (Native Hawaiian or Other Pacific Islanders) are combined into one racial/ethnic category in this chart.
Note: For 2002 data, estimates may differ from prior estimates as new weights were utilized beginning March 2006.
Note: Two methodological changes implemented in the 2011 LACHS, adding cellular telephone households and adopting an improved weighting methodology should be considered when comparisons are made between 2011 data and data from prior survey years.
Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology, Trends in Diabetes: Time for Action, November 2012

KEY POINTS

- Chronic disease and associated risk factors are a major cause of disparities in death and disability.
- Avoiding tobacco use, being physically active, and eating a healthy diet have great potential to reduce the onset and severity of chronic diseases.
- The community environment has an enormous influence on health behaviors and can play a key role in promoting a healthy lifestyle and encouraging good health overall. Healthy physical and social environments are critical to ensuring good health, including access to safe housing, opportunities for a quality education, access to safe places for engaging in physical activity, and options for buying healthy food.

Overweight/Obesity

- Obesity is second only to tobacco as a leading cause of preventable death in the United States. Obesity is a risk factor for a number of chronic diseases, including heart disease, hypertension, type 2 diabetes, liver disease, arthritis, and many forms of cancer.[636]
- In addition to obesity, many Los Angeles County residents are overweight, which also increases their risk of developing preventable chronic diseases.

- Children and adolescents who are obese are much more likely to be obese as adults[637] and can develop myriad health issues such as heart disease, diabetes, and stroke. Type 2 diabetes is increasingly being diagnosed in children and adolescents. This may be due to an increase in obesity fueled by many factors, including unhealthy diets and inadequate levels of physical activity.[638] For today's youth, the rise of childhood obesity and overweight may lead to shorter life spans than those of their parents, reversing a trend entrenched for several generations.

Diabetes

- Adult diabetes is rising in Los Angeles County, largely driven by adult obesity. This increase is expected to continue because of the continued rise in adult obesity and the high rate of childhood obesity, especially in Latino and black populations.
- In light of persistent disparities by racial/ethnic groups, culturally appropriate interventions are needed, as well as strategies to resolve the root social and environmental causes of diabetes and obesity, including poverty, inadequate access to early care and preventive services, lack of physical activity, and the availability and consumption of unhealthy foods.[639]

Heart Disease

- Heart disease is the leading cause of death and premature death in Los Angeles County. Key contributing factors include high blood pressure, elevated blood lipids (e.g., cholesterol), diabetes, overweight and obesity, a lack of physical activity, chronic stress, and genetic factors.
- Heart disease, like many chronic illnesses, is in many cases preventable through healthy lifestyles. Comprehensive, long-term, cross-sectoral strategies are needed to transform Los Angeles County communities into healthy neighborhoods that foster good health.
- Prevention is an important component of the Patient Protection and Affordable Care Act (ACA). High quality health care, including screening for and treatment of elevated blood pressure and cholesterol, is an important strategy for reducing the toll of heart disease.

Caregivers

- It is essential to provide support and stress management to adults who are caregivers. Taking care of an aging or sick adult can cause significant emotional and financial stress, sometimes impacting the caregiver's own health. Many adults already take care of an adult, likely their parent, spouse, or other relative, and the number will rise as our population ages. The economic and social burden of unpaid caregiving will increase in the coming decades with the burden disproportionately falling on family members who must juggle full-time jobs and caregiving duties at home.[640]

c. Health Behaviors

INTRODUCTION

The broad categories of contributors to health include the physical environment, social and economic factors, clinical care, and health behaviors. It is estimated that 30% of health outcomes are attributed to health behaviors.[641] The Centers for Disease Control and Prevention (CDC) reports four key health behaviors that can lead to a longer, healthier life: not smoking, eating a healthy diet, engaging in regular physical activity, and limiting alcohol consumption.[642]

While individuals make choices each day to engage or not in healthy behaviors, their decisions are shaped by environmental considerations. For example, families may not exercise regularly if there is no safe park within walking distance of their home or if they are afraid of street violence or other activities such as drug-dealing. Additionally, they may live in an area with easy access to liquor stores, but not supermarkets that offer fresh, healthy, affordable foods. Building healthy communities – with environments that facilitate healthy behaviors – is essential to helping people engage in healthy behaviors. Therefore, efforts to promote healthy behaviors must include educating individuals about "healthy" choices, as well as creating healthy neighborhoods that make it easy for people to select the healthy choice.

THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Data identified with an asterisk (*) are statistically unstable; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

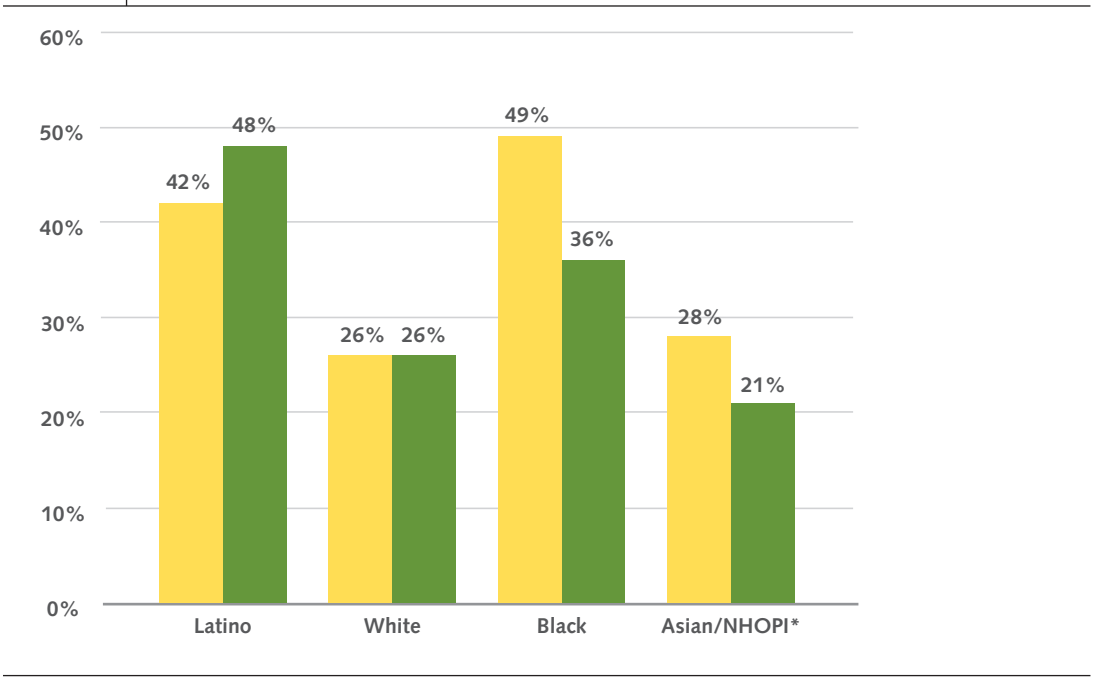
Physical Activity

- Sixty two percent of adults[643] meet physical activity guidelines set by the federal Department of Health and Human Services[644] for aerobic activity. Another 26% engage in some aerobic physical activity, but less than the recommended amount, and 12% are inactive.[645]
- Almost one in three (29%) children[646] ages 6 – 17 meets the federal physical activity guidelines of 60 minutes or more of daily physical activity.[647] The majority (60%) of children are involved in some physical activity, such as team sports or another activity, although at lower levels that do not meet the federal guidelines. Similar to adults, 11% of children ages 6 – 17 do not participate in any physical activity.[648]

Eating Behaviors and Nutrition

- Just 16% of adults eat five or more servings of fruits or vegetables a day.[649]
- Forty percent of adults and half (51%) of children eat fast food at least once a week.[650]
- Over a third of Los Angeles County adults (36%) and children (38%) drink one or more sugar-sweetened beverage each day,[651] a decrease from 2007 for both adults (39%) and children (43%).[652]

Figure 40 Consumption of at Least One Soda or Sugar Sweetened Drink per Day for Children & Adults by Race/Ethnicity, Los Angeles County 2011



*The estimate for Asian/NHOPI adults is statistically unstable.
Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- Adolescents drink more sugar-sweetened beverages than younger children, with half (50%) of adolescents ages 12 – 17 drinking one or more sugar-sweetened drink daily, compared to 40% of children ages 6 – 11, and 24% of children ages 0 – 5.[653]

Tobacco Use

- Thirteen percent of adults smoke cigarettes.[654] Tobacco use in the County is lower than the national average of 19%, but remains slightly above the Healthy People 2020 target of 12% or fewer adults using tobacco.[655]
- Approximately 8,600 lives and $4.3 billion dollars are lost due to medical care and lost productivity costs associated with smoking and smoking-related diseases in Los Angeles County each year.[656] The leading causes of smoking related death are lung cancer, coronary heart disease, and chronic obstructive airway disease (COPD).[657]
- Seventeen percent of households with children report tobacco smoke exposure in their homes.[658]

Substance Abuse - Alcohol

- Fifteen percent of adults engage in binge drinking.[659] This is slightly lower than the national average of 18.3%.[660] The County meets the Healthy People 2020 target to reduce binge drinking to 24% or lower for adults.[661] Binge drinking is defined for women as consumption of four or more drinks, and for men, as five or more drinks, at least once in the past month.

- In 2011, over 3,100 people in the County were killed or injured due to automobile crashes in which a driver was under the influence of alcohol (DUI) or alcohol was determined to be the primary cause. This is about one quarter of the total fatal and injury accidents in California.[662]
- Excessive alcohol use is responsible for almost 2,800 deaths each year in Los Angeles County,[663] as well as about 10,000 deaths in California[664] and 88,000 nationwide.[665]

Substance Abuse - Illicit Drug Use

- Drug overdose is the sixth leading cause of premature death and causes over 18,000 years of life lost.[666]
- Two percent of adults report having used methamphetamines, cocaine, or ecstasy in the past year,[667] which is lower than the Healthy People 2020 goal of 7.1%.[668]

Substance Abuse – Non Medical Prescription Drug Use

- Five percent* of adults report having misused prescription drugs in the past year.[669]
- In 2009, there were more than 3,000 hospitalizations and 5,000 emergency department visits for prescription/over-the-counter drug overdoses among residents of the County.[670] (See endnote for definition of non-medical or misuse of prescription drugs).

Substance Abuse Treatment

- Three percent of adults report needing or wanting treatment for an alcohol or drug problem during the past five years.[671]
- In 2012, 35,960 Los Angeles County residents were being treated in publicly funded substance abuse treatment programs. The most frequently reported drugs for which clients received treatment were marijuana/hashish (27%), alcohol (23%), heroin (21%), and methamphetamines (17%). Heroin treatment admissions rose for the last two years, consistent with national trends due to the prescription drug epidemic.[672]

DIFFERENCES AND DISPARITIES

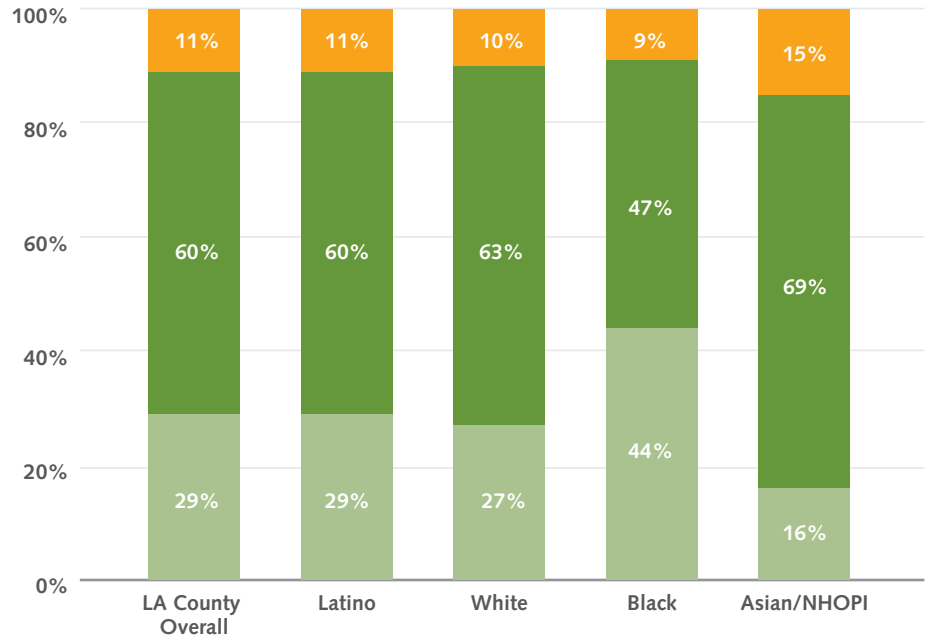
Physical Activity

- Meeting federally-recommended levels of aerobic physical activity decreases as age increases. Three out of four (78%) of the youngest adults ages 18 -24 meet federal goals, compared to 52% of those 60 and older.[673]
- Among adults, physical activity increases as level of education increases. Among those with a college or postgraduate degree, 67% meet aerobic activity guidelines while only 54% of adults with less than a high school education meet guidelines.[674]
- Among children ages 6 – 17, black children (44%) have the highest rate of meeting federal physical activity guidelines, followed by Latinos (29%), whites (27%) and Asians/NHOPIs (16%) (see Figure 41).[675]

Eating Behaviors and Nutrition

- Daily consumption of five or more servings of fruits and vegetables is highest among white adults (21%), followed by Asian/NHOPI (18%), Latino (13%), and black (12%) adults (see Figure 42).[676]
- Latino (46%) and black (45%) adults eat fast food at least once per week at higher rates, compared to whites (33%) and Asians/NHOPI (34%) (see Figure 42).[677]

Figure 41 | Childhood Physical Activity Participation, Ages 6 – 17 Years, Los Angeles County 2011



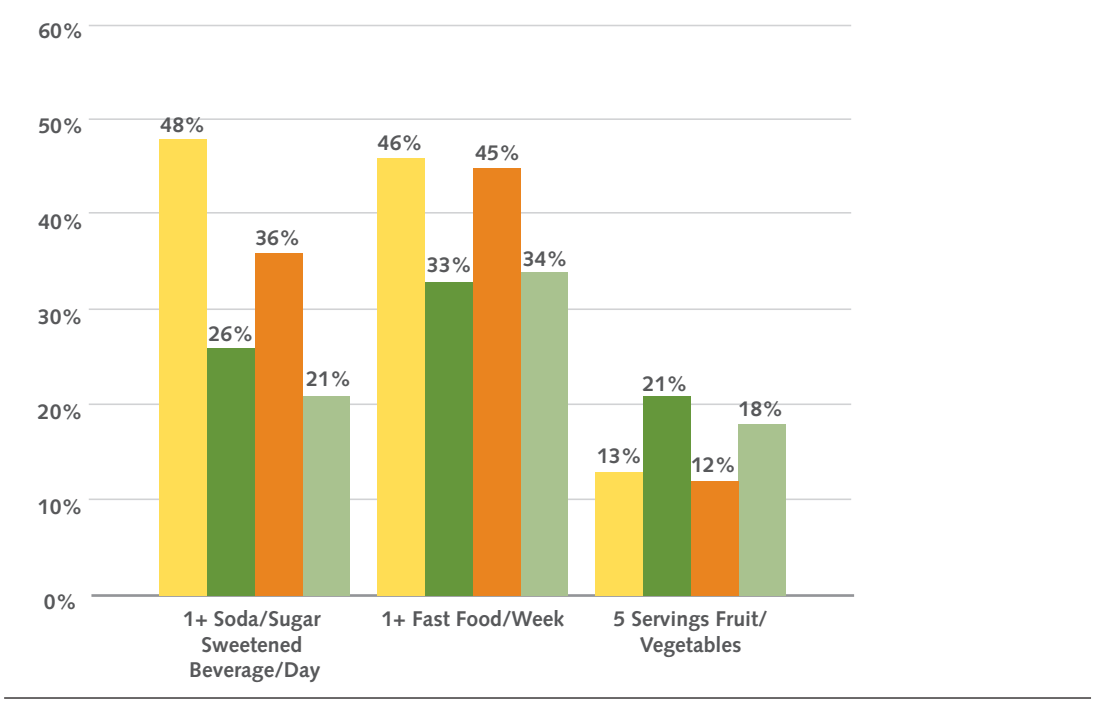
Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- Consumption of fast food is highest among young adults under age 30, over half of whom eat it one or more times each week.[678]
- Almost half (49%) of black children consume at least one sugar-sweetened beverage daily, compared to 42% of Latino, 28% of Asian/NHOPI, and 26% of white children (see Figure 40).[679]
- More men (45%) than women (27%) consume at least one sugar sweetened beverage per day.[680]

Tobacco Use

- Sixteen percent of men in Los Angeles County smoke compared to 10% of women.[681] The rates for smoking are higher for homosexual/bisexual men and women at 22% and 19%, respectively.[682] (See endnote for additional information about this data).
- Homosexuals and bisexuals have higher rates of cigarette smoking (21%) compared to heterosexuals (13%).[683]
- Black men have the highest rate of currently smoking at 20%, followed by white (17%), Latino (16%), and Asian/NHOPI (14%) men (see Figure 43).[684]
- Sixteen percent of black women smoke. This exceeds the rate among white (14%), Latinas (8%), and Asian/NHOPI (5%*) women (see Figure 43).[685]
- Twenty percent of young adults, 25 - 29 years of age smoke, this is significantly higher than in the 18-24 year old population (10%).[686]

Figure 42 Frequency of Health Behaviors for Adults by Race/Ethnicity, Los Angeles County 2011



*The estimate for Asian/NHOPI adults is statistically unstable.
Note: NHOPI = Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

- Eight percent of older adults (65 years or over) smoke compared to 13% of all adults. Thirty eight percent of seniors are formers smokers, compared to 20% of adults in Los Angeles County.[687]
- Nearly one in four (24%) households with black children report tobacco smoke exposure compared to households with Latino (19%), white (13%) children, or Asian/NHOPI (9%*) children.[688]

Substance Abuse - Alcohol

- The proportion of men who report binge drinking is significantly higher (22%) than women (9%).[689]
- Self-reported binge drinking is lowest among black (11%) and Asian/NHOPI (12%) adults compared to Latino (18%) and white adults (15%).[690]
- Young adults 21-29 years of age have the highest prevalence of self-reported binge drinking at 26%. As age continues to increase, drinking declines, thus older adults ages 65 and older have the lowest rate (4%) (see Figure 44).[691]
- Of great concern, is that the rate of self-reported binge drinking is 18% among underage youth ages 18 – 20 (see Figure 44).[692]

Substance Abuse - Illicit Drug Use

- More men (3%) than women (1%) report having used methamphetamine, cocaine, or ecstasy in the past year.[693]

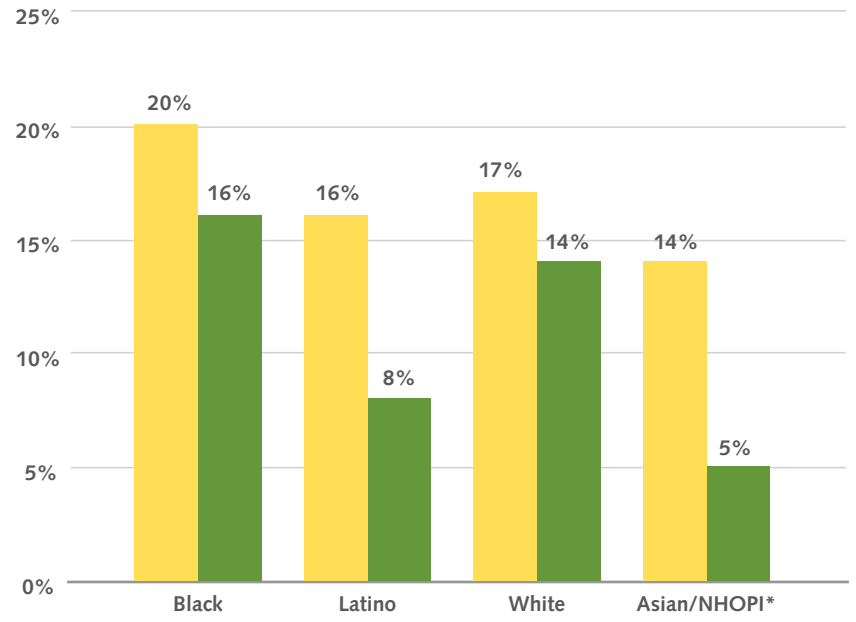
Substance Abuse - Prescription Drug Use

- More men (7%) than women (4%) report misusing prescription drugs.[694]
- Higher percentages of young adults, ages 18 – 29 (7%) and 30-39 (8%), report misusing prescription drugs compared with adults ages 40-49 (5%), 50-64 (4%), and 65 years and older (2%).[695]
- Of the 8,265 drug-related deaths in the County between 2000 and 2009, about 61% involved a common prescription or over-the-counter drug. Of these people who died, there were an equal number of men and women, and most were white (71%). The majority (64%) of these drug-related deaths were unintentional.[696]

Substance Abuse Treatment

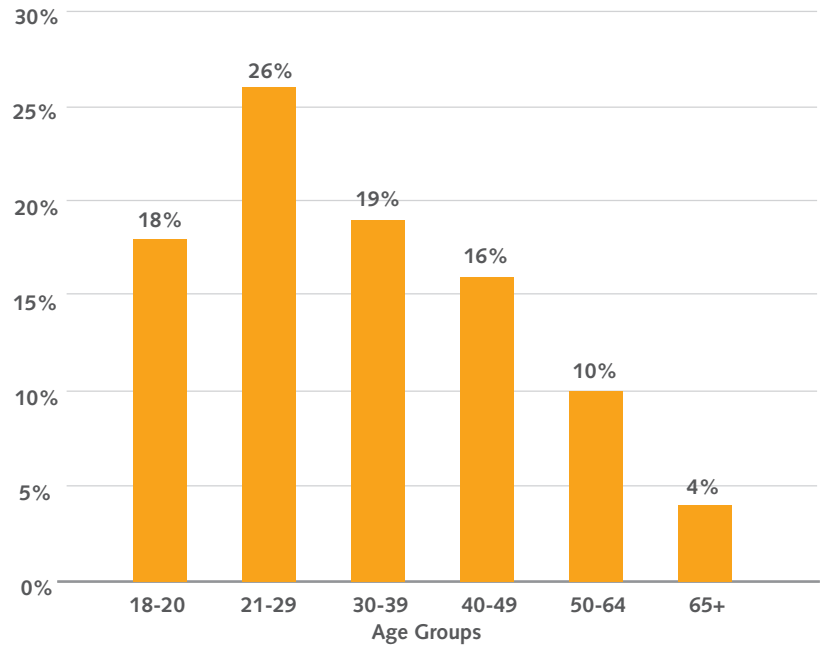
- More men (4%) than women (1%) report needing or wanting treatment in the last year for a drug or alcohol problem.[697]

Figure 43 Percent of Adults Who Are Cigarette Smokers (Report Smoking at Least 100 Lifetime Cigarettes and Currently Smoke), Los Angeles County 2011



*The estimate for Asian/NHOPI females is statistically unstable.
Note: NHOPI=Native Hawaiian or Other Pacific Islanders.
Source: 2011 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

Figure 44	Percent of Adults who Report Binge Drinking in the Past Month by Age Range, Los Angeles County 2011



Source: 2011 Los Angeles County Health Survey, Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health, as presented in Binge Drinking, March 2014.

KEY POINTS

Physical Activity

- Far too few adults and children meet the federal guidelines for daily and/or weekly physical activity. More needs to be done to design communities that encourage active lifestyles and make it easy for people to make physical activity part of their daily routines. Los Angeles County cities and communities should increase access to safe places for residents to walk, bike, play, and exercise.[698] Efforts are also needed to increase physical activity opportunities in schools and after-school programs, and to increase school compliance with state physical education (PE) requirements.

Eating Behaviors and Nutrition

- Though children consume sugar sweetened beverages at high levels, consumption has decreased. This may be a reflection of an increase in awareness of the harms of sugary beverage consumption and efforts to reduce access to sweetened beverages on school campuses.[699]
- Busy lives, the convenience of eating out, and the relative affordability of many restaurants and fast food, have made dining out more common. Healthy eating is usually more difficult when dining out, due to large portion sizes and potentially unhealthy levels of ingredients such as salt, sugar, and fat.

- Cities and communities can increase access to affordable healthy foods through different strategies, including incentives, zoning, and regulations that encourage grocery stores and farmers' markets in all neighborhoods and discourage an abundance of convenience stores and fast-food outlets, especially near schools.[700]

Tobacco Use

- Much effort has been made in public health over the past 50 years to alert the public to the danger of tobacco use. Smoking prevalence is lower today, and almost one in four older adults in Los Angeles County is a former smoker, due in part to effective anti-tobacco initiatives in place over several decades.
- Yet, tobacco use is still the number one cause of preventable death and disease, with more than one million teens and adults in Los Angeles County continuing to smoke.[701] The introduction of electronic cigarettes poses a major public health challenge.
- While tobacco use has decreased overall and optimistically among adolescents, smoking rates are elevated among young adults, some racial/ethnic groups, the gay, bisexual, and lesbian population, those with mental health conditions and histories of substance abuse, and people with disabilities. Prevention and treatment efforts should prioritize these groups.
- Secondhand smoke is the combination of smoke from the burning end of a cigarette and the smoke exhaled by smokers. It contains more than 7,000 chemicals, hundreds of which are toxic including about 70 that can cause cancer. Nonsmokers who are exposed to secondhand smoke are inhaling many of the same cancer-causing substances and poisons as smokers.[702]
- Living in a home where someone smokes exposes infants, children, and nonsmoking adults to secondhand smoke which can lead to numerous health problems. Infants and children face an increased risk of developing severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS). Nonsmoking adults experience a greater risk of developing heart disease and lung cancer.

Substance Abuse

- Excessive consumption of alcohol and abuse of other substances is a significant public health concern, resulting in serious medical illnesses, impaired mental health, and higher rates of motor vehicle crashes, injuries, and violent crime. Further, substance abuse takes a major toll on family life, work productivity, and school performance.[703]
- Drug overdose is a leading cause of premature death, and abuse of prescription drugs is on the rise. Improper prescribing of medications by physicians and other medical personnel is the major reason for drug overdose. Therefore, increasing community awareness of this problem by implementing protocols for correctly prescribing opioid pain killers and educating medical personnel on informing patients of drug interactions is necessary.[704]
- Substance use disorders adversely affect individuals, families, and communities. The Affordable Care Act (ACA) strives to provide some relief by including substance use disorders as one of its ten essential health conditions that are covered. This means that insurance policies must cover substance abuse services, such as treatment, in order to be certified and offered in the ACA. The aim is to treat substance use disorders as any other medical condition.

d. Communicable Diseases

INTRODUCTION

Communicable diseases can spread from one person to another or from an animal to a person. The spread often happens via airborne viruses or bacteria, but also through blood or other bodily fluid. Communicable diseases are also described as infectious or contagious.[705]

During the 20th century, public health measures such as improvements in sanitation and hygiene, the discovery of antibiotics, and the implementation of universal childhood vaccination programs contributed to a considerable decline in mortality from communicable diseases, the leading cause of death in the United States. However, continued protection from communicable diseases is needed, including measures that prevent the spread of new diseases from one region to another in light of the globalization of trade and travel. Further, changing weather patterns from climate change can make areas hospitable to diseases that were not previously susceptible.

Communicable disease control, a responsibility of public health departments, includes surveillance, disease reporting, and enforcing measures to control the spread of communicable disease. Surveillance includes monitoring the number and location of people who develop communicable diseases in order to prevent further transmission and outbreaks. In California, over 80 diseases or conditions are mandated to be reported to the local health department ranging from measles, chlamydia, tuberculosis, and food borne illnesses such as salmonella. Studies have shown that there is significant underreporting of communicable disease. In Los Angeles County, it is estimated that only 5% of communicable diseases are reported which limits the ability to guide local disease control efforts.[706] The potential threat of emerging diseases and bioterrorism-related disease activity further increases the need for prompt and thorough disease reporting.[707]

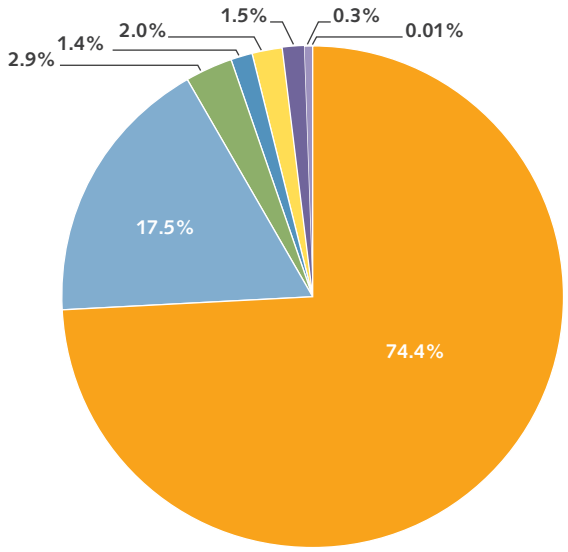
THE DATA

Notes: i) All the data presented are for Los Angeles County, unless otherwise noted; ii) Case numbers of Sexually Transmitted Diseases, HIV/AIDS, Tuberculosis, and foodborne illness exclude those reported from the cities of Long Beach and Pasadena; iii) SPA = Service Planning Area (refers to 8 subregions in LA County); iv) NHOPI = Native Hawaiian and Other Pacific Islanders.

Sexually Transmitted Diseases (STD) and Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS)

- Twenty-two percent of adults are tested annually for STDs (chlamydia or Human Immunodeficiency Virus [HIV]).[708]
- In 2012, a total of 64,979 Sexually Transmitted Diseases (including HIV) were reported. The majority of these cases were chlamydia (74%) and gonorrhea (18%) (see Figure 45).[709]

Figure 45 | Sexually Transmitted Disease and HIV Reports, Los Angeles County 2012



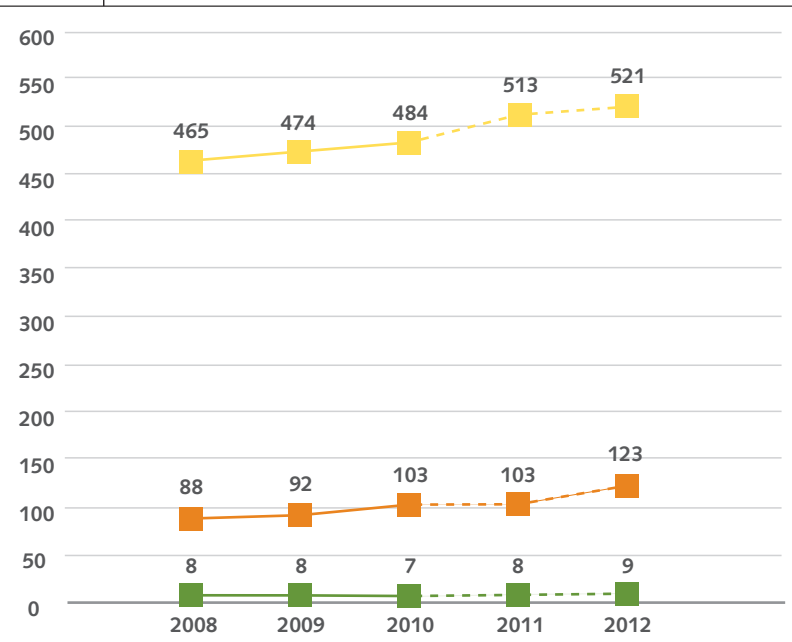
*Pelvic Inflammatory Disease (PID) includes Chlamydia, Non-Chlamydia, Gonococcal, and Non-Gonococcal.
Note: STD numbers exclude cases in cities of Long Beach and Pasadena, 2012 data are provisional.
Source: Division of HIV and STD Programs, Los Angeles County Department of Public Health.

- From 2008-2012, rates of reported chlamydia infection rose 18%, from 442 to 521 cases per 100,000 persons. During the same period, gonorrhea rates increased 46%, from 84 to 123 cases per 100,000 persons, and primary and secondary (P & S) syphilis rates increased 29%, from 7.3 to 9.4 cases per 100,000 persons (see Figure 46).[710]
- There were 2,408 persons diagnosed with human immunodeficiency virus (HIV) infection in 2008 and 1,911 in 2012 reported as of year-end 2013.[711]
- Among adults and adolescents diagnosed with HIV in 2011, eight in ten people (80%) were linked to care within 3 three months of diagnosis, keeping the County on track to meet standards set forth in the National HIV/AIDS Strategy, which seeks to link clinical care for 85% of people newly diagnosed.[712]
- It is estimated that over 60,000 people were living with HIV at the end of 2013.[713]
- The Centers for Disease Control and Prevention (CDC) estimates that 15.8% of people are unaware they are infected with HIV;[714] this translates to approximately 10,500 people in Los Angeles County who are unaware they are HIV positive.

Tuberculosis

- Tuberculosis (TB) is caused by bacteria which usually attacks the lungs but can attack any part of the body. If left untreated or not treated properly, it can cause death. During 2013, there were 666 TB cases confirmed.[715]

Figure 46 Chlamydia, Gonorrhea and Primary & Secondary Syphilis Case Rates, Los Angeles County 2008 – 2012



Note: Excludes cases in cities of Long Beach and Pasadena; dotted lines represent data for 2010, 2011 and 2012, which are provisional.
Source: Division of HIV and STD Programs, Los Angeles County Department of Public Health, 2011/2012 STD Surveillance Data: U.S., California and Los Angeles County.

- TB cases have decreased over the past 20 years from a peak of 2,198 cases in 1992. In 2013, the reported cases increased by 7% (see Figure 47).[716]

Foodborne Illness Outbreaks

- In 2012, there were 21 foodborne outbreaks in Los Angeles County infecting 247 people and hospitalizing 12 people.[717] A foodborne outbreak occurs when there are two or more cases of a similar illness resulting from the ingestion of a common food.[718] Norovirus was confirmed or suspected in 13 of these outbreaks.
- The outbreaks were caused by a meal in 60% of the cases, with a specific food item identified in most. The implicated foods were both cooked (chicken, tuna, donuts) and uncooked (onions, vegetables, guacamole, ranch dressing).[719]
- Most people infected by foodborne illnesses recover without treatment and have no complications. For others, particularly children, the elderly, and those with chronic conditions (such as those who are immunocompromised), the illness can be more serious and lead to hospitalization or even death. Foodborne illnesses were a contributing factor in at least 12 deaths in 2012.[720]

Hospital Associated Infections

- Central line-associated bloodstream infections (CLABSI), although preventable, cause thousands of deaths each year in the United States and add billions of dollars to the U.S. health care system.[721]

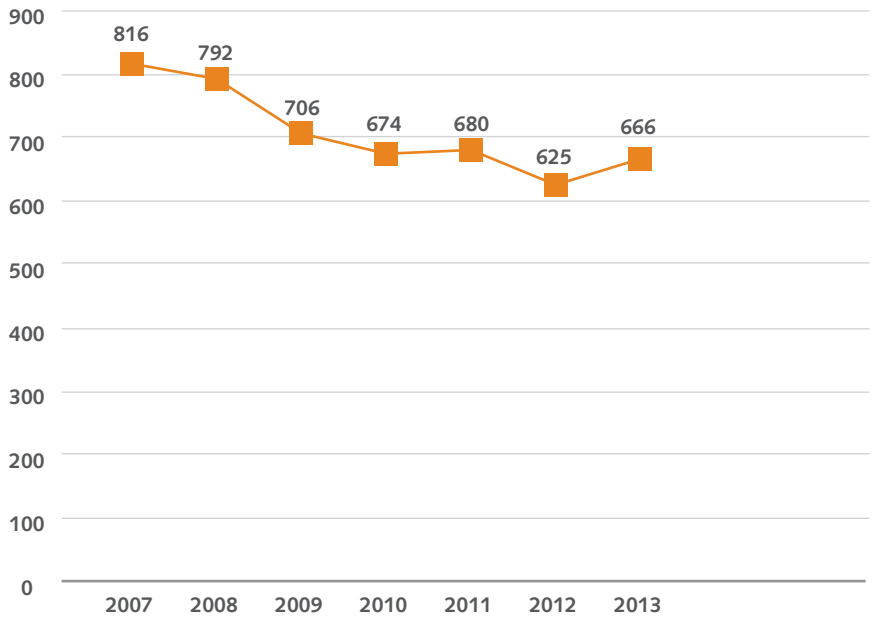
- In Los Angeles County, the rate of CLABSI in hospital intensive care units shows a downward trend. In 2013, the CLABSI rate in ICUs was 1.09 per 1000 days, compared to the 2012 and 2011 rate of 1.2 and the 2010 rate of 1.4.[722]

DIFFERENCES AND DISPARITIES

Sexually Transmitted Diseases and HIV/AIDS

- SPA 6 has the highest rate of reported cases of chlamydia (968 cases per 100,000) followed by SPA 4 (629 per 100,000), SPA 1 (579 per 100,000), SPA 7 (499 per 100,000), SPA 8 (490 per 100,000), SPA 3 (371 per 100,000), SPA 2 (333 per 100,000), and SPA 5 (317 per 100,000).[723]
- In 2012, most new HIV diagnoses were male (91%) and were among 20-39 year olds (63%).[724]
- Of the newly-diagnosed HIV cases in 2012, most cases were among Latinos (49%), followed by whites (23%), blacks (21%), Asians/NHOPI (5%), and American Indian/Alaska Native (1%). Yet, blacks had the highest rate of diagnosis of new cases with 48 per 100,000, more than triple the rate of whites (15/100,000) and over double that of Latinos (20/100,000).[725]
- Among persons diagnosed with HIV in 2012, 85% were men-who-have-sex-with-men (MSM), 9% were exposed to HIV via heterosexual contact, 4% were heterosexual injection drug users, and 3% were MSM who also inject drugs.[726]
- In Los Angeles County the annual number of Stage 3 HIV (AIDS) cases for all races/ethnicities has decreased in the past 9 years. The biggest decrease was among whites, whose annual case total was 445 in 2004 and dropped to 240 in 2012.[727]

Figure 47 Recent Trends in Tuberculosis Cases, Los Angeles County 2007 – 2013



Note: Excludes cases in cities of Long Beach and Pasadena.
Source: Tuberculosis Control Program, Los Angeles County Department of Public Health, Epidemiology Reports.

Tuberculosis

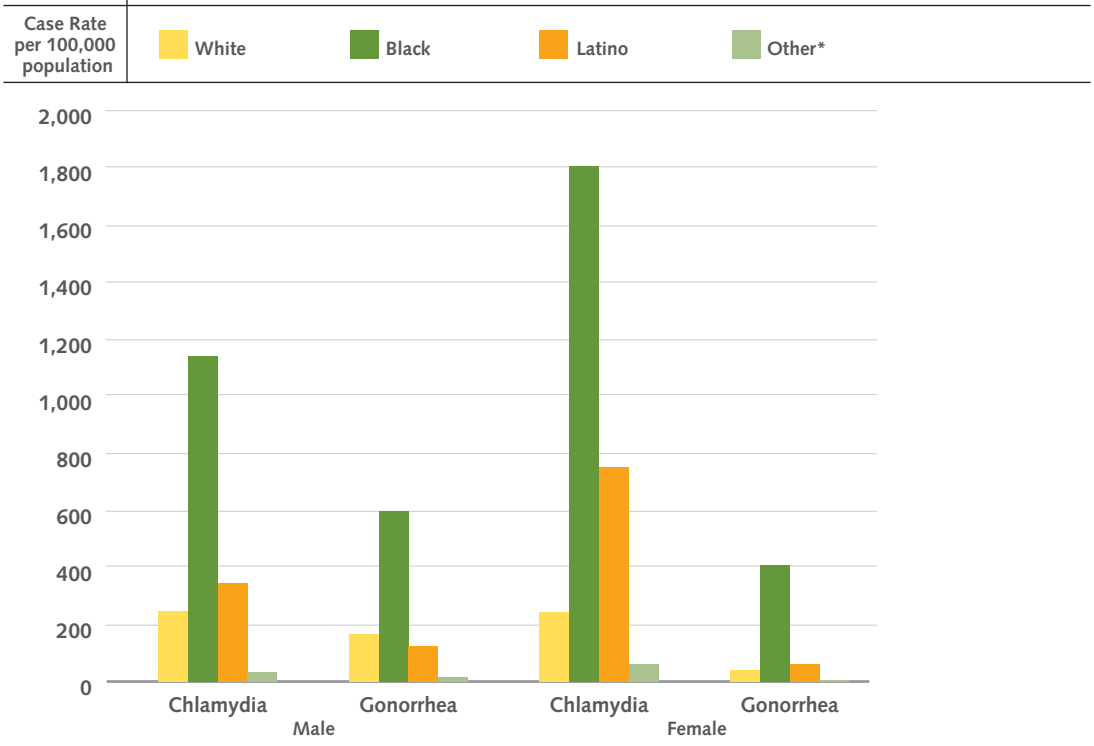
- Those at high risk for TB include foreign born residents (approximately 80% of cases in 2013) and the homeless population which accounted for 10% of new cases in 2013.[728]
- Co-infection with chronic illnesses such as HIV and diabetes is also a risk for those with TB. In 2013, approximately 25% of cases occurred in people who also had diabetes.[729] Of those who were diagnosed with TB in 2013, 4% were also HIV positive.[730]

KEY POINTS

Sexually Transmitted Diseases and HIV/AIDS

- Many STDs can be diagnosed and treated, so it is important for at-risk sexually active adolescent and adults to be tested in order to reduce the spread of these diseases. Many people do not know they are infected because they do not show symptoms.
- Chlamydia is the most common sexually transmitted bacterial infection in the United States. It is usually asymptomatic in both men and women, yet can cause problems for women including pelvic inflammatory disease, chronic pelvic pain, and reduced fertility or infertility. Chlamydia also facilitates the infection of HIV among men and women, therefore effective screening is imperative. Screening is especially recommended for people at high risk, such as: all sexually active, non-pregnant young women aged 24 and younger (25 and younger per CDC recommendations),[731] older non-pregnant women who are at increased risk,[732] men who have sex with men (MSM), and young heterosexual males.

Figure 48 Chlamydia and Gonorrhea Case Rates by Race/Ethnicity and Gender, Los Angeles County 2012



*Other includes cases of unknown race/ethnicity. Excludes cases reported as "Unknown/Other/Ambiguous Genitalia" gender.
Note: Excludes cases in cities of Long Beach and Pasadena.
Source: Division of HIV and STD Programs, Los Angeles County Department of Public Health, 2012 Sexually Transmitted Disease Morbidity Report.

- Identification and treatment of HIV is associated with reduced progression to Acquired Immune Deficiency Syndrome (AIDS)[733] and reduced HIV transmission. Therefore, screening for HIV is recommended to ensure treatment begins as soon as possible.
- Chlamydia and gonorrhea are both on the rise in the County. Young people are the most susceptible and can experience long-term complications if these infections are not treated properly. Seeking treatment early will help minimize the effects of most STDs and prevent transmission. Physicians need to screen at-risk patients and promptly treat patients and their contacts. For patients, education on how to prevent STDs is needed.
- Although there is no cure for HIV/AIDS, there is treatment which can improve health outcomes and quality of life for those infected with HIV. Adherence to the National HIV/AIDS Strategy which emphasizes reduction of new HIV infections, prompt and consistent care, and receipt of adequate treatment to suppress viral load, is important, particularly in communities at high risk for HIV infection.

Tuberculosis

- The long-term decline in TB cases can be attributed to intensive case management methods, Directly Observed Therapy (DOT) in which medical personnel directly watch a patient take the appropriate medication, and incentivizing treatment completion. Also, thorough contact investigation and infection control measures, including the notification and treatment of people who have been in contact with confirmed cases of TB, have contributed to the decline in cases. The recent increase in the number of cases can be attributed to ongoing transmission among the large homeless population in Los Angeles and the difficulty of conducting adequate contact investigations among persons who are homeless.

Foodborne Illness Outbreaks

- Foodborne illness outbreaks can be prevented with safe food handling practices. Outbreaks can occur in all settings where food is present - in homes, hotels, banquet halls, restaurants, and the workplace. Public health helps avoid outbreaks by educating the food industry and the public about safe food storage, handling, and preparation. The Los Angeles County Public Health Department also participates in multistate foodborne investigations to determine if one source is responsible for seemingly similar foodborne illness outbreaks. Many of these investigations result in product recalls and stimulate agricultural research to learn how to better protect food supply.

Hospital Associated Infections

- Central line-associated bloodstream infection (CLABSI) rates are important markers for patient safety and the focus of increasing public health, payer, regulatory, and public interest.
- As part of the National Action Plan to Prevent Healthcare-Associated Infections, the federal government has set a goal of reducing central line-associated bloodstream infections. Los Angeles County's declining rates contribute to California's statewide decreases in CLABSI rates and appear to extend the national trajectory downward, which suggests progress towards CLABSI prevention in most patient care locations. However, additional efforts are needed to uniformly decrease rates in all hospital patient location types.

VIII. The Process to Develop the Community Health Assessment (CHA)

VIII. The Process to Develop the Community Health Assessment (CHA)

LAC DPH's Office of Planning, Evaluation and Development (DPH) began the process to develop a Community Health Assessment with a review of community health assessments from other states, counties, and local hospitals. Planning collaborated internally with other LAC DPH offices and programs to formulate an initial list of CHA indicators. These indicators were selected against several criteria: 1) coverage of a broad scope of health factors, including social determinants such as educational attainment, income/employment, housing needs; 2) balanced coverage of topic areas; and 3) availability of data for each indicator including availability at the sub-County level.

Given the size of Los Angeles County, DPH adopted a regional approach to the CHA and CHIP for reporting and community engagement. Recognizing that each SPA itself is large and encompasses a great diversity of cities and neighborhoods, DPH explored smaller geographies but data for most indicators were not consistently reliable for regions smaller than SPA. Furthermore, SPA boundaries have been approved through a political and community input process.

To initiate the collaborative process, DPH-Planning convened a meeting in November of 2013 with key community stakeholders to discuss the development of a CHA and a CHIP. This meeting included representatives from over 60 local hospitals, clinics, community-based organizations, health coalitions, and other sectors including land use/urban planning and academia. At the meeting, the stakeholders identified opportunities to collaborate and discussed how to build upon existing health assessments and planning efforts within Los Angeles County. This feedback was essential for devising a strategic community-based planning process that would not duplicate previous or existing efforts but could add value to these health planning projects.

Stakeholders were also asked to comment on indicator categories to be included in the CHA. On December 11, 2013, DPH-Planning held a webinar for its key stakeholders and presented a set of proposed CHA health indicators. This webinar, attended by 44 people, described the selection process for the proposed categories and indicators. Participants then had the opportunity to provide feedback and recommendations regarding these indicators and their data sources. The draft list of indicators was also posted on the DPH website to solicit additional stakeholder input during a one month public comment period. During this time, DPH received multiple suggestions for new indicators and data sources; each was carefully reviewed and considered.

The criteria used to assess the suggestions for new indicators included:

- Did the indicator communicate well to a wide audience? Was its meaning easily understood?
- Did the additional indicator provide a new perspective not already provided by another?
- Was the data available to DPH at no cost, and publishable?
- Was data available at least at the County-level with preference for data consistently available by SPA throughout the County?
- Was there a recent data source for this indicator, preferably within the last three years?

Ultimately, thirty-five new indicators were added to the initial list of indicators based upon input received during the comment period. The final list of indicators was posted on the DPH website in March 2014 and stakeholders were notified via email.

The review process of the CHA included an internal review by a number of LAC DPH program staff and subject matter experts to ensure that health issues were framed appropriately, important disparities were highlighted, and that the most salient points were presented to describe the health impact of an issue. The CHA was then presented to stakeholders in November 2014 for public comment over three weeks via the DPH website.

Models Followed to Develop the CHA

To implement an effective collaborative process for developing the CHA in Los Angeles County, various national models were consulted. DPH-Planning staff incorporated components from multiple frameworks including Mobilizing for Action through Planning and Partnerships (MAPP), the Catholic Hospital Association's guidebook on Assessing and Addressing Community Health Needs, the County Health Rankings, and Healthy People 2020.

Models to Develop Indicators

The County Health Rankings Model is a conceptual model of population health that illustrates the diverse factors that make communities healthier places to live, learn, work and play.[734] The model, particularly the Health Factors, helped DPH-Planning prioritize the range of indicators to include in the CHA, including indicators that reflect the physical and social environment. Further, the County Health Rankings Drilldown Guide[735] helped focus initial efforts on questions such as how to define 'community' in a large region. This Drilldown guide provided DPH-Planning staff with a starting point in conceptualizing the CHA, as well as helpful discussion questions regarding data availability and collection.

The Catholic Hospital Association's guidebook, "Assessing and Addressing Community Health Needs," was developed to assist hospitals with assessment activities.[736] Steps outlined in the guidebook provided a helpful framework for DPH-Planning, including steps to engage partners, develop timelines, and understand and interpret data. DPH-Planning's efforts to follow these steps were documented and communicated with text and visuals (e.g., tables, charts, and maps) on DPH-Planning's website and at meetings with stakeholders, per the guidebook's recommendations.

Following recommendations outlined in the MAPP model, DPH-Planning selected indicators specific to local conditions such as air quality, pollution, and housing. Further, DPH-Planning selected indicators that reflect conditions within each of the eight SPAs. The CHA contains eight supplements focusing on indicators relevant to a specific SPA.

Healthy People 2020 (HP 2020) establishes national goals and benchmarks for improving health across the nation.[737] In consideration of these goals, the CHA includes indicators that allow Los Angeles County to compare its health status to the HP 2020 goals and benchmarks. DPH staff also used the HP 2020 goals to focus the CHA's analysis and discussion of disparities.

Models to Collaborate with Community Stakeholders

Both MAPP and the Catholic Hospital Association's guidebook "Assessing and Addressing Community Health Needs" emphasize the importance of collaborating with community stakeholders when conducting assessment and planning efforts to improve community health. Thus, community involvement was actively pursued throughout multiple stages of the CHA development process, including the selection of indicators and the development of an effective collaborative process to conduct the CHA and receive feedback from the community.
Of particular importance was the input provided by the stakeholders at the November 2013 meeting, at which community members asked DPH-Planning to consider assessing SPA-specific needs as much as possible, rather than county-wide health needs. Stakeholders also asked DPH-Planning to focus on health improvement strategies at the SPA level, whenever possible, since many community partners focus their own efforts on smaller geographic areas.

a. Stakeholder Input on Health Needs

In order to supplement the quantitative data presented in the CHA with qualitative data, from December 2013 to January 2014, DPH solicited feedback from community members and stakeholder agencies during an open comment period regarding a proposed list of CHA indicators. Twenty-five responses were collected via electronic survey.

Respondents were asked to identify the biggest health issues facing Los Angeles County along with the most significant factors contributing to poor outcomes across LAC communities. Results, summarized below, indicated that respondents rank chronic disease, access to care, obesity/overweight, and housing as the most important issues in LAC. Social determinants (e.g., poverty/income, educational status, employment status), individual behavior, and built environments were listed as the most significant factors contributing to poor health outcomes.

Most Significant Health Issues Facing Los Angeles County Communities

- Issues Most Commonly Mentioned
  - Chronic disease, including diabetes, cardiovascular disease, and cancer
  - Inadequate access to care
  - Rates of obesity/overweight
  - Inadequate affordable housing/homeless issues
  - Tobacco or alcohol usage
  - Environmental health hazards
  - Inadequate and unsafe pedestrian and cyclist infrastructure
  - Poverty and inequity
  - Lack of access to healthy food

- Other Concerns
  - Lack of civic engagement
  - Youth asthma
  - Lack of access to opportunities for physical activity
  - Inadequate health prevention
  - Decrease in federal funding
  - Mental Health
  - Oral Health
  - Sexually transmitted diseases
  - Aging Issues
  - Teen Pregnancy

Factors Contributing to Poor Health Outcomes in Los Angeles County

- Issues Most Commonly Mentioned
  - Social determinants including poverty, unemployment, education, social structures
  - Poor lifestyle choices and health behaviors; limited awareness about health and health resources
  - Substandard housing and inadequate/unsafe built environments
  - Exposure to toxic substances/sites/emissions
  - Substance abuse, including alcohol and tobacco
  - Shortages of health professionals/gaps in health care
- Other Concerns
  - Lack of access to opportunities for physical activity/low rates of physical activity
  - Lack of access to health care
  - Lack of access to healthy foods
  - Nutrition issues
  - Inadequate mental health resources

HOSPITAL DATA

To examine more qualitative data, DPH-Planning also completed an analysis of data collected from focus groups with community members that were organized by nonprofit hospitals in order to complete their required Community Health Needs Assessments. In general, results from these assessments indicate that community members consistently rank access to care, chronic disease (including diabetes), obesity/overweight and the social environment among the most important health issues. A sampling of those data, categorized by Service Planning Area, is as follows.

Table 11 Prioritization of Health Issues by Focus Group Participants from Hospitals' Community Health Needs Assessments (CHNA)

	SPA 1	SPA 2	SPA 3	SPA 4	SPA 5	SPA 6	SPA 7	SPA 8
Access to Care/Uninsured Population	X	X	X	X	X	X	X	X
Chronic Diseases, including Diabetes and Cancer	X	X	X	X	X	X	X	X
Nutrition and Obesity/ Overweight	X	X	X	X	X	X	X	X
Social Environment, including Safety/Crime/ Violence, Poverty, and Housing/Homelessness	X	X	X	X	X	X	X	X
Mental Health	X	X	X	X	X		X	X
Oral Health	X	X	X		X		X	X
Health Education/Behavior Change			X		X	X	X	X
Aging Issues		X	X		X			X
Physical Environment	X		X	X				
Sexually Transmitted Diseases		X	X				X	
Substance Abuse				X			X	X
Maternal and Infant Outcomes; Women's Health	X		X					
Teen Pregnancy		X						

Note: Community priorities listed above are derived from a sampling of qualitative input from one or two hospitals per SPA: SPA 1[738] , SPA 2[739], SPA 3[740], SPA 4[741], SPA 5[742], SPA 6[743], SPA 7[744], and SPA 8[745].

b. Stakeholder Input on Assets and Resources

Los Angeles County is a large region with a diverse and extensive set of resources. In order to describe these assets and resources, DPH-Planning surveyed key stakeholders and also reviewed hospitals' Community Health Needs Assessments to determine what community members identify as the key assets and resources in their service areas.

Survey of Key Stakeholders

One of the questions in the electronic survey that DPH-Planning sent to key stakeholders in January 2014 was, "What do you think are the most important resources/assets that currently exist in Los Angeles County (or your community) that promote good health?" Key responses are summarized in the following chart:

Key Assets/Resources in the Nonprofit Sector	Key Assets/Resources Provided by Cities/Schools	Key Assets/Resources Provided by the County government
Community health centers	Libraries	LA County Public Health Department programs
Strong local collaboratives that represent multiple sectors that impact health	Cultural activities	LA County Department of Mental Health services
Mental health and substance abuse services, youth programs	City parks (including recreational programs)	County parks
Faith-based organizations	Walkable communities that are safe	Walkable communities that are safe
	Access to affordable healthy food	

Hospitals' Community Health Needs Assessments

DPH-Planning reviewed 44 hospitals' Community Health Needs Assessments (CHNAs) to examine the assets and resources that community members had identified. The CHNAs include detailed lists of medical, dental, and mental health resources – offered by both the nonprofit and public sector. While there are a multitude of services offered throughout Los Angeles County, the CHNAs uniformly prioritize the need to "improve access" to these services. Other key assets and resources identified in the CHNAs include:

- "211" and "Healthycity.org" – two important County-wide resources. These are interactive directories available online (and in the case of 211, available by phone as well) that allow people to search a database of services in their community.
- Resources outside of the health care sector (e.g., educational programs and institutions, employment training/search assistance, childcare providers, and faith-based organizations).

- Resources available through local government agencies (e.g., access to libraries, parks, transportation and housing).
- Local cross-sector collaboratives. Some of these collaboratives are funded by local foundations, also seen as key assets and resources.

As Los Angeles County moves forward in its work to improve the health of its communities, it is clear that collaboration across multiple sectors will be an important strategy to harness and maximize resources that can improve the public's health.

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