Community Health Assessment

City of Long Beach
Department of Health and Human Services
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City of Long Beach
Department of Health and Human Services Bureau Managers

Susan Price, MSW, Interim Director & Community Health Bureau Manager
Mitchell Kushner, MD, MPH, City Health Officer, Physician Services Bureau
S. Michael Johnson, MPA, Support Services Bureau Manager
Cheryl Barrit, MPIA, Preventive Health Bureau Manager
Nelson Kerr, MPA, Environmental Health Bureau Manager
Darnisa Tyler, MPA, Housing Authority Bureau Manager
Dear Family, Friends, and Neighbors,

Since 1906, the City of Long Beach Department of Health and Human Services (Health Department) has been at the forefront of protecting the health and quality of life of our community, preventing diseases, and promoting the health of children and families. Public health is the practice of preventing disease and promoting good health within groups of people, from small communities to entire countries. In other words, public health is about protecting and preserving the health of all those who live, work, play, worship, and learn in Long Beach. Public health is important because it saves money and improves quality of life, helps children thrive, and reduces human suffering. Public health is grounded in understanding the health status of the community, partnerships and community engagement.

I am pleased to share the 2013 Long Beach Community Health Assessment (CHA) with you. The CHA paints a point-in-time picture of the health status of Long Beach. It serves to highlight social, economic, and health conditions that impact our community. As you read through the CHA, I am compelled to ask you to join me and the Health Department in tackling the health and socioeconomic disparities that hinder our city’s full potential to be one of the safest and healthiest cities in America. Long Beach is a city of diverse neighborhoods. While many of our neighborhoods enjoy good health status, there are many communities that are marked with poor health outcomes.

The historic full implementation of the Affordable Care Act in 2014 will provide access to healthcare to millions of formerly uninsured Americans. However, public health remains critical and relevant because of its primary aim of preventing diseases and protecting the health of the community. I hope that the data summarized in the CHA will serve to inspire individuals to adopt a healthy lifestyle and neighborhoods to work together address the root causes of health disparities. Join me in the path to good health.

Sincerely,

Mitchell Kushner, MD, MPH
City Health Officer
Executive Summary

The mission of the City of Long Beach Department of Health and Human Services (LBDHHS) is to improve the quality of life of the residents of Long Beach by addressing public health and human services needs and by promoting a healthy environment in which to live, work, and play. As one of only three city-operated health jurisdictions in the State of California, LBDHHS is able to fulfill its mission by providing locally designed and controlled programs to meet the specific needs of Long Beach residents. Moreover, through advocacy and organized community efforts, the LBDHHS assists community partners to facilitate health promotion and injury prevention.

To effectively focus program direction, the LBDHHS has completed this Community Health Assessment (CHA), which provides a snapshot of the Long Beach community's health, environmental, social, and behavioral conditions. The CHA describes the status of health and well-being of those in Long Beach communities and provides information to help community members to better assess their perceptions and concerns relating to their health. LBDHHS will use the CHA as a tool to develop key strategies aimed at improving the health and quality of life of Long Beach residents.

Long Beach Profile
The City of Long Beach is a coastal community located in southern Los Angeles County. Long Beach is the 7th most populous city in California and the 36th most...
populous city in the nation with a population of 462,257 as of the 2010 Census. Its total area is 50.26 square miles (U.S. Census, 2010).

As of the 2010 Census, the Long Beach population is comprised of 51 percent female and 49 percent male residents. The median age is 33.2. The largest percent (30.5%) of the population is within the age group 25-44, followed by 24.9 percent that are 18 years of age and under, 23.6 percent that are 45-64, 11.7 percent that are 18-24, and 9.3 percent that are 65 and older (Figure 1).

Long Beach is a very diverse city. Based on the 2010 Census, the population is 40.8 percent Hispanic or Latino, 29.4 percent White, 13 percent Black or African American, 12.6 percent Asian, 1.1 percent Native Hawaiian or Pacific Islander, 0.3 percent American Indian and 0.2 percent Other with 2.7 percent of the population reporting two or more races (Figure 2). Although all of the four major racial and ethnic groups are represented in each zip code, Hispanics or Latinos represent nearly 50 percent or greater of the total population in the North (90805), West Central (90806 and 908010) and Southwest (90802, 90804, and 90813) zip codes; while the greatest concentration of Asians, 14-27 percent, are in the West Central (90806, 90807 and 90810) and Southwest (90804 and 90813) zip codes (U.S. Census, 2010, Table DP-1). Maps 1-4 show a graphical representation of racial/ethnic distribution throughout Long Beach.
Health Status
Within Long Beach, health status indicators vary widely across geography, racial/ethnic groups, gender and age. Among all the health status indicators, there is an overwhelming disparity in the health status of those in North (90805), West Central (90806 and 90810) and Southwest (90802, 90804 and 90813) Long Beach communities. Life expectancy for 2010 in these zip codes, 75.6-77 years, is lower by as much as 5 years, when compared to Southeast and East Long Beach zip codes (90808 and 90815) which have life expectancies of 81.5-82.8 years (Figure 3).

Hospitalization rates in these communities are at or above the Long Beach total of 1,437 per 10,000 population with rates of 1,367 per 10,000 for 90810 and rates of 1,464-1,907 per 10,000 population for the other North, West Central and Southwest zip codes. Within these zip codes, 21.7-24.3 percent of the population has been diagnosed with diabetes accompanied by high rates of hospitalization for diabetes. Asthma hospitalization rates are high in these communities as well with rates of 14.1-28.3 per 10,000 population compared to 5.5-9.6 for other zip codes within Long Beach. In addition, over the three-year period, 2006-2008, Long Beach zip codes in the North (90805), West Central (90806, 90807, 90810) and Southwest (90802, 90804, 90813, 90814) have homicide rates by firearm higher than the 2006, 2007 and 2008 Los Angeles County rates (8.3, 6.7, 6.4 per 100,000 population) or California rates (5.1, 4.5, 4.2 per 100,000 population) for at least two of the three years.

With respect to the other Long Beach zip codes, Southeast (90803) and East (90808 and 90815) have seen a rise in diabetes hospitalizations rates since 2007 while all others have seen a decline. East zip codes, 90808 and 90815 also have the second and fourth highest alcohol-drug induced mental illness hospitalization rate at 167.4 and 158.6 respectively per 100,000 population as compared to 254.1 per 100,000 for 90802 and 46.3-159.6 per 100,000 for all other zip codes.

Racial/ethnic disparities exist as well. Asians have a hypertension mortality percentage (3.2%) that is one and one-half to twice that of the other races/ethnicities. Asians and Pacific Islanders represent the largest number of tuberculosis cases in Long Beach (50%). Blacks or African Americans have the highest rate of low birth weight births, while Asians have seen a trend upward of infants being born with low birth weight since 2006 (Figure 4).

The Black or African American community in Long Beach has the highest rate of heart disease hospitalization (2007) with 303 per 10,000 population, nearly twice to and one-half times that of the other races/ethnicities (125-168 per 10,000). Black or African Americans also have the highest diabetes hospitalization rate (64.9 per 10,000) nearly two times that of all other groups (35.4-17.0 per 10,000). Blacks or African Americans have an asthma hospitalization rate (39.2 per 10,000) that is nearly three to four times that of the other races/ethnicities, and over two and one-half times that of Long Beach as a whole (15.0 per 10,000). Cancer death rates for this group in 2007 were 226.6 per 100,000 versus 132.8-158.7 per 100,000 for all other races/ethnicities. They also have assault injury hospitalizations rates (24-46 per 100,000) from 1997-2007 that are twice that of the other racial/ethnic groups.

This community also has the highest rates of sexually transmitted infections (gonorrhea, chlamydia and syphilis) as well as the highest rates of infant deaths, preterm births and low and very low birth weight babies. Blacks or African Americans also have the lowest life expectancy of 72.9 years as well as the...
highest death rate of 1,380 per 100,000 versus 805-927 for all other races/ethnicities (Figure 5).

Hispanics or Latinos have a diabetes hospitalization rate of 35.4 per 10,000, 35-50 percent higher than Whites and Asians. (Figure 6). They have the highest rate of salmonellosis with a rate of 1.9 per 100,000 versus 3.3-7.9 per 100,000 for all other groups and the second highest incidence rate of pertussis 13.3 per 100,000 versus 1.7 and 7.9 per 100,000 for Asians and Blacks or African Americans. The Hispanic or Latino community also has the second highest percentage (33%) of tuberculosis cases in Long Beach.

Whites have a mortality percentage for Alzheimer’s (5.9%) that is nearly three times higher than all other racial/ethnic categories within Long Beach. They have the highest incidence rate of pertussis, 19.9 per 100,000, versus 1.7-13.3 for other groups. Whites also represent a majority of cumulative HIV (43%) and AIDS (55%) cases as of March 31, 2012. Whites are more prone to unintentional injury with the highest hospitalization rate, 37.5 per 100,000 versus 13.5-26 per 100,000 for all other racial/ethnic categories. White children, adolescents and young adults age 5-24, also have a mental health hospital admissions rate (125.8 per 100,000) that is 0.24 to four times that of other racial/ethnic groups.

Within Long Beach age groups, adults over 45 years of age have the highest percentage of diabetes hospitalization (74.5%) and asthma hospitalization (53.3%). The percentage of individuals reporting a disability increases with age to 39.8 percent of those 65 and over reporting a disability versus the Long Beach overall percentage of 9.7. The highest primary and secondary syphilis incidence rate is in the age group 24-29 (44.2 per 100,000) followed closely by the 35-44 age group (38.5 per 100,000). Most cumulative cases of HIV and AIDS (as of March 31, 2012) are in adults with a high percentage of HIV (87%) and AIDS (92%) cases occurring among males.

Children 0-14 years of age have the second highest asthma hospitalization percentage at 28.4 (Figure 7). Children 0-4 were the age group with the highest rate of salmonellosis with a rate of 37.0 per 100,000 versus 3-14 per 100,000 for all other age groups. The highest incidence rate of campylobacteriosis is found in children 0-4 years with 24.6 per 100,000 population versus 3.3-17.7 for all other age groups. Teens and young adults, 15-29, have the highest rates of gonorrhea and chlamydia. For gonorrhea among individuals age 15-24, rates were higher among women.
servings of fruits and vegetables in the previous day. According to the self-reported
body weights from the 2007 Los Angeles County Health Survey, 36.7 percent of Long
Beach adults are overweight (compared to 35.9% of all Los Angeles County adults)
and 31.2 percent are obese (compared to 22.2% of all Los Angeles County adults)
(Figure 8) (LACHS, 2007).

Of particular concern is the prevalence of overweight youth. In the LBUSD, 31
percent of students in the 5th grade fell into the obese category and 21 percent were
classified as overweight, 25 percent of students in the 7th grade were classified
as obese and 21 percent were classified as overweight, and of students in the 9th
grade, 21 percent were obese and 21 percent were overweight (LBUSD, 2010).

Although the percentages of students that are overweight and obese are high in all
zip codes (above 34%), more than half of 5th grade students in the North (90805),
West Central (90806), and Southwest (90802, 90804 and 90813) Long Beach zip
codes are classified as overweight or obese (Figure 9). (Figure 9. Crampton WJ, Humphrey JW, Norman AJ, 2011
5th Grade Students who are Overweight and Obese
by Zip Codes, LBUSD, 2009-2010

Behavioral Health

Conditions and behaviors that contribute to health status show a lack of physical
activity, poor nutrition, tobacco use, and excessive alcohol consumption are
responsible for much of the illness and death related to chronic disease in the United
States. These behaviors are present in Long Beach as well. In Long Beach, 22.1
percent of adults reported binge drinking in the previous month (LACHS, 2007).
Hispanics or Latinos reported a higher percentage of binge drinking (35.5%) than
other races/ethnicities (CHIS, 2009); similarly, Hispanic or Latino students reported
the highest alcohol use among Long Beach Unified School District (LBUSD) students
(California Department of Education, 2008-2010). In 2010, 15.3 percent of Long
Beach adults (18 years and older) were smokers. This is under the 2010 national
average of 19 percent, but above the 2010 Los Angeles County rate of 14.3 percent
and the California rate of 11.9 percent (County of Los Angeles Public Health, 2010).

Of those within the South Bay in 2009 who reported being a smoker, Asians had the
highest percentage of smokers (15.3%) and Hispanics or Latinos had the lowest
(8.3%) (CHIS, 2009).

Poor nutrition and lack of physical activity are contributing factors to obesity, which is
a major risk factor for cardiovascular disease, diabetes, musculoskeletal disorders,
and some cancers. Long Beach adults reported being active and meeting physical
activity guidelines slightly less than adults in the South Bay and in Los Angeles
County (50.9% of Long Beach adults versus 53.7% in the South Bay and 53.2% in
Los Angeles County). Furthermore, in the 2007 Los Angeles County Health Survey,
only 14.5 percent of Long Beach adults reported meeting the recommended five

Having children young and being the child of a young mother predicts poorer health
and socioeconomic standing in years to come. California's teen birth rate dropped
to a record low in 2010 (29.0 births for every 1,000 females ages 15-19), from a high
in 1991 of 70.9 births (CDPH, 2011). Despite this improvement at the state level,
the birth rate among teen women aged 15-19 in Long Beach, although dropping,
remains high. In 2007, Long Beach registered 887 births to young women 15-19,
giving a teen birth rate of 52.6 per 1,000 females aged 15-19. Between 2004 and
2005 the teen pregnancy rate was higher in three of the five CDPH Medical Service
Study Areas (MSSAs) used to report teen pregnancy. Within Long Beach birth rates
were 53.8 – 69.4 births/1,000 teens as compared to that of the County of Los Angeles
(40.5 births/1,000 teens) or the State of California (37.2 births/1,000 teens) (Figure
10) (Takahashi et al, 2008). Latinas represented 71 percent (626) of the births with a
the population in zip code 90813 achieved more than a high school diploma, while more than 80 percent did in 90803.

Of particular concern is the percentage of children born into and living in families in poverty. More than 30 percent of children in Long Beach are born into a family in poverty. Low income households and older homes are among the factors frequently associated with residences having high concentrations of mouse and cockroach allergens (Cohn et al. 2004, 2006) that contribute to adverse health conditions such as asthma and lead poisoning. Areas with higher renter-occupied units are also more likely to have significant maintenance problems. The zip codes with the highest vacancy and renter-occupied housing are also those with lower income and a higher percentage of the populations in poverty. This combination of income levels, renter-occupied housing units and the general age of housing units throughout Long Beach underscore the disparities in the quality of the housing stock in specific zip codes such as West Central (90806) and Southwest (90802, 90804, 90813 and 90814).

Environmental Health

The disparities continue in the North, West Central and Southwest sections of Long Beach as even though the number of childhood lead poisoning cases has declined, 91 percent of the cases since 2005 have occurred in these areas. These areas also have the largest numbers of hazardous waste generators and the lowest amount of green space. A lack of green space not only impacts air quality, but also makes access to recreation open space problematic for much of the youth population in these areas. Although air quality and the designation of unhealthy days impacts all of Long Beach, the higher incidence of asthma, obesity and other health issues in the North, West Central and Southwest are exacerbated by the 94 days (2011) that were considered “Unhealthy for Sensitive Populations” within Los Angeles County.
Health Care Access and Utilization

High rates of disease and illness can be further complicated when greater than 20 percent of Long Beach residents are uninsured. A slightly higher percentage of those between 100 and 199 percent of the Federal Poverty Level (FPL) are uninsured (35.7%) and of those at or below the FPL, 30 percent are uninsured. Hispanics or Latinos report higher percentages uninsured than other races/ethnicities (31.8% Figure 11). Hispanic or Latina women are also the least likely to access preventive screenings such as mammograms. More than 40 percent of Hispanic or Latina women over age 30 reported that they had never had a mammogram.

Since 2005, there has been a yearly increase in the percentage of women waiting until their second trimester to first access prenatal care (Figure 12). There also has been a more than 50 percent increase in annual emergency room discharges from Long Beach hospitals between 2001 and 2010.

This CHA describes the status of health and well-being of those in the Long Beach community. The complete CHA provides an even more detailed presentation of health indicators within Long Beach. Disparities are highlighted in order to focus the greatest impact. LBDHHS will use this CHA as a tool to develop key strategies aimed at improving the health and quality of life of Long Beach residents. LBDHHS provides
Introduction

The mission of the City of Long Beach Department of Health and Human Services (LBDHHS) is to improve the quality of life of the residents of Long Beach by addressing the public health and human services needs and by promoting a healthy environment in which to live, work, and play. As one of only three city-operated health jurisdictions in the State of California, LBDHHS is able to fulfill its mission by providing locally designed and controlled programs to meet the specific needs of Long Beach residents. Moreover, through advocacy and organized community efforts, the LBDHHS assists community partners to facilitate health promotion and injury prevention.

To effectively focus program direction, the LBDHHS has completed this Community Health Assessment (CHA), which provides a snapshot of the Long Beach community’s health, environmental, social, and behavioral conditions. The CHA describes the status of health and well-being of those in Long Beach communities and encourages community members to better understand their perceptions and concerns relating to their health. LBDHHS will use the CHA as a tool to develop key strategies aimed at improving the health and quality of life of Long Beach residents.

Assessment is one of the three core functions of Public Health and a major part of the 10 Essential Public Health Services. As a tool for LBDHHS to monitor health within Long Beach, the CHA was developed through a combination of 1) data sources that surveyed the residents and communities of Long Beach; 2) information collected from focus groups with community members that are traditionally underrepresented in survey data; and 3) interviews with key informants to understand community health needs and identify gaps. This CHA describes the health status of the population, identifies areas for health improvement, determines factors that contribute to health issues, and identifies assets and resources that can be mobilized to address population health improvement.

This CHA used a wide range of data sources from established government sources such as the 2010 Census, 2010 American Community Survey 1-year Estimates, California Health Interview Survey, Healthy City.org, and AIRNow.gov; Long Beach plans and program data such as the City of Long Beach 2005-2010 Consolidated Plan and program status reports; and other community surveys and reports such as Harbor Regional Center Survey, Heal the Bay 2011-12 Annual Report, and Khmer Girls in Action – Step into Long Beach, to name a few. All data was accessed in July, August or September of 2012 unless otherwise noted. A full list of data sources is provided in the Appendix 3.

Information regarding key health issues in Long Beach was also gathered through in-person engagement via community forums and key informant interviews. For highlights of community forums and key informant interviews see Appendix 1.

As noted, data was gathered using a number of sources, which gather and display data in multiple ways. To the extent possible, data was sought that specifically represented the City of Long Beach or the zip codes of 90802, 90803, 90804, 90805, 90806, 90807, 90808, 90810, 90813, 90814 and 90815. Data that was not available in this way was pulled by Service Planning Area (SPA). A SPA is a specific geographic region within Los Angeles County used by the Los Angeles County Department of Public Health for health assessment and planning purposes. There are 8 SPAs within Los Angeles County and Long Beach is located within SPA 8, the South Bay SPA. The South Bay SPA serves a combination of economically, socially and environmentally diverse communities. These communities include Athens, Avalon, Carson, Catalina Island, El Segundo, Gardena, Harbor City, Hawthorne, Inglewood, Lawndale, Lennox, Long Beach, Hermosa Beach, Manhattan Beach, Palos Verdes Estates, Rancho Dominguez, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, San Pedro, Wilmington, and others. With this wide variety of community characteristics, data from the South Bay SPA is representative of the entire region and does not represent Long Beach specifically. Map 1 shows Los Angeles County and the area of the South Bay SPA, highlighted in orange.
Long Beach specific data was not available, South Bay data was used as an indicator or characteristic of the area in general, but was combined with more specific data sources and indicators when possible to form a better picture within Long Beach.

In addition to Long Beach citywide data and zip code data, information was gathered by age group, gender and race or ethnicity. Race or ethnicity groupings in this report include Asian, Black or African American, Hispanic or Latino, White and Other. Native Hawaiian and Pacific Islander data was displayed separately when available. Other populations represent a combination of American Indian and Alaska Native, Some Other Race, Two or More Races, or Native Hawaiian and Other Pacific Islander, if not listed separately.

**Long Beach Profile**

The City of Long Beach is a coastal community located in southern Los Angeles County. Long Beach is the 7th most populous city in California and the 36th most populous city in the nation with a population of 462,257 as of the 2010 Census. Its total area is 50.26 square miles (U.S. Census, 2010).

**Age and Gender**

As of the 2010 Census, the Long Beach population is comprised of 51 percent female and 49 percent male residents. The median age is 33.2. The largest percent (30.5%) of the population is within the age group 25-44, followed by 24.9 percent that are 18 years of age and under, 23.6 percent that are 45-64, 11.7 percent that are 18-24, and 9.3 percent that are 65 and older (Figure 1). The graph shows the Long Beach population distribution by age group followed by a table showing the number of females and males by age group (U.S. Census, 2010, Table QT-P1).

Based on the 2010 Census, the percentage of Long Beach residents, by age and gender, is similar to that of the County of Los Angeles and the State of California, although Long Beach (9.3%) has a slightly lower percentage of older adults. The County of Los Angeles and the State of California report 10.9 percent and 11.4 percent for adults 65 and over, respectively (Table 1) (U.S. Census, 2010, Table QT-P1).

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<th>Age Range</th>
<th>Males</th>
<th>Females</th>
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<tr>
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<tr>
<td>18-24</td>
<td>26,324</td>
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<td>25-44</td>
<td>69,478</td>
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<td>45-64</td>
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<tr>
<td>65+</td>
<td>18,738</td>
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<tr>
<td>Total</td>
<td>226,520</td>
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Table 1. U.S. Census, 2010, Table QT-P1

<table>
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<td>66020</td>
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</tbody>
</table>

Figure 2. U.S. Census, 2010, Table QT-P1 (per ZCTA)
Although the total age distribution in Long Beach is similar to that of the County and State, the age distribution by zip code within Long Beach is quite different. Figure 2, based on the 2010 Census, shows age distribution by zip code. North (90805), West Central (90806 and 90810) and Southwest (90813) zip codes have a higher percent, 29 percent or greater, of those under 18, while Southeast (90803), West Central (90807) and East (90808 and 90815) have a higher percentage of older adults ages 45-64 and 65 and older totaling 40 percent of the population or greater (U.S. Census, 2010, Table QT-P1).

**Race/Ethnicity**

Long Beach is a very diverse city. Based on the 2010 Census, the population is 40.8 percent Hispanic or Latino, 29.4 percent White, 13 percent Black or African American, 12.6 percent Asian, 1.1 percent Native Hawaiian or Pacific Islander, 0.3 percent American Indian and 0.2 percent Other with 2.7 percent of the population reporting two or more races (Figure 3). The Hispanic population is mostly of Mexican heritage while the Asian population is mostly Cambodian and Filipino (U.S. Census, 2010, Table DP-1).

Long Beach has a larger Black or African American (13%), Hispanic or Latino (40.8%), and Other (4.3%) population when compared to the State of California, and a smaller White population (Table 2). Long Beach’s population distribution is more similar to Los Angeles County than to the State, but it has a smaller Hispanic or Latino population and larger Black or African American population than the County.

Other populations represents a combination of American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, some other race and two or more races (U.S. Census, 2010, Table DP-1).

Although Long Beach is diverse, it has very distinct population groupings within the city. Whenever possible, the health and social conditions contained in this CHA are described by zip codes to underscore racial and economic disparities that exist in Long Beach. The zip codes used in this document are 90802, 90803, 90804, 90805, 90806, 90807, 90808, 90810, 90813, 90814, and 90815. Although all of the four major racial and ethnic groups are represented in each zip code, Hispanics or Latinos represent nearly 50 percent or greater of the total population in the North (90805), West Central (90806 and 90810) and Southwest (90813) zip codes and Whites represent 50 percent or greater of the total population in the Southwest (90814), Southeast (90803) and East (90808 and 90815) zip codes (Figure 4). The greatest concentration of Blacks or African Americans, 14-21 percent, are in the North (90805), West Central (90806 and 90810) and Southwest (90802, 90804, and 90813) zip codes; while the greatest concentration of Asians,
14-27 percent, are in the West Central (90806, 90807 and 90810) and Southwest (90804 and 90813) zip codes (U.S. Census, 2010, Table DP-1).

Map 3 outlines all the zip codes within Long Beach. The maps that follow show the racial/ethnic distributions of the four largest racial/ethnic groups, Asian, Black or African American, Hispanic or Latino and White as documented in the 2010 U.S. Census.

Hispanics or Latinos represent nearly 50 percent or greater of the total population in the North (90805), West Central (90806 and 90810) and Southwest (90813) zip codes (Map 4).

Whites represent 50 percent or greater of the total population in the Southwest (90814), Southeast (90803) and East (90808 and 90815) zip codes (Map 5).

Blacks or African Americans represent 14-21 percent of the population in the North (90805), West Central (90806, 90807 and 90810) and Southwest (90802, 90804, and 90813) zip codes (Map 6).

Asians represent 14-27 percent of the population in the West Central (90806, 90807 and 90810) and Southwest (90804 and 90813) zip codes (Map 7).
Languages
The majority of households in Long Beach speak English (53.2%) or Spanish (34.0%) at home. Asian or Pacific Islander languages are spoken in 10 percent of households. Other languages are reported by 2.9 percent of homes (Figure 5) (ACS, 2010, 1 year estimate, Table DP02).

Of the languages spoken at home, Hispanic or Latino households speak Spanish a majority of the time (80.6%), while 18.9 percent of those households speak English only (Figure 6). Asian households speak Asian languages 72.9 percent of the time and English only 23.5 percent of the time. Pacific Islander households are split, speaking Asian languages 58.2 percent of the time and English only 41.3 percent of the time. Black or African American (95.1%) and White (91.6%) households primarily speak English only (ACS, 2010, 5 year estimate, Table DP02).

English Learners
According to the California Department of Education, for the 2010-2011 school year, the Long Beach Unified School District (LBUSD) student population was 84,816. Of that population, 23.3 percent or 19,774 were English Learners. This percentage is higher than the English Learner percentage for the County of Los Angeles, which is 10.26 percent, and the State of California percentage, which is 17.0 percent.

Of the English Learners within the LBUSD, a large majority or 88.9 percent are Spanish speakers, while 5.8 percent speak Khmer (Cambodian). The remaining 4.5 percent represent 32 other languages. Figure 7 lists the top 10 languages spoken by English Learners.

English Learners by Language
Long Beach Unified School District, 2010-2011

The California Department of Education defines English Learners as a K-12 student who, based on objective assessment, has not developed listening, speaking, reading, and writing proficiencies in English sufficient for participation in the regular school program. These students are sometimes referred to as Limited English Proficient (LEP).
English Proficiency

Within Long Beach, English proficiency varies by age. For individuals that also speak Spanish, a majority of 5-17 year olds and 18-64 year olds consider themselves able to speak English “well” or “very well.” Those 65 years of age and over are equally likely to speak English “well” and “very well” or “not at all.” Figure 8, based on 2010 Census, American Community Survey data, shows self-reported English proficiency by age group (ACS, 2010, 1 year estimate, Table B16004).

Similar to Spanish speakers, Asian or Pacific Island language speakers between the ages of 5-64 are likely to speak English “well” or “very well,” while for those 65 years of age and over, just over 50 percent (51.1%) report speaking English “not well” or “not at all” (Figure 9) (ACS, 2010, 1 year estimate, Table B16004).

Long Beach is a diverse, multi-lingual community with many resources, but also inequities. Community residents value their diversity and the unique nature of the Long Beach experience. To follow are chapters that further assess the health of the Long Beach community by looking at its overall health status, health behaviors, social determinants that impact health, environmental factors that impact health, and the availability, accessibility and utilization of health resources.

Not only are the data and statistics important in developing this assessment, but so too is the community’s voice as noted at the beginning of the introduction. As an important consideration in the assessment of the health and well being of residents within Long Beach, below are quotations from community leaders gathered during key informant interviews by LBDHHS in 2012. Here are what some Long Beach community leaders had to say:

“We have our own community health clinic, own health department, our own school district, our own children’s hospital and a bunch of non-profits that work together and we engage the community...We are a community that wants to look at creative solutions for health problems in a broad sense.”

“I want to see our families be stress-free for good. We need to help our families [learn] how to cope with stress. We need to fix our environment. We need to teach people how to exercise...”

“Our youth talk about the need for more free services about their bodies, like contraception.”

“I've lived in Long Beach all my life and I started working at the age of 16 and I really like Long Beach because we're a diverse community. Here, you have the opportunity to learn about cultural differences and similarities.”

“We have our own community health clinic, own health department, our own school district, our own children’s hospital and a bunch of non-profits that work together and we engage the community...We are a community that wants to look at creative solutions for health problems in a broad sense.”

“Let’s make it hip to carry a water bottle.”

“I am really concerned about housing in Long Beach. We have no rent control and that is hard for many low income families.”

“... It’s not enough to simply have parks, we need to make sure they are safe.”

“We have our own community health clinic, own health department, our own school district, our own children’s hospital and a bunch of non-profits that work together and we engage the community...We are a community that wants to look at creative solutions for health problems in a broad sense.”

“I want to see our families be stress-free for good. We need to help our families [learn] how to cope with stress. We need to fix our environment. We need to teach people how to exercise...”

“Our youth talk about the need for more free services about their bodies, like contraception.”

“I've lived in Long Beach all my life and I started working at the age of 16 and I really like Long Beach because we're a diverse community. Here, you have the opportunity to learn about cultural differences and similarities.”
Chapter 1. Health Status

Overview
Overall the population of the South Bay area, which includes Long Beach, believes they are in fairly good health with more than half of the residents of the region report being in “Excellent” or “Very Good” health. However, life expectancy in Long Beach is lower than Los Angeles County as a whole, and lower than the surrounding communities in the South Bay. Both mortality and morbidity vary in Long Beach across geography, racial/ethnic groups, gender and age. These variations are not always consistent. As seen here in this section, health disparities are based on a wide range of factors.

General Health Status
The 2009 California Health Interview Survey (CHIS) provides estimates for the South Bay Service Planning Area (SPA). Overall, more than half of respondents reported their health as “Excellent” or “Very Good.” Only 3.5 percent reported their health status as “Poor” (Figure 10).

Table 3. California Health Interview Survey, 2009
Health Status Comparison by Gender, South Bay SPA and Los Angeles County, 2009

<table>
<thead>
<tr>
<th></th>
<th>South Bay SPA</th>
<th>Los Angeles County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Health Status</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Excellent</td>
<td>25.7</td>
<td>22.6</td>
</tr>
<tr>
<td>Very good</td>
<td>30</td>
<td>30.5</td>
</tr>
<tr>
<td>Good</td>
<td>25.8</td>
<td>29.2</td>
</tr>
<tr>
<td>Fair</td>
<td>15.4</td>
<td>13.8</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
<td>4.0*</td>
</tr>
</tbody>
</table>

Overall self reported health status for males and females in the South Bay SPA does not differ significantly from that reported in Los Angeles County as a whole (Table 3). Both in the South Bay SPA and Los Angeles County as a whole, females are slightly less likely to report their health status as “Excellent” than males and slightly more likely to report their health as “Good.” The percentages of males and females reporting “Fair” and “Poor” health status do not vary as much.

Self reported health status varies significantly across racial/ethnic groups (Table 4). Whites are much more likely to report “Excellent” or “Very Good” health than all other groups. Two-thirds (67.2%) of Whites report their health as “Excellent” or “Very Good” compared to 55.6 percent of Blacks or African Americans and less than half of Hispanics or Latinos (44.1%), Asians (47.3%) or Others (43.4%). Hispanics or Latinos (24.8%) and Asians (22.6%) have the highest percentage of individuals rating their health as “Fair” or “Poor.” Blacks or African Americans (15.6%), Whites (12.1%) and Others (16.3%) had lower rates of reported “Fair” or “Poor” health.

Health Status Comparison by Race, South Bay SPA, 2009

<table>
<thead>
<tr>
<th></th>
<th>Asian</th>
<th>Black or African American</th>
<th>Hispanic or Latino</th>
<th>White</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Status</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Excellent</td>
<td>20.9</td>
<td>19.1</td>
<td>19</td>
<td>31.3</td>
<td>22.2</td>
</tr>
<tr>
<td>Very good</td>
<td>26.4</td>
<td>36.5</td>
<td>25.1</td>
<td>35.9</td>
<td>21.2</td>
</tr>
<tr>
<td>Good</td>
<td>30.1</td>
<td>28.7</td>
<td>31.1</td>
<td>20.7</td>
<td>38.2</td>
</tr>
<tr>
<td>Fair</td>
<td>15.5</td>
<td>12.6</td>
<td>21.9</td>
<td>9.3</td>
<td>14.9</td>
</tr>
<tr>
<td>Poor</td>
<td>7.1*</td>
<td>3.0*</td>
<td>2.9*</td>
<td>2.8</td>
<td>3.4*</td>
</tr>
</tbody>
</table>

* Statistically unstable
Life Expectancy and Mortality

“Average life expectancy is one of the most fundamental measures of the health of a population and community” (LADPH, 2010). The overall mortality, the causes of death and the disparities in mortality tell a story about the community as well.

Life Expectancy

According to the United States Center for Disease Control and Prevention (CDC) the 2010 age adjusted life expectancy at birth for the United States is 78.5 years (CDC, 2010). According to a study by Los Angeles County Department of Public Health (LADPH), Office of Health Assessment and Epidemiology, life expectancy for Los Angeles County overall (2006) is 80.3 years. This same study shows Long Beach life expectancy at birth as 78.6 years. When compared to the cities in the South Bay SPA, for which Long Beach is a part, life expectancy ranges from 84.4 years in Lennox to 77.0 years in Inglewood. Figure 11 shows the life expectancy at birth for Los Angeles County, Long Beach, and a number of cities within the South Bay SPA.

Life expectancy in Long Beach varies among gender and racial/ethnic groups as well. Across gender lines, females are expected to outlive males by 5.1 years (Table 5).

Table 5. LBDHHS, 2010

<table>
<thead>
<tr>
<th>Gender</th>
<th>Life Expectancy (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>81.4</td>
</tr>
<tr>
<td>Male</td>
<td>76.3</td>
</tr>
</tbody>
</table>

Among racial/ethnic groups, a large disparity exists. Asians have the highest life expectancy at 84.4 years followed by Hispanics or Latinos at 80 years and Whites at 79.2 years. The Black or African American community has an 8 to 12 year decrease in life expectancy from the other groups at 72.9 years (Figure 12).

Life expectancy also varies across Long Beach geographically. Zip code 90802 has the lowest life expectancy at age 1 with 75.6 years and 90815 has the highest life expectancy at age 1 with 82.8 years. The geographic variation can be seen in Figure 13. There is a large disparity of 5 to 6 years comparing the North zip codes 90805 (76.8), West Central 90806 (76.8), 90810 (76.8) and Southwest 90813 (76.7), 90802 (75.6), 90804 (77) with life expectancy in the mid-seventies to Southeast zip codes 90803 (81.7) and East 90808 (81.5), 90815 (82.8) with life expectancy in the low eighties.

As a comparison to the life expectancy projection, death rates display the actual occurrence of deaths in Long Beach. Figure 14 shows death rates (age-adjusted) per 100,000 population in Long Beach for the year 2007 divided into racial/ethnic categories. Death rates among the Black or African American community are approximately 30 to 40 percent greater than the other groups within Long Beach.
The ability to improve the community’s life expectancy will depend on our ability to influence those aspects that limit life span. To determine these factors we explore what causes deaths within Long Beach. In 2010 most deaths in Long Beach resulted from heart disease (29%) and neoplasms/cancer (22%). Other significant causes of death include chronic lower respiratory disease (such as emphysema and chronic obstructive pulmonary disease – COPD) and cerebrovascular disease (such as stroke). All injuries (including unintentional injuries and intentional self-harm) are responsible for an additional 5 percent of all deaths (Figure 15). Other causes of death (such as Nephritis Nephrotic Syndrome, Viral Hepatitis, Essential Hypertension and Hypertensive Renal Disease, Parkinson's Disease and Assault/Homicide) individually account for less than two percent of all deaths in Long Beach, but account for the remaining percent of all deaths (19%).

The leading causes of death vary by race in Long Beach. As seen in Table 6, diseases of the heart are the leading cause of death for all races/ethnicities in Long Beach, followed by malignant neoplasms (cancer). Interestingly, Blacks or African Americans, Hispanics or Latinos and Asians/Pacific Islanders have a similar rate of cerebrovascular disease deaths (8.1-8.7%), but the percentage for Whites (5.7%) is one-third as high. Blacks or African Americans have a diabetes percentage (6.1%) nearly one and one-half to almost twice the percentage of all other categories (2.6-4.7%). Whites have a rate of Alzheimer’s deaths (5.9%) that is nearly three times higher than all other races/ethnicities. The Other category has a chronic lower respiratory diseases percentage (20%) that is over twice that of Whites (9.3%) which is nearly twice to three times that of the other races/ethnicities (3.5-5.1%). Blacks or African Americans and Hispanics or Latinos have a homicide/assault percentage (3.8-3.8%) that is more than five times that of Whites and Asians (0.5-0.7%).
The incidence of disease or illness also varies greatly by race and ethnicity (Figure 17). Using hospitalization rates for 2007, the rate of hospitalization per 10,000 population is highest for Blacks or African Americans with 2,227 per 10,000, followed by Hispanics or Latinos with 1,707 per 10,000 and Whites with 1,328 per 10,000. The lowest rate of hospitalization is found in the Asian community with 1,264 per 10,000.

The overall hospitalization rate for Long Beach is 1,437 per 10,000. Zip codes found in the North (90805), West Central (90806) and Southwest (90802, 90804, 90813) have hospitalization rates above the Long Beach overall rate (Figure 18). The highest rate appears in 90813 (1,907 per 10,000). The lowest rate appears in 90803 (1,007 per 10,000) and 90808 (1,068 per 10,000).

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Heart Disease

As noted earlier, heart disease is the leading cause of death in Long Beach (27% of all 2011 deaths) and is a leading non-pregnancy or childbirth related cause of hospitalization (2007). Heart disease represented 9.3 percent (5,555) of all hospitalizations in 2007. Heart disease hospitalization is equally distributed by gender with 51 percent of all those hospitalized being males and 49 percent females (Figure 19).

Although the heart disease death percentage (27.8-35.1%) is fairly evenly distributed among racial/ethnic categories, hospitalization rates for Blacks or African Americans (303 per 10,000 population) are nearly twice to two and one-half times that of the other races/ethnicities (Figure 20).

There is also significant variance across zip codes for hospitalization rates for heart disease. The highest rate of 234.7 per 10,000 population is present in 90813 and the lowest of 97.2 per 10,000 is found in 90814 (Figure 21). Map 8 shows heart disease hospitalization rates (per 10,000) by zip code revealing the highest rates in West Long Beach and lowest rates in East Long Beach.
Cancer

Cancer is a leading cause of death as well as of morbidity in Long Beach. Data on cancer is reported in Los Angeles County by SPA and Health District. Long Beach is within South Bay SPA (SPA 8) and represented exclusively in Health District 40. Cancer incidence will be represented by hospitalization and mortality rates. Within Long Beach hospitalization rates vary greatly by race/ethnicity and gender (Figure 22 and 23).

While hospitalization rates show White females as the majority of those who are hospitalized for cancer, mortality rates demonstrate a different trend. Within Long Beach as well as Los Angeles County and the State of California, males have a higher death rate than females (Figure 24) and Blacks or African Americans have a substantially higher death rate than all other races/ethnicities (Figure 25). Across nearly all categories, Long Beach has a higher mortality rate for cancer than Los Angeles County, but is overall lower than the State in total.

Within Los Angeles County and the State of California, the five most common types of cancer are prostate and breast (male and female respectively), followed by lung/bronchus and colon/rectum (both genders), bladder (males) and uterus (females) and melanoma (both genders). Skin cancer is the most commonly reported type of cancer in the South Bay SPA (CDPH-CCR, 2011 and CHIS, 2005).
Diabetes is a serious health problem in Long Beach. Based on the California Health Interview Survey, the estimated percent of adults age 45 and over who have ever been told by a doctor that they have diabetes, sugar diabetes or as borderline or pre-diabetes in all Long Beach zip codes is greater than 15 percent (Figure 26).

Similar to the percent diagnosed with diabetes as noted in Figure 26, the diabetes hospitalization rate for Long Beach in 2007 is found to be highest in the North (90805), West Central (90806, 90810) and Southwest (90802, 90804, 90813) with hospitalization rates above the Long Beach overall rate of 26.8 per 10,000 population (Figure 27). The highest rate appears in 90813 (54.7 per 10,000). The lowest rate appears in 90815 (7.2 per 10,000), 90803 (9.4 per 10,000) and 90808 (12.0 per 10,000).

For 2010, hospitalization rates improved in all Long Beach zip codes noted above with the highest rates, however these zip codes still have the highest hospitalization rates throughout Long Beach.

Map 9 shows diabetes hospitalization rates (per 10,000) by zip code from 2007 with the highest rates in West Long Beach and lowest rates in East Long Beach.

The percent hospitalized for diabetes is evenly split among the genders with 50.8 percent males and 49.2 percent females. However, there is a disparity with respect to the race/ethnicity of those hospitalized for diabetes (Figure 28). Black or African Americans have a rate (64.9 per 10,000) nearly two times that of all other groups with Hispanics or Latinos at a rate of 35.4 per 10,000 and Asians a rate of 22.9 per 10,000. Whites have the lowest rate at 17 per 10,000.
Regardless of race/ethnicity, individual hospitalization for diabetes increases significantly as age increases. Nearly 75 percent of those hospitalized for diabetes are over 45 years of age (Figure 29).

**Respiratory Disease**

Chronic respiratory disease includes asthma and Chronic Obstructive Pulmonary Disease (COPD), including emphysema and chronic bronchitis. Within Long Beach, asthma and COPD are the cause of about 1200 hospitalizations in 2007 (Asthma 627 and COPD 639). Of those with COPD, four-in-ten are non-smokers (Breathe California of Los Angeles County, 2012). Of these respiratory ailments, asthma is specifically tracked. Asthma is on the rise throughout the United States and specifically within Long Beach. There are approximately 55,512 adults with asthma who reside in Long Beach.

The percentage of residents ever diagnosed with asthma in 2009 ranges from 13.1 percent in 90813 to 15.1 percent in 90815 (Figure 30). With one exception (90813 and California percentage), all zip codes have percentages that are higher than those for Los Angeles County (12.5%), California (13.7%) and the United States (8%). The rates of asthma vary slightly across the city, however all zip codes have seen a rise in the percentage of individuals with asthma since the period 2003-2005. Hospitalization rates for asthma are an indicator that asthma is not well controlled either by medical treatment, environmental conditions or nutrition. Hospitalization rates for asthma vary by race/ethnicity, gender and age group. Blacks or African Americans have a hospitalization rate (39.2 per 10,000) that is nearly three to four times that of the other races/ethnicities, and over two and one-half times that of Long Beach as a whole (15.0 per 10,000) (Figure 31).

Females are nearly twice as likely to be hospitalized for asthma than males (Figure 32), while children (0-14 years of age) and the older age group (greater than 45 years of age) are those most likely to need hospital care for asthma (Figure 33).
Although there is little variability of the percentage of those with asthma within zip codes (13.1%-15.1%), the asthma hospitalization rate for Long Beach in 2007 is found to be highest in 90813 (28.3 per 10,000) and lowest in 90815 (5.5 per 10,000) (Figure 34).

Map 10 shows asthma hospitalization rates (per 10,000) by zip code from 2007 with the highest rates in West Long Beach and lowest rates in East Long Beach.

Pediatric hospitalizations for asthma are highest in West Long Beach and lowest in East Long Beach (Map 11).
Infectious and Communicable Diseases

Infectious diseases include vaccine preventable diseases, foodborne illness and sexually transmitted infections. Definitions of the infectious and communicable diseases in this report can be found in Appendix 2, Glossary of Terms.

Pertussis

The number of vaccine preventable illnesses are increasing in California and a similar trend appears in Long Beach as well. In 2010, Long Beach reported 69 cases of pertussis. This number of cases is almost five times higher than in 2009 (12 cases). The pertussis caseload dropped again in 2011 (16 cases), but not as low as 2007-2008 levels (Figure 35). The majority of cases of pertussis in 2009-2010 were among Whites, followed by Hispanics or Latino and Asians (Figure 36). Cases were primarily among young children 0-14 years of age, with incidence rates per 100,000 population of 70.8, 49.3 and 53.6 for ages 0-4, 5-9 and 10-14 respectively. Case rates for ages 15 and above ranged from 0 to 9.5 per 100,000 population, with the 15-19 age group having a rate of 8.4 per 100,000 and the 45-55 age group having a rate of 9.5 per 100,000. All other age groups had a rate under 3.0 per 100,000. Public health officials believe the pertussis outbreaks in 2010 may have been due to a change in the vaccinations formula that may have made the injection safer, but possibly not as effective. California has been aggressive in its efforts to control pertussis outbreaks through public education and the passage of a law that requires all middle and high school students to have a Tdap booster shot.

Salmonellosis

Another preventable condition is salmonellosis. There were 48 cases of salmonellosis in 2010 in Long Beach. The highest rate of salmonellosis were among Hispanics or Latinos followed by Asians (Figure 37). Children 0-4 were the age group with the highest rate of salmonellosis with a rate of 37.0 per 100,000. Those over the age of 65 had the second highest rate at 14.0 per 100,000 (Figure 38).
Campylobacteriosis

Incidence rates of campylobacteriosis are on the rise in Long Beach, Los Angeles County and the State of California (Figure 39). Since 2006 the Long Beach incidence rate has increased steadily from 7.3 per 100,000 population in 2006 to 10.1 per 100,000 in 2009 with a small decline in 2010 to 9.7 per 100,000. Because campylobacteriosis is a food-borne infection, the incidence rate is distributed among age groups, however the highest incidence rate is found in children 0-4 years (24.6 per 100,000 population). Other spikes in incidence rate are within the 10-14 age group (9.5 per 100,000) and 25-29 age group (12.9 per 100,000) followed by an overall rise in incidence with age groups 40 and above (10.8-17.7 per 100,000) (Figure 40).

Tuberculosis

Tuberculosis cases are in decline in Long Beach as well as Los Angeles County and the State of California (Figure 41). All three jurisdictions, however, still have incidence rates far above the national incidence rate. In 2009 the national incidence rate was 3.8 cases per 100,000 population with California having a rate of 6.4, Los Angeles County a rate of 7.2 and Long Beach with a rate of 8.9. Asians and Pacific Islanders represent the largest number of cases in Long Beach (50%) followed by Hispanics or Latinos with another 33 percent (Figure 42). Individuals born outside the United States accounted for nearly 75 percent of the cases of tuberculosis in Long Beach between 2006 and 2009 (Figure 43).
Vector-borne Diseases

In 2009, the number of typhus cases jumped dramatically in Long Beach. Typhus is endemic to Southern California. In 2009, there were 13 cases of typhus documented in Long Beach. In both 2010 and 2011, there were 9 cases of typhus (Figure 44). Typhus is primarily transmitted by fleabites from fleas living on opossums, rodents, and feral cats.

Sexually Transmitted Infections

Reportable sexually transmitted infections (STIs) in Long Beach include gonorrhea, chlamydia, syphilis, and HIV/AIDS. Long Beach incidence rates of these infections are high and are generally higher than both Los Angeles County and California.

Gonorrhea

In 2011, there were 438 cases of gonorrhea reported in Long Beach. Incidence rates in Long Beach have been higher than both California and Los Angeles County until 2009 when rates dropped below that of Los Angeles County. Since 2009, incidence rates remain below Los Angeles County, but are still well above the State rates (Figure 45).

“STDs are a huge problem I see in our clients and community, especially among the women. They don’t seek medical care until their symptoms get worse.”

—Long Beach Community Leader, Key Informant Interview, LBDHHS, 2012
Incidence rates were highest among Blacks or African Americans (Figure 46). Among individuals age 15-24, rates were higher among women. However, in those over the age of 25, rates were higher among men (Figure 47) (CDPH, 2010, STD Control Branch).

Chlamydia

Chlamydia is another sexually transmitted infection prevalent in Long Beach. Although incidence rates in Long Beach are in decline, they still remain above those of Los Angeles County and the State (Figure 48). In 2010, there were more than 2,400 cases of chlamydia reported in Long Beach. Rates are highest among both genders of Blacks or African Americans (Figure 49). However, rates of chlamydia are consistently higher among women than men. Teens and young adults ages 15-29 have a significantly higher incidence rate, with rates over twice to more than five and one-half that of other age groups (Figure 50) (CDPH, 2010, STD Control Branch).
Syphilis

Another STI tracked in Long Beach is syphilis. Primary and secondary (P & S) syphilis was on the rise since 2001, but has seen a sharp decline since 2008. Incidence rates in Long Beach are still above California and Los Angeles County rates (Figure 51).

The highest incidence rate for males is in the age group 24-29 (44.2 per 100,000) followed closely by the 35-44 age group (38.5 per 100,000) (Figure 52). The syphilis incidence rate is highest in the Black or African American and White male populations (Figure 53) (CDPH, 2010 & 2012, STD Control Branch).
HIV/AIDS

Over the years, surveillance of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has evolved to adapt to changes in the HIV/AIDS epidemic and advances in diagnosis and treatment. In the beginning of the epidemic, surveillance systems across the country only reported AIDS cases. California surveillance later expanded due to increased understanding of the etiology and transmission of AIDS to include HIV reporting (CDPH, 2010). In Long Beach, AIDS have been tracked since 1983 with HIV tracking starting in 2006. As of March 2012, the cumulative number of total cases of HIV in Long Beach is 1,449 with a mortality rate of 4 percent (Table 7). As of March 2012, there have been a total of 6,158 cases of AIDS in Long Beach, with a 50 percent mortality rate (Table 8) (LBDHHS, 2010). In 2010, Long Beach ranks in the top 8 for the number of cumulative HIV cases and in the top 6 for the number of cumulative AIDS cases in California. In California as well as in Long Beach, most cases of HIV (86% in California, 87% in Long Beach) and AIDS (90% in California, 92% in Long Beach) occur among males (CDPH, 2010).

Table 7. LBDHHS, Epidemiology Program, 2012

<table>
<thead>
<tr>
<th></th>
<th>HIV Cumulative Cases, Long Beach, 2006 – 2012 (March)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Cases</td>
</tr>
<tr>
<td>Long Beach Total</td>
<td>1,449</td>
</tr>
<tr>
<td>Adult Cases</td>
<td>1,439</td>
</tr>
<tr>
<td>Pediatric Cases</td>
<td>10</td>
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</table>

Table 8. LBDHHS, Epidemiology Program, 2012

<table>
<thead>
<tr>
<th></th>
<th>AIDS Cumulative Cases, Long Beach, 1983 – 2012 (March)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Cases</td>
</tr>
<tr>
<td>Long Beach Total</td>
<td>6,158</td>
</tr>
<tr>
<td>Adult Cases</td>
<td>6,147</td>
</tr>
<tr>
<td>Pediatric Cases</td>
<td>11</td>
</tr>
</tbody>
</table>

The racial/ethnic distribution of HIV cases is similar to the AIDS case distribution charted in Figure 54. Table 9 shows exposure categories are similar for both HIV and AIDS. The majority of HIV/AIDS exposure is due to male-to-male sexual contact.

Table 9. LBDHHS, Epidemiology Program, 2012

<table>
<thead>
<tr>
<th></th>
<th>Cumulative HIV and AIDS Exposure Category Long Beach as of March 31, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Exposure</td>
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</tr>
<tr>
<td>Male-to-Male Contact</td>
<td>1,059</td>
</tr>
<tr>
<td>Intravenous Drug Use</td>
<td>77</td>
</tr>
<tr>
<td>Male-to-Male Contact and Intravenous Drug Use</td>
<td>77</td>
</tr>
<tr>
<td>Heterosexual Contact</td>
<td>165</td>
</tr>
<tr>
<td>Recipient of Blood/Blood Products Transfusion</td>
<td>0</td>
</tr>
<tr>
<td>Mother at Risk (Perinatal Exposure)</td>
<td>10</td>
</tr>
<tr>
<td>Risk Not Reported/Other</td>
<td>61</td>
</tr>
</tbody>
</table>
Maternal, Child, Adolescent and Infant Health

Maternal, child, adolescent and infant health is influenced by many factors. Table 10 lists preconception health conditions that impact the health of a pregnant woman and her fetus. This data is available from the 2010 Surveillance Report, A Survey of the Health of Mothers and Babies in Los Angeles County, for Los Angeles County and the South Bay SPA (SPA 8). The South Bay SPA is a region within Southern Los Angeles County that includes Long Beach and a number other cities. The South Bay SPA data is not exclusive to Long Beach, but can be used as representative for these indicators as well as for a comparison.

Preconception health conditions and experiences are indicators of proactive health management. Table 10 represents that nearly one-half of all pregnant women are at risk for at least one preconception condition that predisposes them to complications during or after pregnancy. These factors also influence the health of the baby. Another preconception experience is the knowledge of folic acid. Folic acid has been shown to reduce birth defects. The CDC states that, if a woman has enough folic acid in her body before and during pregnancy, it can help prevent major birth defects of the baby’s brain and spine (CDC, 2012). Nearly one-half (49%) to two-thirds (65.8%) were not aware or taking advantage of this opportunity to influence a healthy baby.

The conditions, noted above that occur preconception, are likely to remain during pregnancy. These conditions along with other behavior and access to care factors such as substance use or abuse, inadequate prenatal care, maternal age and injury including domestic violence, impact both fetal and infant health. Conditions postpartum such as preterm birth and low birth weight infants has not substantially changed over the ten year period from 1998 to 2008 (Figure 55). The following charts show the general trends for Long Beach, but also the trends by race/ethnicity.

### Infant Mortality

Infant mortality in Long Beach has decreased overall, but is more variable than the rate for California, which decreased from 5.7 per 1,000 live births in 1998 to 5.1 per 1,000 live births in 2008 (Figure 56) (UCSF, Family Health Outcomes Project, FHOP, 2008).
Preterm Birth

Preterm (less than 37 completed weeks) birth trends in both California and Long Beach show no distinct trend from year to year since 1998 (Figure 57). Preterm birth risk factors include prior preterm birth, substance use/abuse, short inter-pregnancy interval, multiple low pregnancy weight gain, and stress during pregnancy (UCSF, FHOP, 2008).

Preterm birth by race/ethnicity similarly shows no trend from year to year, however there is a higher incidence rate of preterm birth in the Black or African American community and a slightly higher rate in the Asian community compared to Hispanics or Latinos and Whites (Figure 58) (UCSF, FHOP, 2008).

Low and Very Low Birth Weight

Low birth weight (less than 2500 grams) rates in both California and Long Beach show a slight upward trend from 1998 to 2008, however very low birth weight (less than 1500 grams) rates in both California and Long Beach show no distinct trend from year to year since 1998 (Figure 59). Low and very low birth weight rates are higher in Long Beach than California in total. Low and very low birth weight risk factors include young or old maternal age; low income; low maternal education level; race/ethnicity; high parity; short inter-pregnancy interval; multiple gestation; unintended pregnancy; history of low birth weight; poor reproductive history; intrauterine growth retardation; preterm birth; prior preterm birth; late entry into prenatal care; lack of comprehensive prenatal care; low pre-pregnancy weight; tobacco use during pregnancy; alcohol/substance abuse during pregnancy; low pregnancy weight gain; placenta previa; premature rupture of the membrane; stress during pregnancy, strenuous exertion during pregnancy (UCSF, FHOP, 2008).
In addition to the health conditions and experience noted above, a number of other risk factors contribute to preterm or low birth rate babies. Table 12 shows the percentage of mothers that engaged in the listed behaviors or were subject to the stated behavior of others during pregnancy.

Breastfeeding

The American Academy of Pediatrics recommends that babies be fed nothing but breast milk for about the first 6 months and continue breastfeeding for at least 1 year. Babies who are breastfed have lower risk of obesity, diabetes, respiratory and ear infections, and sudden infant death syndrome, and tend to require fewer doctor visits, hospitalizations, and prescriptions (CDC, 2011). In addition, mothers who breastfeed have lower risks of breast and ovarian cancers. Breastfeeding has a specific relationship to childhood obesity where the baby's risk of becoming an overweight child goes down with each month of breastfeeding (CDC, 2011).

In the US, breastfeeding is increasing. Mothers who started to breastfeed increased from 74.6 percent in 2008 to 76.9 percent in 2009. In the state of California, 87.6 percent of mothers started breastfeeding in 2009. At 6 months, 56.1 percent of mothers were still breastfeeding, though only 41.4 percent were doing so exclusively (DHHS, 2012). In Long Beach, based on data from newborn screening forms at local hospitals (Long Beach Memorial Medical Center, Pacific Hospital of Long Beach and St. Mary’s Medical Center), the percentages of infants who were breastfed range

Across racial/ethnic groups low birth weight rates have increased slightly. There is a disparity within racial/ethnic groups with Black or African American infants being born with low birth weight rates of as much as twice that of the other groups (Figure 60). There is also a sharp increase with Asian infants being born with low birth weight rates since 2006 (UCSF, FHOP, 2008).

Table 11 shows the rates of very low birth weight rates for California, Long Beach and the racial/ethnic groups within Long Beach. Rates between 1998 and 2008 have declined for all groups except Asians. Similar to low birth weight rates, there is a disparity within racial/ethnic groups with Black or African American infants being born with very low birth weight rates of as much as twice that of the other groups (UCSF, FHOP, 2008).

Table 11. UCSF, FHOP, 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th>Long Beach</th>
<th>Asian</th>
<th>Black or African American</th>
<th>Hispanic or Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1.1</td>
<td>2.2</td>
<td>0.9</td>
<td>2.3</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2000</td>
<td>1.1</td>
<td>1.0</td>
<td>1.2</td>
<td>2.1</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>2002</td>
<td>1.2</td>
<td>1.9</td>
<td>1.3</td>
<td>3.2</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>2004</td>
<td>1.2</td>
<td>1.9</td>
<td>1.3</td>
<td>3.2</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>2006</td>
<td>1.2</td>
<td>1.9</td>
<td>1.3</td>
<td>3.2</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>2008</td>
<td>1.2</td>
<td>1.9</td>
<td>1.3</td>
<td>3.2</td>
<td>1.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Table 12. LADPH, Maternal, Child and Adolescent Health Program, 2010

<table>
<thead>
<tr>
<th>Risk Behaviors or Social Situations During Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles County, South Bay SPA, 2010</td>
</tr>
<tr>
<td>Behavior/Situation</td>
</tr>
<tr>
<td>Smoking</td>
</tr>
<tr>
<td>Exposure to secondhand smoke</td>
</tr>
<tr>
<td>Using illegal drugs or drugs not prescribed by a doctor</td>
</tr>
<tr>
<td>Drinking alcohol</td>
</tr>
<tr>
<td>Did not exercise</td>
</tr>
<tr>
<td>Experienced domestic violence/intimate partner abuse</td>
</tr>
<tr>
<td>Argued more than usual with husband/partner</td>
</tr>
<tr>
<td>Husband/partner lost his/her job</td>
</tr>
<tr>
<td>Had a lot of bills that could not be paid</td>
</tr>
<tr>
<td>Reported experiencing discrimination</td>
</tr>
<tr>
<td>Self reported depression</td>
</tr>
</tbody>
</table>

(1) Estimate Unstable

In addition to the health conditions and experience noted above, a number of other risk factors contribute to preterm or low birth rate babies. Table 12 shows the percentage of mothers that engaged in the listed behaviors or were subject to the stated behavior of others during pregnancy.

Breastfeeding

The American Academy of Pediatrics recommends that babies be fed nothing but breast milk for about the first 6 months and continue breastfeeding for at least 1 year. Babies who are breastfed have lower risk of obesity, diabetes, respiratory and ear infections, and sudden infant death syndrome, and tend to require fewer doctor visits, hospitalizations, and prescriptions (CDC, 2011). In addition, mothers who breastfeed have lower risks of breast and ovarian cancers. Breastfeeding has a specific relationship to childhood obesity where the baby’s risk of becoming an overweight child goes down with each month of breastfeeding (CDC, 2011).

In the US, breastfeeding is increasing. Mothers who started to breastfeed increased from 74.6 percent in 2008 to 76.9 percent in 2009. In the state of California, 87.6 percent of mothers started breastfeeding in 2009. At 6 months, 56.1 percent of mothers were still breastfeeding, though only 41.4 percent were doing so exclusively (DHHS, 2012). In Long Beach, based on data from newborn screening forms at local hospitals (Long Beach Memorial Medical Center, Pacific Hospital of Long Beach and St. Mary’s Medical Center), the percentages of infants who were breastfed range
from 89.5 percent at Long Beach Memorial to 75.7 percent at
Pacific Hospital, with only 14.3 to 53.3 percent of infants being
exclusively breast-fed (CDPH, 2012). Similar trends were reported
by all racial/ethnic groups of 2008 WIC participants showing 80.5 to
89.9 percent of infants were breast fed at birth. Of this same group
only 32.2 to 59.5 percent were still breastfeeding at 6 months and
17 to 39.1 percent were breastfeeding at 12 months (WIC, 2008).

Disability
The American Community Survey provides estimates regarding
residents of Long Beach that self-report living with a disability.
Disability categories reported include: ambulatory difficulty; hearing
difficulty; vision difficulty; cognitive difficulty; self-care difficulty; and
independent living difficulty.

Disability and Race/Ethnicity
Across racial/ethnic groups there are two outliers in those that
reported a disability. Native Hawaiian or Pacific Islanders, although
a small number of individuals in Long Beach, had a disability
percentage significantly higher at 18.5 percent than Asians
(11.0%), Blacks or African Americans (13.3%) or Whites (12.4%).
Hispanics or Latinos on the other hand, had the lowest reported
percentage at 6.0 percent. The “Other” category represents all
other races and those reporting two or more races (Figure 61).

Disability and Gender
In 2010, the average percent of the population with a disability in Long Beach was
9.7 percent. Over nine percent (9.1%) of males reported disabilities while females
reporting a slightly higher percentage at 10.3 percent. Specific disability information
was available for those that reported vision, cognitive, ambulatory, self-care, and
independent living difficulty.

At older ages, women were more likely to report living with a disability than men. This
trend was true for all age groups 35 and older. On the contrary, between the genders
in children 5 to 17 years of age and adults 18 to 34 years of age, males reported a
higher percentage of disability than females (Figure 62) (ACS, 2010, Table B1810).

Disability and Age
Among the civilian population not living in an institution in 2010, 9.7 percent or 44,390
individuals reported at least one kind of disability. The percentage of individuals
reporting a disability increased with age. For children and adolescents 5-17 years
old, a total of 3,099 individuals or 3.8 percent reported a disability. This percentage
rose to 39.8 percent or 15,441 individuals for those 65 and over (ACS, 2010, Table
S1810).

The type of disability most commonly reported varied by age as well (Figure 63). For
the 5-17 age range, cognitive disability was the most frequently reported disability
(2.7%). In the 18-64 age range, ambulatory difficulty (4.1%) joined cognitive difficulty
(4.2%) as the most commonly reported disability. Independent living difficulty (3.1%)
was also frequently reported in this age range. In the oldest population, 65 years and
older, ambulatory difficulty (26.7%) and independent living difficulty (20.2%) were the
most commonly reported (ACS, 2010, Table S1810).

Long Beach
Supportive Services
Only about 7% of
individuals in Long Beach
with disabilities seek
supportive services. Of those that access
supportive services from
the Harbor Regional
Center, a private, not-for
profit corporation in Long
Beach contracting with
the State of California
for the provision of
services to persons with
developmental disabilities
pursuant to the Lanterman
Act, 10% are Asian,
21% are Black or African
American, 38% are
Hispanic or Latino, 25% are
White and 6% are Other.
Less than one percent
are Pacific Islanders
despite having the highest
disability percentage
in Long Beach (Harbor
Regional Center, 2012).

Disability by Race/Ethnicity
Long Beach, 2010,

Of Long Beach
residents that
seek supportive
services, 50%
are either under
18 or over 65
years of age
(Harbor Regional
Center, 2012).
A majority of individuals reporting a disability also reported having health insurance coverage (Figure 65). However, 189 (5.8%) individuals under 18 year of age reported no coverage. Most concerning is the percentage of individuals in the 18 to 64 age group with a disability that do not have health insurance coverage. Almost 28 percent or more than 7,000 individuals in the 18 to 64 age group are without health insurance coverage. Public health insurance coverage is more common than private in all age groups; however, it is significantly higher in the older than 65 population eligible for Medicare (ACS, 2010, Table B1835).

**Injury and Violence**

Overall crime statistics for Long Beach are described in Chapter 3, Social Determinants of Health. The impacts of crime are reported here in the form of hospitalization rates. Injury hospitalization rates are reported here by intentional injury and unintentional injury hospitalization rates for ages 0-24 year olds, injury hospitalization 0-14 years and assault injury hospitalization 15-24 years.

Unintentional injury risk factors include lack of use or proper use of protective safety equipment, engaging in high risk activities (sports, recreation, etc.), type of employment or industry, overweight, lack of physical activity, and substance abuse. This rate is only slightly higher in Long Beach (25.8 per 100,000) than for California (25.1 per 100,000) and is much higher than the intentional injury rate for 0-24 year olds (11.8 per 100,000 in 2007) (Figure 66). Intentional injury risk factors include race/ethnicity, geographic location, mental health problems, social or behavioral problems, history of incident with law, aggressive behavior, attention deficits,
Asians have the lowest rate year over year (4.1-10.2 per 100,000). Blacks or African Americans (14.8-25.4 per 100,000) and Whites (11.0-21.2 per 100,000) have the highest rates, with a spike in 2005 followed by a small decline (UCSF, FHOP, 2007).

As the intentional injury hospitalization rate varies by race/ethnicity, as does the unintentional injury hospitalization rate, but in different ways (Figure 68). Whites are more prone to unintentional injury with the highest hospitalization rate (34.3-48.6 per 100,000), while Black or African Americans (22.6-38.9 per 100,000) and Hispanics or Latinos (25.8-34.3 per 100,000) have similar rates and Asians again have the lowest rate (11.7-21.9 per 100,000) (UCSF, FHOP, 2007).

While injury rates for Long Beach do not vary significantly from the California rate, assault injury hospitalization rates are higher in Long Beach than the rates for California (Figure 69). Assault risk factors include a history of violence, social or behavioral problems, history of incidents with law, aggressive behavior, exposure to violence, lack of parental involvement/social ties, involvement in gangs, involvement with peers associated with violence, lack of community assets, substance abuse, and mental health. As with the other injury hospitalization rates, assault injury hospitalization rates vary by race/ethnicity (Figure 70).
However for assault injury rate, the variation is more significant with Blacks or African Americans having assault injury hospitalizations rates (24.4-47.2 per 100,000) for many years twice that of the other race/ethnic groups. Hispanics or Latinos have rates of 13.1-20.8 per 100,000 population and Whites have rates of 7.8-15.4 per 100,000 population. In general, assault hospitalization rates follow the same pattern, regardless of race/ethnicity, with a decline from 1997 to 2000, a rise to 2005 and another decline to 2007 (UCSF, FHOP, 2007).

As the assault hospitalization rates for Long Beach are higher than that of the California rate, so too is the homicide rate by firearm. Over the three-year period, 2006-2008, Long Beach zip codes in the North (90805), West Central (90806, 90807, 90810) and Southwest (90802, 90804, 90813, 90814) have homicide rates by firearm higher than the 2006, 2007 and 2008 Los Angeles County rates (8.3, 6.7, 6.4 per 100,000 population) or California rates (5.1, 4.5, 4.2 per 100,000 population) for two of the three years (Figure 71) (HealthCity.org, 2008).

**Mental Health**

An individual’s mental health can impact many other social and behavioral aspects of life. Within the South Bay SPA, 13.5 percent of residents reported needing help for emotional/mental health problems or problems with the use of alcohol/drug. In addition, 1.8 to 5 percent indicated they likely had serious psychological distress and 7.4 to 15.2 percent reported thoughts of committing suicide. Figure 72 shows these indicators of mental health by race/ethnicity (CHIS, 2009).

Other indicators of the mental health of the community are the rates of those hospitalized for mental illness. Hospitalization for mental illness includes diagnosis for patients with any schizophrenic, affective psychosis, neurotic disorder, or paranoid and senile state. We also explore alcohol and drug induced mental disease rates.
The California mental illness hospitalization rate is 551.7 per 100,000 for 2010. Mental illness hospitalization rates for Southwest Long Beach zip codes, 90802, 90804 and 90813, are 2 to 3 times higher than the State rate and 50-100 percent higher than other zip codes in Long Beach with rates of 1,598.6, 1,317.3, and 1,422.5 per 100,000 population, respectively (Figure 73). These rates are followed by West Central, 90807, with a rate of 889.4 per 100,000 population and North, 90805, with a rate of 840.4 per 100,000 population, which also exceed the State rate significantly (HealthyCity.org, OSHPD, 2010).

The alcohol-drug use or alcohol-drug induced mental disease rate for California is 109.1 per 100,000 population. All Long Beach zip codes except 90805, 90807 and 90810 have rates higher than the State rate (Figure 74). The greatest outlier is 90802 (254.1 per 100,000 population) with a alcohol-drug induced mental disease rate that...
Beach zip codes. The percentage of residents ever diagnosed with asthma in 2009 ranges from 13.1 percent in 90813 to 15.1 percent in 90815. With one exception (90813 and California percentage), all zip codes have asthma percentages that are higher than those for Los Angeles County (12.5%), California (13.7%) and the United States (8%). Long Beach also has incidence rates of sexually transmitted infections (such as gonorrhea, chlamydia syphilis, and HIV/AIDS) that are generally higher than both Los Angeles County rates and California rates.

Among the geographic health status indicators, there is an overwhelming disparity in the North (90805), West Central (90806 and 90810) and Southwest (90802, 90804 and 90813) Long Beach communities. Life expectancy in 2010 for these zip codes, 75.6-77.0 years, is lower by as much as 5 years, when compared to Southeast and East Long Beach zip codes which have life expectancies of 81.5-82.8 years. Hospitalization rates in these communities are at or above the Long Beach total of 1,437 per 10,000 population with rates of 1,367 per 10,000 for 90810 and rates of 1,464-1,907 per 10,000 population for the other North, West Central and Southwest zip codes. Within these zip codes, 21.7-24.3 percent of the population have been diagnosed with diabetes and has diabetes hospitalization rates higher than the Long Beach total rate of 26.8 per 10,000 at 27.9-54.7 per 10,000. Asthma hospitalization rates are high in these communities as well with rates of 14.1-28.3 per 10,000 population compared to 5.5-9.6 for other zip codes within Long Beach.

In addition, over the three-year period, 2006-2008, Long Beach zip codes in the North (90805), West Central (90806, 90807, 90810) and Southwest (90802, 90804, 90813, 90814) have homicide rates by firearm higher than the 2006, 2007 and 2008 Los Angeles County rates (8.3, 6.7, 6.4 per 100,000 population) or California rates (5.1, 4.5, 4.2 per 100,000 population) for at least two of the three years.

With respect to the other Long Beach zip codes, Southeast (90803) and East (90808 and 90815) have seen a rise in diabetes hospitalizations rates since 2007 while all others have seen a decline. East zip codes, 90808 and 90815 also have the second and fourth highest alcohol-drug induced mental illness hospitalization rate at 167.4 and 158.6 respectively per 100,000 population as compared to 254.1 per 100,000 for 90802 and 46.3-159.6 per 100,000 for all other zip codes.

Summary
In summary, more than half of the population of the South Bay SPA, which includes Long Beach, feels good about their health status. However, with a lower life expectancy in Long Beach than the surrounding communities and health status indicators that vary across geography, racial/ethnic groups, gender and age, health disparities persist throughout the Long Beach community.

Throughout Long Beach, heart disease is the leading cause of death (27% of all 2011 deaths) and is a leading (non-pregnancy or childbirth related) cause of hospitalization (2007). Cancer is the second leading cause of death (24%) in Long Beach with higher mortality rates (141.5 per 100,000 for females and 184.5 per 100,000 for males) than Los Angeles County (130.4 per 100,000 for females and 175.3 per 100,000 for males). In addition, asthma rates are significant in all Long Beach zip codes. The percentage of residents ever diagnosed with asthma in 2009 ranges from 13.1 percent in 90813 to 15.1 percent in 90815. With one exception (90813 and California percentage), all zip codes have asthma percentages that are higher than those for Los Angeles County (12.5%), California (13.7%) and the United States (8%). Long Beach also has incidence rates of sexually transmitted infections (such as gonorrhea, chlamydia syphilis, and HIV/AIDS) that are generally higher than both Los Angeles County rates and California rates.
Racial/ethnic disparities exist as well. Asians have a cerebrovascular disease rate (11.8%) that is twice as high as the other races/ethnicities. Asians and Pacific Islanders represent the largest number of tuberculosis cases in Long Beach (50%). Asians also have seen a sharp increase in the rates of infants being born with low birth weight since 2006.

The Black or African American community in Long Beach has the highest rate of heart disease hospitalization (2007) with 303 per 10,000 population, nearly twice to two and one-half times that of the other races/ethnicities (125-168 per 10,000). Black or African Americans also have the highest diabetes hospitalization rate (64.9 per 10,000) nearly two to four times that of all other groups (17.3-35.4 per 10,000). Blacks or African Americans have the highest diabetes hospitalization rate (39.2 per 10,000) that is nearly three to four times that of the other races/ethnicities, and over two and one-half times that of Long Beach as a whole (15.0 per 10,000). Cancer death rates for this group in 2007 were 226.6 per 100,000 versus 132.8-158.7 per 100,000 for all other races/ethnicities. They also have assault injury hospitalizations rates (24.6 per 100,000) from 1997-2007 that are twice that of the other race/ethnic groups. This community also has the highest incidence rate of campylobacteriosis with a rate of 24.6 per 100,000 population versus 3.3-17.7 for all other age groups.

Hispanics or Latinos have a diabetes hospitalization rate of 35.4 per 10,000, 35-50 percent higher than Whites and Asians. They have the highest rate of salmonellosis with a rate of 11.9 per 100,000 versus 3.3-7.9 per 100,000 for all other groups and the second highest incidence rate of pertussis 13.3 per 100,000 versus 1.7 and 7.9 per 100,000 for Asians and Blacks or African Americans. The Hispanic or Latino community also has the second highest percentage (33%) of tuberculosis cases in Long Beach.

Whites have a rate of Alzheimer’s (6.6%) that is two times higher than all other racial/ethnic categories within Long Beach. They have the highest incidence rate of pertussis 19.9 per 100,000 versus 1.7-13.3 for other races. Whites also represent a majority of HIV and AIDS (55%) cases. Whites are more prone to unintentional injury with the highest hospitalization rate, 37.5 per 100,000 versus 13.5-26 per 100,000 for all other racial/ethnic categories. While children, adolescents and young adults age 5-24, also have a mental health hospital admissions rate (125.8 per 100,000) that is one-quarter to four times greater than that of other racial/ethnic groups.

Within Long Beach age groups, adults over 45 years of age have the highest percentage of diabetes hospitalization (74.5%) and asthma hospitalization (53.3%). The percentage of individuals reporting a disability increases with age to 39.8 percent of those 65 and over reporting a disability versus the Long Beach overall percentage of 9.7 percent. The highest primary and secondary (P & S) syphilis incidence rate is in the age group 24-29 (44.2 per 100,000) followed closely by the 35-44 age group (38.5 per 100,000). Most cases of HIV and AIDS are in adults with a high percentage of HIV (87%) and AIDS (92%) cases occurring among males.

Children 0-14 years of age have the second highest asthma hospitalization percentage at 28.4 percent. Children 0-4 were the age group with the highest rate of salmonellosis with a rate of 37.0 per 100,000 versus 3-14 per 100,000 for all other age groups. The highest incidence rate of campylobacteriosis is found in children 0-4 years with 24.6 per 100,000 population versus 3.3-17.7 for all other age groups.

Teens and young adults, 15-29, have the highest rates of gonorrhea and chlamydia. For gonorrhea among individuals age 15-24, rates were higher among women. However, in those over the age of 25, rates were higher among men. Chlamydia rates are consistently higher among women than men with rates over twice to more than five and one-half times that of other age groups.

Conditions and behaviors that contribute to the health status in Long Beach and the trends discovered above will be further explored in subsequent chapters.
Chapter 2. Behavioral Health Assessment

According to the Centers for Disease Control and Prevention (CDC, 2012), four health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness and death related to chronic diseases. Seven out of 10 deaths among Americans each year are from chronic diseases. Heart disease, cancer, and stroke account for more than 50 percent of all deaths each year. This chapter presents information on the health behaviors of the residents of Long Beach in the areas known to contribute to health status.

Substance Use and Abuse

Alcohol

Health guidance recommends that adults drink alcohol only in moderation, which means that men should have no more than two drinks per day and women no more than one drink per day (USDA and USDHHS, 2005). Of particular concern is binge drinking (a large number of drinks on one occasion) and heavy drinking (consuming a large number of drinks over a longer period of time, such as a month).

The 2007 Los Angeles County Health Survey (LACHS) provides information on binge drinking and heavy drinking for Long Beach residents. Binge drinking for females is four or more drinks and males five or more drinks on one occasion at least one time in the past month. Heavy drinking for males is consuming more than 60 drinks and for females more than 30 drinks in the previous month. Among Long Beach residents, 22.1 percent of adults reported binge drinking in the previous month. This percentage was higher than adults in the South Bay (15.9%) and in Los Angeles County (16.2%) (Figure 76). The percentage of adults who reported heavy drinking in the past month was also higher in Long Beach (4.8%) compared to adults in the South Bay (3.5%) and adults in Los Angeles County (3.3%) (LACHS, 2007).

Of adults in the South Bay area who reported binge drinking in the past year, both Whites (33.5%) and Hispanics or Latinos (35.5%) reported higher percentages of binge drinking compared to Asians (11.5%) or Blacks or African Americans (24.7%) (Figure 77) (CHIS, 2009).
Smoking has long been recognized as one of the main contributors of preventable illness and disease. In 2010, 15.3 percent of Long Beach adults (18 years and older) were smokers (Figure 78). This is under the 2010 national average of 19 percent, but above the 2010 Los Angeles County rate of 14.3 percent and the California rate of 11.9 percent (LADPH, 2010). Of those within the South Bay in 2009 who reported being a smoker, Asians had the highest percentage of smokers (15.3%) and Hispanics or Latinos had the lowest (8.3%) (Figure 79) (CHIS, 2009).

Information about youth drinking is available for Long Beach Unified School District (LBUSD) students in the 7th, 9th and 11th grade, as well as non-traditional students. Non-traditional students are those enrolled in community day schools or continuation education. According to EdSource, nearly 10 percent of public school students in California are enrolled in these programs. The percentages of males and females that reported no drinking was similar: 85.7 percent of 7th grade females versus 84.9 percent of 7th grade males, 69.9 percent of 9th grade females versus 72.2 percent of 9th grade males and 66.0 percent of 11th grade females versus 63.9 percent of 11th grade males (Tables 13 and 14). Hispanic or Latino youths reported drinking with greater frequency than other groups (Table 15) (CHKS, 2008-2010).

<table>
<thead>
<tr>
<th>Frequency of Alcohol Use by Males in the Previous Month by Grade</th>
<th>LBUSD, 2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 days (no drinking)</td>
<td>1-2 days</td>
</tr>
<tr>
<td>7th Grade</td>
<td>84.9%</td>
</tr>
<tr>
<td>9th Grade</td>
<td>72.2%</td>
</tr>
<tr>
<td>11th Grade</td>
<td>63.9%</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency of Alcohol Use in the Previous Month by Race/Ethnicity</th>
<th>LBUSD, 2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 days (no drinking)</td>
<td>1-2 days</td>
</tr>
<tr>
<td>Asian</td>
<td>86.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>81.6%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>67.2%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>75.9%</td>
</tr>
<tr>
<td>White</td>
<td>73.2%</td>
</tr>
<tr>
<td>Multiethnic</td>
<td>75.4%</td>
</tr>
<tr>
<td>Other</td>
<td>80.2%</td>
</tr>
</tbody>
</table>

Smoking

Smoking has long been recognized as one of the main contributors of preventable illness and disease. In 2010, 15.3 percent of Long Beach adults (18 years and older) were smokers (Figure 78). This is under the 2010 national average of 19 percent, but above the 2010 Los Angeles County rate of 14.3 percent and the California rate of 11.9 percent (LADPH, 2010). Of those within the South Bay in 2009 who reported being a smoker, Asians had the highest percentage of smokers (15.3%) and Hispanics or Latinos had the lowest (8.3%) (Figure 79) (CHIS, 2009).
Youth smoking data is also available for LBUSD students in the 7th, 9th and 11th grades. For all races, the percentage of students that reported having smoked 7 or more times was under 10 percent (Table 16). White (8.1%), Pacific Islander (9.5%), and Other (8.0%) students were more likely to report having smoked 7 or more times compared to other races/ethnicities (Figure 80)(CHKS, 2008-2010).

Drug Use
A little over 13 percent (13.2%) of adults in the South Bay area reported having tried marijuana, cocaine, sniffed glue or used other illegal drugs in their lifetime (Figure 81) (CHIS, 2009).

LBUSD students in 5th, 7th, 9th and 11th grades were asked whether they had ever (1 or more times) used marijuana or inhalants (to get high) in the California Healthy Kids Survey for the 2008-2009 and 2010-2011 school years (Figure 82). The percentage of 5th grade students that reported ever having used marijuana was 2 percent for both years. The percentage of 7th grade and 9th grade students...
also remained fairly consistent; 13 percent in 2008-2009 versus 14 percent in 2010-2011 for 7th graders and 33 percent in 2008-2009 versus 36 percent in 2010-2011 for 9th graders. However, the percentage of 11th grade students who reported ever using marijuana increased from 37 percent in 2008-2009 to 43 percent in 2010-2011. The use of inhalants (to get high) was fairly consistent between 2008-2009 and 2010-2011, but the trend in inhalant usage diminished with age, compared with the increase in marijuana usage with age. Four percent of 5th grade students reported using inhalants in 2010-2011 (5% in 2008-2009), increasing to 16 percent of 7th grade students in 2010-2011 (15% in 2008-2009), holding stable at 16 percent of 9th grade students in 2010-2011 (17% in 2008-2009) and then decreasing to 14 percent of 11th grade students in 2010-2011 (13% in 2008-2009) (CHKS, 2008-2009 and 2010-2011).

Of the LBUSD students surveyed, only those in the 9th and 11th grade were asked additional questions about specific other drug use (other than marijuana and inhalants). The 5th grade students were only asked about marijuana and inhalants.

A larger percentage of students in the 9th and 11th grade reported using ecstasy than all other specifically named drugs (Figure 83). Eleven percent of 9th graders in 2008-2009 and 2010-2011, 13 percent of 11th graders in 2008-2009 and 15 percent of 11th graders in 2010-2011 reported having tried ecstasy in their lifetime (1 or more times). The category “other drug or pill” saw an increase in percentage of both 9th and 11th grade students between the 2008-2009 and 2010-2011 survey; 9 percent of 9th grade students in 2008-2009 increasing to 13 percent in 2010-2011 and 9 percent of 11th grade students increasing to 12 percent in 2010-2011 (CHKS, 2008-2009 and 2010-2011).

The 7th grade students were not asked about additional specific drugs (aside from marijuana and inhalants), but they were asked generally if they had ever tried any other illegal drug or pill (1 or more times). Of the 7th grade students, 7 percent reported using other illegal drugs or pills in the 2008-2009 survey, and 8 percent reported using other illegal drugs or pills in the 2010-2011 survey (CHKS, 2008-2009 and 2010-2011).

Of the LBUSD students surveyed, only those in the 9th and 11th grade were asked additional questions about specific other drug use (other than marijuana and inhalants). The 5th grade students were only asked about marijuana and inhalants.

The percentage of 9th grade students in the LBUSD who reported ever having used prescription drugs (1 or more times) was 12 percent in both the 2008-2009 and 2010-2011 (Figure 84). For 11th grade students, 16 percent reported ever having used prescription drugs in 2008-2009 and 14 percent reported ever having used prescription drugs in 2010-2011 (CHKS, 2008-2009 and 2010-2011).
Obesity

An elevated body mass index (BMI) is a major risk factor for cardiovascular disease, diabetes, musculoskeletal disorders, and some cancers. Childhood obesity is associated with a higher chance of obesity, premature death and disability in adulthood. In addition to affecting their health later in life, obese children experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance and psychological effects. (World Health Organization, 2012). According to the self-reported body weights from the 2007 Los Angeles County Health Survey, 36.7 percent of Long Beach adults are overweight (compared to 35.9% of all Los Angeles County adults) and 31.2 percent are obese (compared to 22.2% of all Los Angeles County adults) (Figure 85) (LACHS, 2007).

A child’s BMI is a number calculated from a child’s weight and height. Unlike BMI for adults, child and teen BMI takes into account two additional factors; age and sex. This is due to the fact that the amount of body fat changes with age and is different in boys and girls. The overweight category is defined by a body mass index-for-age range of the 85th to less than the 95th percentile. The obese category is defined by a body mass index-for-age range of greater than or equal to the 95th percentile. In a healthy population, only 5 percent of the students should be classified as being obese and 10 percent as being overweight (CDC, 2012). In the LBUSD, 31 percent of students in the 5th grade fell into the obese category and 21 percent were classified as overweight, 25 percent of students in the 7th grade were classified as obese and 21 percent were classified as overweight, and of students in the 9th grade, 21 percent were obese and 21 percent were overweight (Figure 86). In Los Angeles County, 22.9 percent of 5th, 7th, and 9th grade students were considered obese (Crampon et al, 2011).

“... To address obesity, we need to look at our built-in environment. We need better access to fresh fruits and vegetables. We need to educate people about what to eat. There is still that last mile... they still have to make the decision to make the healthy choice. They have to understand that this is better for them. Like choosing a bottle of water over a can of soda.”

– Long Beach Community Leader, Key Informant Interviews, LBDHHS, 2012
Physical Activity

A sedentary lifestyle, or limited physical activity, is closely tied to being overweight or obese. Long Beach adults reported being active and meeting physical activity guidelines slightly less than adults in the South Bay and in Los Angeles County (50.9% of Long Beach adults versus 53.7% in the South Bay and 53.2% in Los Angeles County) (Figure 88). To meet physical activity guidelines a person must have vigorous activity - hard physical activity causing heavy sweating, large increases in breathing and heart rate for at least 20 minutes, at least 3 days/week, moderate activity - cause light sweating, slight increases in breathing and heart rate for at least 30 minutes, at least 5 days/week, or a combination of vigorous and moderate activity meeting the time criteria for at least 5 days/week (USDHHS, 2008).

Long Beach adults exceeded South Bay and Los Angeles County percentages for having some physical activity that did not meet the guidelines (16.3% of Long Beach adults versus 11.3% in the South Bay and 10.7% in Los Angeles County). However those the reported minimal to no activity and had a sedentary lifestyle was high, but less than both the South Bay and Los Angeles County (32.9% of Long Beach adults versus 35.0% in the South Bay and 36.2% in Los Angeles County) (LACHS, 2007).

In the 2007 Los Angeles County Health Survey, 22.3 percent of Long Beach parents reported that their children watched three or more hours of television a day, comparable to 22.7 percent of children in the South Bay and 23.7 percent of children in Los Angeles County (LACHS, 2007). In terms of physical activity, a higher percentage of Long Beach parents reported their children engaging in weekly physical activity than Los Angeles County parents as a whole, but slightly lower than the South Bay area parents (Figure 89). Over 40 percent (40.7%) of Long Beach parents (of children 6-17 years old) reported that their children participated in one hour of physical activity a day, 5 days a week compared to 37.6 percent of children in Los Angeles County and 42 percent of children in the South Bay (LACHS, 2007).

In California, students in the 5th, 7th and 9th grades are tested for fitness against six standards. These standards represent minimum levels of fitness known to be associated with those health and physical characteristics that offer protection against diseases resulting from physical inactivity. While parents report children being physically active, many children do not meet the fitness standards. Among 9th grade students, only 30.8 percent of Black or African American students and 32.1 percent of Hispanic or Latino students meet all fitness standards compared to 48.4 percent of White students and 44.9 percent of Asian students (Table 17) (CDE, 2011).
The majority of LBUSD students in the 7th (77%), 9th (68%) and 11th (56%) grades reported exercising or doing a physical activity at a park, playground or open space at least one of the last 7 days (Figure 90) (CHKS, 2010-2011).

### Nutrition

Fruit and vegetable consumption has been linked to a reduced risk of each of the three leading causes of death in the United States: heart disease, cancer, and stroke (three of the top four leading causes of death in Long Beach). It has also been linked to reducing the risk of diabetes, hypertension, and other chronic diseases. However, the majority of individuals in the United States do not achieve the recommended five servings of fruits and vegetables per day. Long Beach residents are no exception. In the 2007 Los Angeles County Health Survey, only 14.5 percent of Long Beach adults reported meeting the recommended five servings in the previous day, compared to 15.1 percent of adults in Los Angeles County and 13.6 percent of adults in the South Bay (Figure 91). Availability of fresh fruits and vegetables does not appear to be a factor in the failure of adults to reach the recommended servings of fruits and vegetables. In the same survey, 92.8 percent of Long Beach adults reported the quality of fresh fruits and vegetables where they shop as very high or somewhat high (LACHS, 2007).

In contrast to fresh fruit and vegetable consumption, fast food consumption and consumption of sodas or sweetened beverages appears to be prevalent in Long Beach. A little over 46 percent (46.3%) of Long Beach adults reported eating fast food at least once a week, higher than adults in both the South Bay (43.9%) and Los Angeles County (40.2%) (Figure 91) (LACHS, 2007).

LBUSD students in the 7th, 9th and 11th grades were asked how many times in the past 24 hours did they eat fast food (Figure 92). The highest percentage at each grade level reported 0 times (40% of 7th graders, 44% of 9th graders and 49% of 11th graders). The percentage of students reporting consuming fast food 1 time, 2-4 times and 5 or more times remained consistent throughout the grade levels, with 5 or more receiving the lowest percentage of responses (3% of 7th graders, 1% of 9th graders and 2% of 11th graders). The same students were also asked how many...
times in the past 24 hours they drank soda, sports drinks or other sweetened soft drinks. Here again, the largest percentage of students answered 0 times (31% of 7th graders, 32% of 9th graders and 38% of 11th graders) (CHKS, 2010-2011).

Sexual Activity and Pregnancy

Sexual activity and safe practices are an important component of behavioral health because they are specifically relevant to some vulnerable populations. Teen pregnancy in particular affects not only the lives of young people and their families, but society as well, and costs California taxpayers $1.7 billion a year. California’s teen birth rate dropped to a record low in 2010 (29.0 births for every 1,000 females ages 15-19), from a high in 1991 of 70.9 births (CDPH, 2011). Despite this improvement at the state level, the birth rate among teen women aged 15-19 in Long Beach although dropping remains high. In 2007, Long Beach registered 887 births to young women aged 15-19, giving a teen birth rate of 52.6 per 1,000 females aged 15-19. This rate is higher than both Los Angeles County (36.9) and California (37.1) for the same period. Latinas represented 71 percent (626) of the births with a rate of 92.2 in 2007. From 2001 to 2007, the number of births to Long Beach teens aged 15-19 has remained relatively stable (901 births in 2001 and 887 in 2007). Between 2005 and 2009, 18-19 percent of births to Long Beach teens under the age of 20 were to young women who were already mothers (Annie E. Casey Foundation, 2012).

Within Long Beach, CDPH reports teen pregnancy by Medical Service Study Areas (MSSAs). MSSAs are sub-city and sub-county geographical units used to organize and display population, demographic and physician data. MSSAs were developed to determine areas of unmet priority need. Urban MSSAs include a population range of 90,000 to 125,000 and reflect recognized community and neighborhood boundaries and similar demographic and socioeconomic characteristics (CA Office of Health Planning and Development, 2012). Between 2004 and 2005 the teen pregnancy rate was higher in three of the five reporting regions within Long Beach (53.8 – 69.4 births/1,000 teens) as compared to that of the County of Los Angeles (40.5 births/1,000 teens) or the State of California (37.2 births/1,000 teens) (Figure 93, Takahashi et al, 2008).

In addition to teen pregnancy, rates of sexually transmitted infections (STIs) are indicators of unprotected sex and other risk behaviors. In 2008, female teens in Long Beach ages 15-19 had the highest rates of chlamydia and gonorrhea among all age groups in Long Beach at 3,815.6 and 505.8 per 100,000 respectively, and accounted for 34.2 percent and 40.8 percent of the female chlamydia and gonorrhea cases in the city. Young males also had disproportionately high rates of these infections with males aged 15-24 accounting for 54.3 percent of the male chlamydia cases and 41.8 percent of gonorrhea cases. Zip codes 90802, 90805, and 90813 were the areas with the highest rates of chlamydia and gonorrhea for teens aged 15-19 (LBDH/HIS, Epidemiology Program, 2009). It is believed that young women, especially those of color, are at increasingly high risk for STIs through heterosexual contact for several reasons including biological vulnerability, lack of recognition of their partners’ risk factors, inequality in relationships, and having sex with older men who are more likely to be infected with HIV or other STIs. Data from the 2007 Los Angeles County Coordinated HIV Needs Assessment, which included greater Long Beach, suggest several explanations for why young people are at increased risk. Nearly 48 percent of surveyed youth ages 12-24 reported having sex with at least one casual partner during the previous six months, 31 percent reported inconsistent condom use, and 9.8 percent reported having sex while under the influence of crystal methamphetamine.

The 2009 Needs Assessment of the Long Beach Teen Pregnancy Prevention Collaborative sought to collect Long Beach specific data about youth behaviors. A convenience sample of 175 Long Beach teens aged 12-18 that completed questionnaires for the needs assessment found that 59 percent of respondents had had sex at least once. The average age of first sex for sexually experienced teens was 14.8 for females and 13.7 for males. Of these teens, 56.3 percent had had sex in the last 30 days, 12.6 percent did not use any type of contraception at last sex (8.6% of females and 14.3% of males) and 9.7 percent had been pregnant or gotten someone pregnant. A total of 18.4 percent (5.9% of males and 25.4% of females) reported alcohol use at last sex. Anecdotal information from the youth participants in a previous LBDH/HIS prevention program reveals that issues such as violence and abuse by a partner, negative partner reaction to condoms and social norms about condom use while in relationships have a negative impact on condom use.
Conditions and behaviors that contribute to the health status show a lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption are responsible for much of the illness and death related to chronic disease in the United States. These behaviors are present in Long Beach as well. In Long Beach, 22.1 percent of adults reported binge drinking in the previous month (LACHS, 2007). Hispanics or Latinos reported a higher percentage of binge drinking (35.5%) than other races/ethnicities (CHIS, 2009); similarly, Hispanic or Latino students reported the highest alcohol use among LBUSD students (CDE, 2008-2010). In 2010, 15.3 percent of Long Beach adults (18 years and older) were smokers. This is under the 2010 national average of 19 percent, but above the 2010 Los Angeles County rate of 14.3 percent and the California rate of 11.9 percent (LADPH, 2010). Of those within the South Bay in 2009 who reported being a smoker, Asians had the highest percentage of smokers (15.3%) and Hispanics or Latinos had the lowest (8.3%) (CHIS, 2009).

Poor nutrition and lack of physical activity are contributing factors to obesity, which is a major risk factor for cardiovascular disease, diabetes, musculoskeletal disorders, and some cancers. Long Beach adults reported being active and meeting physical activity guidelines slightly less than adults in the South Bay and in Los Angeles County (50.9% of Long Beach adults versus 53.7% in the South Bay and 53.2% in Los Angeles County). Furthermore, in the 2007 Los Angeles County Health Survey, only 14.5 percent of Long Beach adults reported meeting the recommended five servings of fruits and vegetables in the previous day. According to the self-reported body weights from the 2007 Los Angeles County Health Survey, 36.7 percent of Long Beach adults are overweight (compared to 35.9% of all Los Angeles County adults) and 31.2 percent are obese (compared to 22.2% of all Los Angeles County adults) (LACHS, 2007).

Of particular concern is the prevalence of overweight youth. In the LBUSD, 31 percent of students in the 5th grade fell into the obese category and 21 percent were classified as overweight, 25 percent of students in the 7th grade were classified as obese and 21 percent were classified as overweight, and of students in the 9th grade, 21 percent were obese and 21 percent were overweight (Crampon et al, 2011). Although obesity rates are high in all zip codes (above 34%), more than half of 5th grade students in the North (90805), West Central (90806), and Southwest (90802, 90804 and 90813) Long Beach zip codes are classified as overweight or obese.

Having children young and being the child of a young mother predicts poorer health and socioeconomic standing in years to come. California's teen birth rate dropped to a record low in 2010 (29.0 births for every 1,000 females ages 15-19), from a high in 1991 of 70.9 births (CDPH, 2011). Despite this improvement at the State level, the birth rate among teen women aged 15-19 in Long Beach, although dropping, remains high. In 2007, Long Beach registered 887 births to young women 15-19, giving a teen birth rate of 52.6 per 1,000 females aged 15-19. Between 2004 and 2006 the teen pregnancy rate was higher in three of the five CDPH Medical Service Study Areas (MSSAs) used to report teen pregnancy. Within Long Beach, birth rates were 53.8 – 69.4 births/1,000 teens as compared to that of the County of Los Angeles (40.5 births/1,000 teens) or the State of California (37.2 births/1,000 teens) (Takahashi et al, 2008). Latinas represented 71 percent (626) of the births with a rate of 92.2 in 2007. Despite interventions aimed to prevent teen pregnancy and to support adolescent mothers, many young mothers are having multiple children. Between 2005 and 2009, 18-19 percent of births to Long Beach teens under the age of 20 were to young women who were already mothers (Annie E. Casey Foundation, 2012).
Chapter 3. Social Determinants of Health

Assessing the health of a community requires analysis beyond traditional reports of illness and injury and known health risk factors. Social and economic factors are known to contribute significantly to health outcomes, even if the direct causative pathway is undefined. Improving the health of the community is virtually impossible unless the economic stability, educational attainment, and safety of the community are improved. This chapter looks broadly at social and economic factors in order to develop a more complete picture of the health of the community.

Socioeconomic measures such as education, income, and poverty level influence health and quality of life for individuals and families. Several chronic diseases such as diabetes are associated with low levels of education and income, as are tobacco use, sedentary lifestyle, teen pregnancy and being overweight.

Overall Need

Healthy City created an overall need index to measure need across Los Angeles County to help the California Community Foundation (CCF) understand the needs of communities they invest in. The need index incorporates the following indicators: percent of families below poverty level, percent of deaths of population under one year of age (CDPH, 2008), homicide death rate (CDPH, 2007), percent of unemployed persons in labor market (age 16 and over) and percent of persons age 25 and over without a high school diploma (Nielsen Claritas Inc., 2010). The overall need index is available for the zip codes that correspond to the City of Long Beach. Higher values indicate higher need areas, while lower values represent lower need areas. Map 12 illustrates the need index for zip codes in Long Beach. The East side of the city is the area with the lowest need, but pockets of higher need are distributed throughout the remainder of the city.

“Am I sick because I am poor, or am I poor because I am sick? It is both: it should be neither.”

—Paul Erwin, Poverty in America: How Public Health Practice Can Make a Difference, 2008
Map 13 presents an even more detailed socioeconomic index for all regions of Long Beach. It is divided into U.S. Census block groups. Currently, this index is based on data from the 2000 U.S. Census. Darker colors in the North, West Central and Southwest indicate lower socio-economic status while lighter colors in the East and Southeast represent higher status.

**Income**

The City of Long Beach’s median household income of $51,426 was lower than the median income for the County of Los Angeles of $52,684 and $57,708 for the state (ACS 2010, S1903). The Long Beach Community Action Partnership (LBCAP) estimates that $60,000 is needed for a family of four to live a decent quality of life (LBCAP Long Beach Poverty Statistics, 2012).

There is variation among median income levels across race and ethnic groups, as represented in Figure 94. Black or African American ($40,218) and Hispanic or Latino ($41,956) households had the lowest median incomes, which were about $10,000 less than the overall median income of Long Beach ($51,426)(ACS, 2010, Table S1903).
Median household income also varied substantially by zip code, with higher incomes, greater than $59,000, in the East (90808 and 90815) and Southeast (90803) and lower incomes, less than $43,000, in the North (90805), West Central (90806 and 90810) and Southwest (90802, 90804, 90813, 90814) (Table 18). A household describes all people who occupy a housing unit regardless of their relationship to each other.

**Poverty**

Approximately 15.4 percent of all families in Long Beach live below the poverty level, which is one and one-half times the statewide poverty rate of 10.2 percent (ACS 2006-10). Long Beach is 26th in poverty ranking among the 70 U.S. cities with a population of 250,000 or more (LBCAP, Long Beach Poverty Statistics, 2012).

The poverty level is lowest among married couples with related children under 18, with 13.2 percent below the poverty line, and the poverty level is highest in families with a female head of household, at 39.4 percent (Figure 95). Overall, Long Beach families experience greater poverty (15.4%) than both Los Angeles County (12.6%) and State of California families (10.2%) (ACS, 2010, Table DP03).

Poverty also varies by race/ethnicity. Almost one quarter of Hispanic or Latino (24.3%) and Native Hawaiian and Pacific Islander (23.7%) families in Long Beach live in poverty (Figure 96). In contrast, only 10.6 percent of White families are in poverty (ACS, 2010, Table S1903).

In 2010, of the 158,386 households in Long Beach, 18,265 or a little more than 10 percent received cash public assistance, Food Stamps or Supplemental Nutrition Assistance Program (SNAP) (ACS, 2010, Table B22005F). The distribution of races among those that received food assistance is presented in Figure 97.
Children and Poverty

There are approximately 30,565 children under 18 years of age living in poverty in Long Beach, which represents 27.6 percent of the children in the area (Table 19). An estimated 1,637 or 32 percent of children born in the last 12 months were born into poverty (ACS, 2010, Table S1301).

According to the Educational Demographics Office, 59,118 Long Beach students were enrolled in the Free/Reduced Price Meals Program in the 2010-2011 school year, representing 69.7 percent of total enrollment. In addition, 50,865 students were enrolled in compensatory education programs, which target children at risk and operate in schools with high proportions of transient, low-income or English learner students (CDE, 2011).

Employment

Employment has profound effects on health. Unemployed people seek medical care more often than those employed and are more likely to experience depression, anxiety disorders, and addictions (Paul and Moser 2009). In 2010, Long Beach residents aged 16 years and over had an unemployment rate of 14.4 percent, slightly higher than the County rate of 12.4 percent and the statewide rate of 12.8 percent (ACS, 2010, Table S2301). Unemployment varies by race/ethnicity (Table 20), with the highest unemployment among Blacks or African Americans at 18.1 percent and the lowest among Whites at 9.8 percent.

Most jobs in Long Beach are in education, health care, and professional services (ACS, 2010, Table DP03), but there is also significant industrial development (Figure 98 and Table 21). The Port of Long Beach is one of the world’s largest shipping ports, and the headquarters alone provides hundreds of jobs in downtown Long Beach. The City of Long Beach operates and maintains a world-class international deep-water harbor, a nationally recognized convention center, beaches, and marinas. The City also administers oil extraction operations under a trust agreement with the State (LB 2010 Comprehensive Annual Financial Report).

<table>
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<th>Table 19. ACS, 2010, 1 year estimates, Table S1301</th>
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<td><strong>Children Living in Poverty</strong></td>
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<td><strong>Long Beach and California, 2010</strong></td>
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<td><strong>Long Beach Residents</strong></td>
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<td>Individuals living in poverty</td>
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<td>Under 18 living in poverty</td>
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<th>Table 20. ACS, 2010 1 year estimates, Table S2301</th>
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<tr>
<td><strong>Unemployment Rate (16 years and over) by Race/Ethnicity</strong></td>
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<tr>
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<td><strong>Race/Ethnicity</strong></td>
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<tr>
<th>Table 21. LB 2010 Comprehensive Annual Financial Report</th>
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<tr>
<td><strong>Top 10 Employers</strong></td>
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<td><strong>Long Beach, Fiscal Year 2010</strong></td>
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School Readiness and Educational Attainment

Higher education is statistically associated with several positive health outcomes. Mothers with more education are less likely to have low birth weight babies and more likely to breast feed. Fewer college graduates smoke. College-educated adults are less likely than others to be obese, and children living in households with more highly educated adults are less likely to be obese. People with higher levels of education are more likely to exercise (Education Pays, 2010).

Early Childhood

The relationship between school preparedness and later educational success is well established. The CDC's Community Preventive Services Task Force recommends publicly funded, center-based, comprehensive early childhood development programs for low-income 3 to 5 year olds, because they increase readiness to learn. This may be particularly important in Long Beach because there is a significant population of students that learn English in the public schools. Only 19.2 percent of the children under five who were classified as “English Learners” were able to attain the level of English Proficient in the 2011-2012 school year (Title III Accountability Report, LBUSD). Yet language proficiency is a good predictor of later success.

Vocabulary and familiarity with letters for children entering kindergarten predicts reading ability throughout a child’s education (School Readiness Indicators Initiative, 2012). Among Long Beach children 3 and 4 years old, over half (53%) are in preschool. Of these, 5,049 are enrolled in public school and 2,354 are enrolled in private school. There are 6,353 3 and 4 year olds who are not in school (ACS, 2010, Table B14003).

School-aged Population

Completing high school affects health outcomes and several other social indicators (e.g. income) that are related to health. For instance, in 1999, the mortality rate of high school dropouts ages 25 to 64 was more than double the mortality rate of those with some college (National Vital Statistics Report, as cited in Cutler and Lleras-Muney 2006). Another significant social and health issue in high schools is teen pregnancy, which also contributes to dropout rates.

There are an estimated 81,837 students enrolled in K-12 schools in Long Beach (ACS, 2010, Table S1401). In the 2010-11 school year, 5,283 of the 6,781 members of the senior class graduated (77.9%) (CDE, 2012). The percentage of youths dropping out of school in the LBUSD varied by race, with highest dropout percentages among Hispanics or Latinos (17.5%) (Figure 99). The percentage of youths who dropped out between grades 9 and 12 ranged from 0.7 percent at the prestigious magnet school, the California Academy of Math and Science (CAMS) to almost 19 percent at Jordan. Wilson, Jordan, and Cabrillo High had the highest high school dropout rate (Table 22) (CDE, 2012). Dropout rates are reported per cohort, as the number of cohort members who dropped out over the total number in the cohort (for grades 9-12).
More than one quarter of sophomores (26%) and juniors (29%) in Long Beach schools tested poorly on the annual standardized evaluations of English skills, which is higher than the state average by about 5 percentage points (17% and 21% for sophomores and juniors respectively) (Figure 100) (CDE, 2012).

**Adult Educational Attainment**

About 60 percent (59.0%) of adults in Long Beach over the age of 25 had at least some college, which is comparable to the State average (60%) and slightly higher than that of Los Angeles County (55%). In 2010, all 18-24 year olds completed 9th grade and 53.9% have already attended some college. Only 6.8 percent of that age group had attained a Bachelor's degree, though presumably more will finish a degree in coming years (Figure 101) (ACS, 2010, Table S1501).

Educational attainment varied considerably by place of birth, with 43 percent of the foreign-born population reporting less than a high school education (Figure 102) (ACS, 2010, Table B06009).
Adult educational attainment varied widely by race. Only 5.3 percent of Whites and 11.8 percent of Blacks or African Americans had less than a high school education, whereas 23.1 percent of Asians and 43.4 percent of Hispanic or Latino residents of Long Beach did not complete high school. Conversely, 43.6 percent of Whites have a bachelor’s degree or higher, while only 11.4 percent of Hispanic or Latinos attained that level of education (Figure 103) (HealthyCity.org, ACS, 2006-2010).

One interesting facet of educational attainment in Long Beach emerged when we compared genders. In the Black or African American population, more females than males had some college or a college degree, but they were also more likely to lack a high school diploma than males. To a lesser extent this was also true for Asian and Hispanic or Latino females (Figure 104) (HealthyCity.org, ACS, 2006-2010).
Educational attainment also varied considerably by zip code according to the 2000 Census. North (90805), West Central (90806 and 90810) and Southwest (90802, 90804, and 90813) Long Beach zip codes had especially low educational achievement with over 26-62 percent having less than a high school education. In contrast, 70 percent or greater of the population attained more than a high school education for zip codes 90803, 90807, 90808, 90814, and 90815 (Figure 105).

**Affordable Housing**

Long Beach consists of 174,236 housing units (ACS 2010, DP04). Of those 91 percent are occupied and 9 percent are vacant. Of those occupied, 40 percent are owner-occupied, and 60 percent are renter-occupied, with 53 percent of the occupants having moved in since 2005. The rental vacancy rate is significantly higher (7.3%) than the homeowner vacancy rate (2.7%) (ACS, 2010, Table DP04).

Approximately one third (36.3%) of the housing units in Long Beach were built in 1949 or earlier. Another 36.5 percent were built between 1950 and 1969. The remainder of the housing units were built in 1970 or later (Figure 106). Less than 1 percent of occupied housing units lack complete plumbing facilities, but 1.4 percent lack complete kitchen facilities, and 2.2 percent lack telephone service (ACS, 2010, Table DP04).

The value of owner-occupied units in Long Beach is relatively high, with a median value of $435,500. Roughly one third of the units (32.5%) are valued between $500,000 and $999,999 and another third (36.2%) between $300,000 and $499,000 (ACS, 2010, Table DP04).

According to the Consolidated Annual Plan for Long Beach, more than 15,000 seniors who own homes have low-to-moderate incomes. Minor home repair and rehabilitation assistance is needed by many of these elderly owners.

“Substandard affordable housing is available. No heat, mold, cabinet doors missing, roaches...people will accept these conditions because it's all they can afford.”

-Long Beach Community Leader, Key Informant Interviews, LBDHHS, 2012
Cost of Housing

For those housing units with a mortgage, the monthly owner costs as a percentage of household income ranged from less than 20 percent to 35 percent or more. The distribution across this spectrum is greatest at both ends: 24.2 percent report a mortgage costs as less than 20 percent of household income, while 36.9 percent report a cost of greater than 35 percent of their income (Figure 107) (ACS, 2010, Table DP04).

The median rent for Long Beach is $1,051, with a range from less than $200 to $1,500 or more. The majority of rents fall in to the $750 to $999 price range (29.5%) or the $1,000 to $1,499 range (37.1%). Gross rent as a percentage of household income ranges from less than 19.9 percent to 35 percent or more, with close to half (46.8%) paying 35 percent or more (Figure 108) (ACS, 2010, Table DP04).

Foreclosures

The number of foreclosures in Long Beach increased significantly between 2007 (567) and 2008 (1,572). The third quarter of 2008 alone saw more than 500 foreclosures. While the numbers of foreclosures have declined in more recent years, they are still higher than the 2007 numbers (Figure 109) (DataQuick, 2007-2010).

Homelessness

At the January 2011 homeless count, 3,704 homeless adults and 586 homeless children were counted in Long Beach (Figure 110). An estimated 45 percent of homeless adults (1,672), and 70 percent of children are in homeless shelters or other facilities. The majority, about 70 percent, of homeless adults are men, 34 percent of them are veterans. The biennial Long Beach homeless count recorded a sharp decline in homelessness between 2003 and 2007. Though there has been a slight increase over the last 5 years, the numbers remain lower than before 2003, especially among children (City of Long Beach, 2011).
The majority of homeless people in Long Beach are Black or African American (36.7%) and White (34.8%) (Figure 111).

Since 2003, there has been a striking decline of homeless persons living on the street (from 4,500 to 2,200) in Long Beach, and a corresponding increase in homeless people living in shelters (from 1,340 to 2,080) (Figure 112) (City of Long Beach, 2011).

ACCESS TO HEALTHY FOODS AND NUTRITIONAL ENVIRONMENT

Low-income urban communities frequently face limited opportunities to purchase healthy food. Often without cars or convenient public transportation options, residents must rely on more expensive processed foods sold at convenience and corner stores. These less healthy food options have a negative impact on nutrition, weight, and health. In 2009 and 2010, the City of Long Beach Department of Health and Human Services Healthy Active Long Beach Program participated in the Communities of Excellence in Nutrition, Physical Activity and Obesity Promotion (CX3) project. The CX3 project is a neighborhood assessment program aimed at providing data and setting priorities for the improvement of access to healthy foods and physical activity for Long Beach's low-income neighborhoods.

Neighborhoods were chosen based on the following criteria: at least 50 percent or more of the population at or below 185 percent of the Federal Poverty Level (based on 2000 Census) and each neighborhood had at least one middle or high school within their boundaries. All the neighborhoods fell within the 90802, 90806, or 90813 zip codes (Table 23).

The indicators used to assess each neighborhood’s nutritional environment were Geographic Information Systems software, site visits, interviews and store surveys. Health officials and volunteers looked at factors including healthy food access and availability, marketing practices and product quality. Store quality was determined
by access (percent of population living within a half mile of a supermarket or large grocery store), price, availability, nutrition information, exterior advertising, interior advertising and promotions, and walkability. The conclusion drawn by the CX3 project was that in eight of the poorest neighborhoods of Long Beach, there was limited access to affordable, healthy foods. The findings suggested that stores and fast food outlets in these neighborhoods do not meet standards for health and the residents in these neighborhoods pay more than 10 percent above the county average for produce. In addition, most of the stores, which sold alcohol, did not comply with the State of California Signage Law, and many of the neighborhoods did not have a single park or playground for children.

A longitudinal study of the body mass index of students attending Long Beach public schools was published in 2011 (Crampon et al, 2011) and provided valuable information about the correlations between students’ BMI and various factors including race, language spoken, parent education and geographic location in Long Beach. When it came to geographic location, the results showed that in the two planning districts where the eight neighborhoods of the CX3 study fall (West Central and Southwest districts), the percentages of students classified as overweight and obese were significantly higher at all grade levels. In the West Central and Southwest districts, 55-58 percent of 5th grade students were overweight or obese, compared to only 34-41 percent of 5th grade students in the Southeast and East districts. Among 9th graders, 44-45 percent of West Central and Southwest students were overweight or obese compared to 28 percent in the Southeast and East districts.

### Distance from Food Retailers

In order to further explore the relationship between geographic location of the students and BMI classifications, the longitudinal study gathered data on the availability of various types of food retailers in each part of Long Beach. The types of retailers included full service supermarkets or warehouse food stores, mini-markets and fast food retailers.

The first column in Table 24 shows the average distance between the students’ homes and the nearest supermarket or warehouse food store and the nearest mini-mart. The other columns give the average number of these stores found within a quarter mile, half mile and mile. The results show very little difference in proximity to the healthier food sources for students who had a body mass index in the normal range versus students in the overweight or obese ranges. However, when it comes to distance from mini-marts, we can see that students within the normal range had far fewer of these unhealthy food source options near their homes than students in the overweight and obese ranges. According to one Long Beach resident, “we have pockets of food deserts in Long Beach. Depending on where you live in Long

### Table 23: LBDHHS, Communities of Excellence in Nutrition, Physical Activity and Obesity Promotion (CX3), 2009 and 2010

<table>
<thead>
<tr>
<th>Neighborhoods</th>
<th>Zip Code</th>
<th>Franklin 90802</th>
<th>St. Mary 90813</th>
<th>Mary Butler 90806</th>
<th>Washington 90813</th>
<th>Poly High 90813</th>
<th>Burnett 90806</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td>7,366</td>
<td>8,912</td>
<td>4,255</td>
<td>9,234</td>
<td>7,630</td>
<td>2,078</td>
</tr>
<tr>
<td>% of people in poverty</td>
<td>65-79*</td>
<td>69</td>
<td>69</td>
<td>80-86*</td>
<td>71-79*</td>
<td>59-66</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Parks/Playgrounds</td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Access I</td>
<td></td>
<td>0**</td>
<td>98</td>
<td>0</td>
<td>0**</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>Access II</td>
<td></td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>0/0</td>
<td>1/1</td>
<td>1/1</td>
</tr>
<tr>
<td>Supermarkets or large grocery stores</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Farmers markets</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Small markets or other food stores</td>
<td></td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Convenience stores</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fast food outlets</td>
<td></td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Ratio of fast food outlets to population</td>
<td></td>
<td>1:2,455</td>
<td>1:1,782</td>
<td>1:851</td>
<td>1:839</td>
<td>1:1,522</td>
<td>1:520</td>
</tr>
</tbody>
</table>

Access I: Percent of population living within a half mile of a supermarket or large grocery store (within neighborhood).  
Access II: Proportion of supermarkets or large grocery stores with convenient public transit.  
*Multiple census tracts and/or census block groups  
**50% of residents are within 0.5 mile of a large grocery store outside of the neighborhood.

### Table 24. Crampon et al, 2011

<table>
<thead>
<tr>
<th>Distance from Mini-Marts</th>
<th>Average Number In</th>
<th>Distance from Supermarket or Warehouse Food Stores</th>
<th>Average Number In</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Distance Nearest</td>
<td>0.25 Miles</td>
<td>0.50 Miles</td>
</tr>
<tr>
<td><strong>Grade 5</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>0.17</td>
<td>4.88</td>
<td>18.60</td>
</tr>
<tr>
<td>Overweight</td>
<td>0.19</td>
<td>4.66</td>
<td>17.38</td>
</tr>
<tr>
<td>Normal</td>
<td>0.21</td>
<td>4.04</td>
<td>15.56</td>
</tr>
<tr>
<td><strong>Grade 7</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>0.17</td>
<td>4.96</td>
<td>18.93</td>
</tr>
<tr>
<td>Overweight</td>
<td>0.19</td>
<td>4.65</td>
<td>17.62</td>
</tr>
<tr>
<td>Normal</td>
<td>0.21</td>
<td>4.10</td>
<td>15.64</td>
</tr>
<tr>
<td><strong>Grade 9</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>0.17</td>
<td>5.09</td>
<td>19.22</td>
</tr>
<tr>
<td>Overweight</td>
<td>0.18</td>
<td>4.60</td>
<td>17.63</td>
</tr>
</tbody>
</table>
Beach, it’s easier to walk to a liquor store than it is to go to a grocery with fresh fruits or vegetables” (Long Beach, Key Informant Interview, LBDHHS, 2012).

On average, there are 3.24 more mini-marts located within a half mile of the homes of students in the obese range than the homes of students within the normal range for body mass index. When you extend that circumference to a mile, there were an average of 10.2 more mini-marts found near the homes of students in the obese range versus students in the normal range.

Access to Fitness or Recreation

Long Beach is an attractive city with varied recreational opportunities, but many of these are considered inaccessible by the local residents because of cost or safety concerns. According to Good Magazine (2009), downtown Long Beach is considered the 8th most walkable city in the United States, though this is primarily an index for visitors rather than an indication of, for example, access to grocery stores and other commodities that a resident populous might need. Popular recreational attractions such as harbor cruises and Segway rentals are primarily directed at visitors and those in town for meetings/business.

As noted in Chapter 2, there is an estimated 2,600 acres of recreation open space within Long Beach. Within Long Beach’s total 51.3 square miles, the quantity of green space varies. There is a lack of green space compounded by population growth in the Central, West and North sections of the city that makes access to recreation open space problematic for much of the youth population in these areas.

YMCA and the Boys and Girls Clubs each have three facilities in Long Beach, and they also partner with the City to implement a city-wide WRAP (Winners Reaching Amazing Potential) after-school program. Through these programs, thousands of local students and their families have free access to supervised physically and emotionally healthy activities on their school campuses every day. The WRAP program is designated as a balanced mixture of academic enrichment and assistance that are a fundamental components of youth development. There are eight WRAP sites in Long Beach.

In Long Beach DHHS key informant interviews, two significant obstacles to fitness and recreation were mentioned several times. First, the recreational opportunities in Long Beach were seen as expensive, and second, access to parks and other facilities was limited by the lack of public safety. “Safety at parks is a huge problem. It’s not enough to simply have parks, we need to make sure they are safe,” said one Long Beach community leader.

Long Beach is aware of this problem, and is making an effort to increase the safety of parks. Two years ago, a community-based organization started the Summer Night Lights program, which keeps three of the most dangerous parks (Martin Luther King Jr., Drake and Admiral Kidd Parks) open from 6-9 p.m. weekdays in the summer. The program employs 30 kids and 20 adults, and last year recorded 15,000 visits by area kids.

| Year End Crime Statistics of Long Beach, 2007-2010 |
|----------------|----------|----------|----------|----------|
| Type of Crime   | 2007     | 2008     | 2009     | 2010     |
| Violent Crime   | 3,424    | 3,151    | 3,162    | 2,735    |
| Murder and Manslaughter | 39   | 40       | 40       | 31       |
| Rape           | 138      | 120      | 131      | 134      |
| Robbery        | 1,506    | 1,484    | 1,382    | 1,200    |
| Aggravated Assault | 1,741  | 1,507    | 1,609    | 1,370    |
| Burglary       | 2,905    | 3,080    | 3,117    | 2,929    |
| Larceny Theft  | 7,215    | 7,038    | 7,169    | 6,524    |
| Auto Theft     | 2,860    | 2,870    | 2,358    | 2,190    |
| Arson          | 109      | 107      | 90       | 74       |

Crime

According to the Long Beach Police Department, crime rates in Long Beach have been declining since 2002 (Table 25). The overall crime rate declined 5.6 percent from 2002 to 2008, and the decrease continued in 2009 and 2010 (LBPD, 2007-2010).

The total number of deaths where the underlying cause of death was homicide (assault) by firearms for all zip codes in Long Beach was 41 for the year 2006, 28 for the year 2007, and 32 for the year 2008 (Table 25 above includes murder by other types of weapons). The rate of deaths due to homicide (assault) by firearms per 100,000 population can be seen in Figure 113 broken down into each Long Beach zip codes. Long Beach zip codes in the North (90805), West Central (90806, 90807, 90810) and Southwest (90802, 90804, 90813, 90814) have homicide rates by firearm higher than the remaining zip codes.

Between 2007 and 2010 the overall hospitalization rate for non-fatal firearm related injuries per 100,000 population varies among zip codes. Comparing the rates of these incidents by zip code, they were concentrated in the North (90805), West Central (90806 and 90810) and Southwest (90813) zip codes (Figure 114) (HealthyCity.org, OSHPD, 1997-2010).
Summary

As is evident in other chapters of this document, a recurring theme of disparity characterizes the City of Long Beach. The social problems that are associated with poor health such as high unemployment, low education, and high crime are prevalent in different geographical sections of Long Beach. Long Beach consists of a higher percent of individuals living in poverty than either Los Angeles County or the State of California. The effects of living below the poverty line are exacerbated in Long Beach, given the high cost of housing, and the high percentage of income that must be used for housing.

Within Long Beach, the median income ranges from $19,815 in the 90813 zip code to $64,242 in zip code 90803. This discrepancy, where one zip code has more than 3 times the average income of another illustrates the challenges that affect the achievement of positive health outcomes for all Long Beach community members. The same pattern of disparity exists with educational attainment. Only 20 percent of the population in zip code 90813 achieved more than a high school diploma, while more than 80 percent did in 90803.

Of particular concern is the percentage of children born into and living in families in poverty. More than 30 percent of children in Long Beach are born into a family in poverty. In addition, the higher crime areas of the city also tend to be the areas with the highest percentage of children. Homicide by firearm rates and hospitalizations for firearm injuries are highest in four zip codes, 90805, 90806, 90810, and 90813, where approximately 30 percent of the population is under 18.
Chapter 4. Environmental Health

Overview
The World Health Organization (WHO) defines the environment, as it relates to its contribution to health, as “all the physical, chemical, and biological factors external to a person, and all the related behaviors” (WHO, 2006). Environmental health interventions consist of preventing or controlling disease, injury, and disability related to the interactions between people and their environment. Poor environmental quality has its greatest impact on people whose health status is already at risk. Therefore, environmental health interventions must address the societal and environmental factors that increase the likelihood of exposure and disease (Healthy People 2020, 2012).

Air Quality
Poor air quality is linked to long-term damage to respiratory and cardiovascular systems, cancer and premature death (US Environmental Protection Agency, 2010). Decreasing air pollution is an important step in creating a healthy environment.

Despite ongoing improvements, air quality in the Southern California Air Basin remains problematic. According to the California Air Resources Board annual reporting (2011) against national air quality standards, all of Los Angeles County, including Long Beach, are nonattainment areas for ozone, particulate matter (PM) 10, PM2.5, nitrous oxide (NO2) and lead (particulate). A nonattainment area is one where air pollution levels persistently exceed the national ambient air quality standards. There are a number of ways that the safety of ambient and outside air is reported. The most understandable is the Air Quality Index (AQI), an index of values ranging from 0 to 500 that is forecasted daily by the Environmental Protection Agency. The AQI is reported by county. In 2011, Los Angeles County had 94 days considered “Unhealthy for Sensitive Populations.” “Unhealthy for Sensitive Populations” is an AQI over 100; this level is predicted to negatively impact those with asthma, lung disease, children and older adults. Of those 94 days, 11 days had an AQI exceeding 150 and therefore considered “Unhealthy” or “Very Unhealthy” even for the general population with no health concerns. Figure 115 shows the AQI days by month for Los Angeles County in 2011. It shows the months between May and September as having the most hazardous air conditions with almost 10 days to a total of 20 days per month with an AQI that exceeds 100.

Specific to Long Beach, air quality is impacted by the 710 freeway along the West, the Long Beach/Los Angeles port complex along the Southwest, the 103 freeway and major oil refineries in the West, the 405 freeway through the center of the City, and major industrial sectors, mainly in the South. As noted above, improvements have been made to reduce air quality impacts, such as the use of lower emission vehicles and equipment at the Port of Long Beach and the introduction of green space along the 710 corridor. Figure 116 shows how air quality has improved over the last 10 years with the number for “Unhealthy” and “Very Unhealthy” days decreasing by over 30 percent since 2002.
Long Beach has two California Air Resources Board, Air Quality Management District air quality monitoring stations within its borders. Ultra fine particles are not currently being regulated or monitored in California; however Ozone, PM 2.5, and PM 10 are being measured in the North and South Long Beach areas. Turning Data into Action: Focused Health Profile of Long Beach, CA (CDC Reach CORE, 2011) shows that in 2010, the measurements collected by the Air Quality Management District reflect values exceeding the national and statewide standards for all three air quality indicators. In 2011, the data shows that standards were only exceeded for PM 2.5 at the North Long Beach monitoring station. Note that with the exception of Ozone, the South Long Beach monitoring station had insufficient data to determine a value (Table 26).

Air quality is a major concern for many Long Beach residents, as discovered in a residential survey done within Long Beach over the last few years. From the West Long Beach Health Survey (2009), respondents reported that “the two most significant health problems confronting West Long Beach… were air quality (e.g., air pollution, smell, smog, asthma, respiratory) (38.4%) and general health issues (obesity, cancer) (24%)…” Other concerns identified in the survey include garbage in the streets, noise, violence and dust.

### Green Space

Another aspect of the community that impacts air quality is the amount of open or green space. There is an estimated 2,600 acres of recreation open space within Long Beach. According to the Long Beach General Plan, Open Space and Recreation Element (republished 2005), the City of Long Beach has 92 parks encompassing 1,413 acres, 22 mini parks totaling 21 acres, nine greenway parks totaling 71 acres, 19 neighborhood parks totaling 147 acres, 13 community parks totaling 464 acres, El Dorado Regional Park with 401 “regional use” acres, and 28 special use parks totaling 310 acres and 12 acres of land at the two ranchos. Greenway parks are largely undeveloped ribbons of green spaces. Special use parks include riverfront recreation vehicle campground, two special events parks (Queen Mary and Rainbow Lagoon), the calm water swimming park at Colorado Lagoon, and Shoreline/Riverfront, Santa Cruz and Victory parks. Some of the unique facilities found in local parks include a skateboard park, lawn bowling greens, an archery range, a model boat building shop, casting pond, paddleboat lake, duck pond, nature center and trails and a dog park.

Within Long Beach’s total 51.3 square miles, the quantity of green space varies greatly by zip code. Green space in Long Beach (as reported by the California Protected Area Database as open space, including federal, state, and special resource protection areas) is distributed as shown on Figure 117 by acres per 1,000 people. East and Southeast (coastal) Long Beach has a significantly higher number of protected areas per person while the entire North and West parts of Long Beach have a significantly fewer number of green spaces. This lack of green space and the population growth that has occurred in the North, West Central and Southwest sections of the city makes access to recreation open space problematic for much of the youth population in these areas.
and Alamitos Bay, Long Beach has 11 linear miles of beachfront property, 1.8 miles of bluffs or hillside areas and 42 acres on four man-made islands (currently used for oil extraction). There are approximately 275 landside acres devoted to oil and gas extraction, with about 85 percent of these acres located in the harbor district.

The LBDHHS Bureau of Environmental Health tests beach water weekly at 52 sites for three types of bacteria that indicate water quality and safety. Throughout Long Beach, water quality is very good during dry summer weather while conditions degrade in the wet weather. During 2011, the Long Beach City beach was closed only once because the water quality did not meet state standards. Colorado Lagoon exhibits excellent water quality meeting state standards during both summer and winter weather. For most of the City’s beaches this disparity between dry and wet weather water quality is a problem; however, it is an issue throughout California. This demonstrates the challenge of successfully mitigating storm water runoff pollution (Heal the Bay, 2011-2012) throughout the City.

Long Beach efforts to locate pollution sources and improve water quality have demonstrated that the Los Angeles River, an enormous pollution challenge because of its 100-plus square mile drainage, is the predominant cause of fecal bacteria in Long Beach waters. While the Los Angeles River will continue to be the major source of contamination for Long Beach beaches, the City’s investigations have resulted in the discovery and repair of leaking or disconnected sewage pump lines and improperly working storm drain diversions. The City has also implemented innovative pilot technology to disinfect runoff in the storm drains (Heal the Bay, 2011-2012).

Lead

Lead is a highly toxic metal that was used for many years in products found in and around homes. It was banned for use in paint in 1978 by the Environmental Protection Agency. An elevated blood lead level in a child is defined as 5 or more micrograms of lead in a deciliter (µg/dL) of blood. Of the children tested by the Long Beach Childhood Lead Poisoning Prevention Program (CLPPP) over the last 3 years in Long Beach, children ages 0-21 with blood lead levels (BLL) ≥5 µg/dL have varied from 195 in 2010, 170 in 2011, and up again to 189 in 2012. Although the number of children with BLL ≥5 µg/dL has not decreased, the number of serious lead poisoning cases, those eligible for services under the CLPPP, has substantially decreased since 2005. Anyone under the age of 21 years with BLL of 19.5 µg/dL or greater or sustained BLL 14.5 µg/dL or greater is considered eligible for case services under the CLPPP.

The cases noted in the Table 26 show a significant disparity of childhood lead poisoning cases for certain zip codes. Even though the number of cases has declined, those zip codes with the highest number of cases since 2000 (90802, 90804, 90805, 90806, 90813) represent 91 percent of the cases since 2005.

The statistics in Table 26 indicate lead sources still remain in the community. Of the approximate 174,236 structures in Long Beach, a majority of them (85%) were built before 1979 (ACS, 2010, 1 year estimate, Table DP04). The City of Long Beach 2005-2010 Consolidated Plan notes that an estimated 46,500 units occupied by low and moderate income households may contain a lead hazard (Table 27).

<table>
<thead>
<tr>
<th>Table 26: LBDHHS, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>Zip Codes</td>
</tr>
<tr>
<td>90802</td>
</tr>
<tr>
<td>90804</td>
</tr>
<tr>
<td>90805</td>
</tr>
<tr>
<td>90806</td>
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<td>90813</td>
</tr>
<tr>
<td>90814</td>
</tr>
<tr>
<td>90815</td>
</tr>
</tbody>
</table>

*California CLPPP A case is defined as a child under the age of 21 years with a blood lead level of 15 µg/dL, or greater of lead in their blood on one venous draw. A child under the age of 21 years with two venous blood lead levels of 14.5 µg/dL, up to 16.4 µg/dL, at least 30 days apart and no more than 90 days apart.
Vector Control
Routine monitoring and treatment of sites where insects breed and rodents seek shelter protects the public’s health and safety. Monitoring and treating these sites, controls the transmission of diseases such as encephalitis, West Nile Virus, rabies, typhus and plague. Table 28 shows the number of sites within Long Beach by zip code that require intervention to control vector sources. Monitoring sites include locations of mosquito traps and chicken coops in addition to identified typhus cases.

### Vector Control Hazards by Zip Code

<table>
<thead>
<tr>
<th>Year Built</th>
<th>Units Occupied by Low / Moderate Income Households</th>
<th>Estimated Percentage, Units with Lead-Based Paint</th>
<th>Number, Units with Lead-Based Paint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-Occupied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1940</td>
<td>2,993</td>
<td>90%</td>
<td>2,694</td>
</tr>
<tr>
<td>1940 - 1959</td>
<td>8,425</td>
<td>80%</td>
<td>6,740</td>
</tr>
<tr>
<td>1960 - 1979</td>
<td>3,056</td>
<td>62%</td>
<td>1,895</td>
</tr>
<tr>
<td>Total</td>
<td>14,474</td>
<td></td>
<td>11,328</td>
</tr>
<tr>
<td>Renter-Occupied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1940</td>
<td>9,666</td>
<td>90%</td>
<td>8,699</td>
</tr>
<tr>
<td>1940 - 1959</td>
<td>17,790</td>
<td>80%</td>
<td>14,232</td>
</tr>
<tr>
<td>1960 - 1979</td>
<td>19,810</td>
<td>62%</td>
<td>12,282</td>
</tr>
<tr>
<td>Total</td>
<td>47,266</td>
<td></td>
<td>35,214</td>
</tr>
</tbody>
</table>

Hazardous Sites
Routine monitoring and complaint inspections for hazardous material situations protect the public’s health by preventing human and environmental exposure to hazardous materials and chemicals. Within Long Beach there are hazardous and medical waste generators, hazardous materials site cleanups and accidental release incidents. Table 29 shows the type and number of sites within Long Beach in 2011 that required intervention, inspection, and monitoring of hazardous sources. The areas with the largest numbers of hazardous waste generators (over 100) are in the North (90805) with 215 sites, West Central (90806 and 90807) with 157 and 150 respectively, Southwest (90802, 90804 and 90813) with 187, 113 and 315 respectively and East (90815) with 106. The areas with the highest concentration of hazardous waste generators are 90802, 90805 and 90813.

### Hazardous Sites by Zip Code

<table>
<thead>
<tr>
<th>Hazardous Site</th>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>90802</td>
<td>Hazardous Waste Generator</td>
<td>187</td>
</tr>
<tr>
<td>90803</td>
<td>Hazardous Waste Generator</td>
<td>69</td>
</tr>
<tr>
<td>90804</td>
<td>Hazardous Waste Generator</td>
<td>113</td>
</tr>
<tr>
<td>90805</td>
<td>Hazardous Waste Generator</td>
<td>215</td>
</tr>
<tr>
<td>90806</td>
<td>Hazardous Waste Generator</td>
<td>157</td>
</tr>
<tr>
<td>90807</td>
<td>Hazardous Waste Generator</td>
<td>150</td>
</tr>
<tr>
<td>90808</td>
<td>Hazardous Waste Generator</td>
<td>82</td>
</tr>
<tr>
<td>90810</td>
<td>Hazardous Waste Generator</td>
<td>65</td>
</tr>
<tr>
<td>90813</td>
<td>Hazardous Waste Generator</td>
<td>315</td>
</tr>
<tr>
<td>90814</td>
<td>Hazardous Waste Generator</td>
<td>20</td>
</tr>
<tr>
<td>90815</td>
<td>Hazardous Waste Generator</td>
<td>106</td>
</tr>
</tbody>
</table>
Housing with Physical Problems

Unhealthy and unsafe housing, including homes with significant upkeep problems, lack of specific safety devices, deferred maintenance, moisture, and pest infestation, contribute to health affects including asthma, lead poisoning, deaths in house fires, falls on stairs and from windows, burn and scald injuries, and drowning in bathtubs and pools. Residents in poorly maintained homes are at a higher risk for injury and illness (U.S. Surgeon General, 2009). The quality of the housing stock in Long Beach is affected by the year the unit was built and its status as owner-occupied versus renter-occupied and occupied versus vacant. As noted previously, of the approximate 174,236 structures in Long Beach, a majority of them (85%) are more than 33 years old (built before 1979) (Figure 118). Of those structures, over 100,000 (58%) are more than 53 years old (built before 1959) (ACS, 2010, 1 year estimate, Table DP04). The Long Beach housing stock is aged with only approximately 11,000 units built after 1990. According to the City of Long Beach 2005-2010 Consolidated Plan, Housing and Household Needs Assessment, housing units older than 50 years generally require rehabilitation in order to maintain their usefulness.

Long Beach housing units have a 7.1 percent total vacancy rate, however there is a great disparity among zip codes. Zip code 90808 has a 2.7 percent vacancy rate compared to 90802 with a 13.9 percent vacancy rate. The combination of zip codes 90802 (13.9%), 90803 (7.3%), 90804 (7.8%) and 90813 (8.2%) referred to as the South Long Beach, has a vacancy rate at or well above that of Long Beach in total.

The same trend is present for renter-occupied versus owner-occupied units. Long Beach as a whole has a 58.4 percent renter-occupied versus 41.6 percent owner-occupied housing base (Table 30). The zip codes of 90802, 90804, 90806, 90813, and 90814 have a higher percentage of renter-occupied units ranging from 65.0 percent to as high as 86.8 percent renter-occupied in 90813.

Summary

Low-income households and older homes are among the factors frequently associated with residences having high concentrations of mouse and cockroach allergens (Cohn et al. 2004, 2006) and maintenance issues that contribute to adverse health conditions such as asthma and lead poisoning. Areas with higher renter-occupied units are also more likely to have significant maintenance problems. The zip codes with the highest vacancy and renter-occupied housing are also those with lower-income and a higher percentage of the populations in poverty. This combination of income levels, renter-occupied housing units and the general age of housing units throughout Long Beach underscore the disparities in the quality of the housing stock in specific zip codes such as West Central (90806) and Southwest (90802, 90804, 90813 and 90814).

The disparities continue in the West Central and Southwest sections of Long Beach in addition to the North, where even though the number of childhood lead poisoning cases has declined, 91 percent of the cases since 2005 have occurred in these areas. These areas also have the largest numbers of hazardous waste generators and the lowest amount of green space. A lack of green space not only impacts air quality, but also makes access to recreation open space problematic. Although air quality and the designation of unhealthy days impacts all of Long Beach, the higher incidence of asthma, obesity and other health issues in the North, West Central and Southwest are exacerbated by the 94 days (2011) that were considered “Unhealthy for Sensitive Populations” within County of Los Angeles.
Health care has seen enormous advances over recent decades, but poor access and utilization of health care can render those advances irrelevant to a population. It is easy to underestimate the challenges of navigating the health care system, and also to overestimate the resources and skills that consumers may have to help them. Though medical interventions may be available, lack of information about services and inability to navigate the complex system can lead to delayed care, failing to get care, or seeking care in settings such as emergency rooms, that are accessible but costly (Sofaer et al, 2009).

Insurance Coverage
The American Community Survey (ACS) estimates the health insurance coverage status of Long Beach residents with either private or public health insurance. Estimates only include data from civilian and non-institutionalized populations.

Overall, 22.3 percent (102,440) of Long Beach residents reported being uninsured; this is a slightly lower percentage than Los Angeles County in general, where the percentage of those uninsured is slightly higher (23.5%). However, both City and County levels are well above the level for California, where 18.5 percent of respondents reported being uninsured.

Insurance Coverage and Age
Health insurance coverage status varies considerably with age. While 2.1 percent of people over the age of 65 and 5.9 percent of respondents under 18 reported being uninsured, 30.7 percent of respondents between the ages of 18 and 64 reported not having health coverage (ACS, 2010, Table S2701).

Insurance Coverage and Race/Ethnicity
The percentage of people lacking insurance was highest among those identifying themselves as Hispanic or Latino (31.8%) followed by Black or African American (19.8%) and Asian (19.2%) respondents. Only 11.0 percent of the White population was uninsured (Figure 119).

Residents without Health Insurance by Race/Ethnicity
Long Beach, 2010

Insurance Coverage and Gender
Males in Long Beach are more likely to report a lack of health insurance coverage than their female counterparts; an estimated 24.5 percent of men in Long Beach do not have health insurance, compared to 20.0 percent of women who lack coverage (ACS, 2010, Table S2701).

Consumers can be more than patients; they can be partners in health care. A consumer who is engaged in her health is a powerful force, with the ability to shape the quality of her own care, help control health care costs, and even shape the way our health care system operates.

“Patients to Partners”, 2009, California Program on Access to Care
Insurance Coverage, Education and Income

Higher education and income are correlated with higher rates of health insurance coverage, and people were more likely to have health insurance at each increase in education level (Figure 120). Individuals in Long Beach reporting less than a high school level education more often lacked health insurance coverage (45.7%) than individuals with subsequently higher levels of education; 31.6 percent of high school graduates, 21.6 percent of those who attended some college, and 11.8 percent of those with at least a bachelor’s degree reported being uninsured (ACS, 2010, Table S2701).

Individuals earning between $25,000 and $49,999 annually had the highest percentage of uninsured (31.9%), and those earning $75,000 to $99,000 annually had the lowest (13.4%) (Figure 121) (ACS, 2010, Table S2701).

Approximately 30 percent of those at or below the federal poverty level (FPL) lacked health insurance coverage (Figure 122). A higher percentage (35.7%) of individuals between 100-199 percent of the FPL reported no insurance, perhaps because they fail to qualify for assistance from some public programs. This is consistent with the findings based on income level, where those in the lowest income bracket had a slightly lower percentage uninsured than those in the next bracket. Only 15.2 percent of respondents earning over 200 percent of the FPL were uninsured (ACS, 2010, Table S2701).

Pre-Existing Condition Insurance Plan

The Patient Protection and Affordable Care Act of 2010 created the Pre-Existing Condition Insurance Plan (PCIP) to make health coverage available to people with pre-existing conditions. PCIP provides a new health coverage option for people who have been without health coverage for at least 6 months and have a pre-existing condition or have been denied health coverage because of their health condition. In California, the total enrollment was 11,746 people in June 2012, 26.3 percent of whom live in the County of Los Angeles. There were 128 subscribers in Long Beach as of June 2012 (Table 31), though it should be noted that participation has been increasingly very rapidly throughout 2012 (06/12 PCIP Summary, Managed Risk Medical Insurance Board).

Health Insurance through Public Providers

Public health insurance plays an important role for families who do not otherwise have private health insurance. Medi-Cal, California’s Medicaid program, provides public health insurance to low-income individuals including families with children, seniors, persons with disabilities, and pregnant women. The California Department of Health Care Services recently began making enrollment data available by zip code. In the last quarter of 2011 there were 130,090 individuals in Long Beach who were enrolled in Medi-Cal and meeting their monthly share of the costs.
Healthy Families provides low cost health, dental, and vision insurance to children who do not have insurance and do not qualify for Medi-Cal. As of December 2011, there were 8,231 Healthy Family program subscribers enrolled from Long Beach (Figure 123) (MRMIB, 2009-2012). Additionally, the CaliforniaKids and Healthy Kids programs provide insurance to many children who are ineligible for Healthy Families or Medi-Cal due to immigration status or income limits. In Long Beach, as of June of 2010, there were 2,603 children in Long Beach enrolled in CaliforniaKids (HealthyCity.org, California Coverage and Health Initiatives, 2010). Enrollment in Healthy Kids was 650 in June of 2010, down from 1,015 in December of 2009. Access for Infants & Mothers (AIM) and Kaiser Child Health Plan are also available within Long Beach to reduce the number of uninsured pregnant mothers and children.

Clinical Preventive Services

Despite evidence that early detection of many common diseases and preventive action can greatly improve health outcomes, communities continue to struggle with ensuring access to and usage of appropriate clinical preventive services. Even the populations served by Medicare and Medicaid tend to underutilize the preventive services covered under those programs.

Prenatal Care

Between 2000 and 2008, the percentage of pregnant women in Long Beach that first received prenatal care in the first trimester ranged from 84.6 percent to a high of 92.3 percent in 2005. However, this percentage declined from the peak in 2005 to 86.5 percent in 2008 (Figure 124) (UCSF, FHOP, 2008). The percentage of women receiving late prenatal care showed a corresponding increase in the years since 2005 with second trimester care increasing from 5.9 percent to 10.9 percent and third trimester care increasing from 1.2 percent to 2.1 percent (Figure 125).
Diabetes is characterized by high blood sugar levels, which can lead to a variety of complications. Diabetic people are at a 2-4 times higher risk of heart disease and stroke than those without diabetes. Diabetes can also lead to other complications, such as loss of vision, kidney failure, and amputations of legs or feet. Effective control of the patient’s blood sugar levels and blood pressure can prevent or delay these complications (CDC Diabetes Report Card, 2012).

The U.S. Preventive Services Task Force recommends disease management, including regular screening for diabetes related health problems, because there is strong evidence that management improves glycemic control, monitors glycated hemoglobin, and detects diabetic retinopathy. Sufficient evidence also suggests that diabetes management improves screening of the feet and legs for problems related to diabetes, lower extremities for neuropathy and vascular changes.

As reported in Chapter 1, Health Status, the estimated percent of adults age 45 and over who have ever been told by a doctor that they have diabetes, sugar diabetes or as borderline or pre-diabetes in all Long Beach zip codes is greater than 15 percent (15.3%-24.3%). Similar to the high percentage diagnosed with diabetes, the diabetes hospitalization rate for Long Beach in 2010 ranges from the highest rate in 90813 (292 per 100,000) to the lowest rates in 90803 (97 per 100,000) and 90815 (101 per 100,000). Additional data on access to care issues (for diabetes and other issues to follow) is not available specifically for Long Beach; therefore statistics were gathered from the Los Angeles County South Bay Service Planning Area for which Long Beach is a part. This data is not representative of Long Beach, but is being used as an indicator of access to care issues. Within the South Bay area, of those who have been diagnosed with diabetes, 52.1 percent feel very confident in their ability to control and manage their disease and 38.7 percent feel somewhat confident in doing so. However, 14.6 percent of diabetics were not given a diabetes care plan by their doctor. When individuals ever diagnosed with diabetes were asked how many times per month they checked their glucose or sugar (or had it checked by a family member or friend), 13 percent reported that they never did, and 10.5 percent reported only 1-2 times (Figure 126) (CHIS, 2009).

Most diabetics (78%) had had an eye exam with pupil dilation within the past year (CHIS, 2009), although 6.2 percent had never had such screening. Because of the circulatory problems associated with diabetes, it is important to evaluate patient’s legs and feet for sores regularly. A little more than 60 percent (62%) of diabetics reported being examined fewer than three times (CHIS, 2009).

Colorectal Screening

According to CHIS 2009, 45 percent of residents of the South Bay area over the age of 40 were not in compliance with the recommendations for colorectal examinations. Generally, the samples sizes were not adequate to determine the rates of colorectal screening among ethnic groups, but the Hispanic or Latino population seemed to have lower rates of compliance than the Black or African American or White population (over 55% as opposed to under 50% non-compliance). Among those who had not had the screening, 25.6 percent said it was because no doctor had recommended screening.

On the other hand, 79 percent of South Bay area residents over the age of 50 reported having had sigmoidoscopy, colonoscopy or a fecal occult blood test at some point in their lifetime (CHIS, 2009).

Gender-specific Health Screening

The American Cancer Society recommends that men should talk to a doctor about the pros and cons of testing for prostate cancer so they can decide if testing is the right choice for them starting at age 50 (ACS Guidelines, accessed 2012). In the South Bay area, among men aged 40 and older, 44.4 percent had undergone a prostate-specific antigen (PSA) test, 33.0 percent of them within the previous 12 months. However, 55.6 percent of men over 40 had never had a PSA screening, which allows for early detection of prostate cancer (CHIS, 2009).

The Pap test is the most effective screening test for cervical cancer and is generally recommended to start once a woman is sexually active or by age 21. Among women over the age of 18 in the South Bay area, 88.6 percent had had a Pap test within the previous 3 years (Table 32) (CHIS, 2007).
Usual Source of Care

The 2009 CHIS survey provides information on usual sources of health care for South Bay residents; however, this data should be interpreted with caution because of statistical instability. Approximately 60% of adult residents report a doctor's office, a health maintenance organization (HMO), or Kaiser as their usual source of care. Approximately 20% report a community clinic, government clinic, or community hospital as their usual source of health care. Around 1 percent report the emergency room or urgent care, or some other place as their usual source.

Health Care Barriers

Barriers to accessing the health care system can be geographic, cultural, socioeconomic or organizational. There are two geographical areas of Long Beach that have a shortage of health professionals. Long Beach West Central (90806, 90807, and 90810) is federally designated as an Underserved Area by the primary care professional criteria and North Long Beach (90805) is federally designated as an Underserved Area by the mental health professional criteria. Cultural and socioeconomic barriers are more difficult to estimate since the population facing such barriers are often less easily accessed to identify obstacles. When asked if they ever delayed medical care that they felt they needed over the previous year, 12.8 percent of South Bay residents reported that they did delay or did not receive health care. The percentage was highest among the White population (17.2%) followed by Black or African American residents (15.2%) and Hispanics or Latino residents (8.5%) and Asian residents (8.3%) (Figure 128).

Mammogram Screening History

The American Cancer Society recommends yearly mammograms for women starting at age 40 and continuing for as long as a woman is in good health. According to the 2009 CHIS, most of the women over the age of 30 years in the South Bay area had had a mammogram within the past two years (65.8%) (Table 33).

However, screening history varied considerably by race, with 42.5 percent of Hispanic or Latina women having never had a mammogram (Table 34).

Health Care Access

While the underutilization of health care services continues to remain an issue, according to the 2009 CHIS data, 90.8 percent of adult South Bay residents 18 and older, and 92.8 percent of children through age 17, reported having a usual place to go when they were sick or needed health advice (Figure 127). However, the percentage of individuals that do not have a usual source of health care increases for those that do not currently have health insurance. For individuals without health insurance, only 46.4 percent of adults and 49 percent of children 17 and under reported having a usual place to go when they were sick or needed health advice (CHIS, 2009).

Table 33. CHIS, 2009

<table>
<thead>
<tr>
<th>Most recent mammogram</th>
<th>Adult 30-59</th>
<th>Adult 40-64</th>
<th>Senior 65-79</th>
<th>Senior 80+</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years or less</td>
<td>18.1%*</td>
<td>82.6%</td>
<td>82.6%</td>
<td>61.8%</td>
<td>65.8%</td>
</tr>
<tr>
<td>More than 2 years</td>
<td>5.8%*</td>
<td>10.3%</td>
<td>13.4%*</td>
<td>25.0%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Never had a mammogram</td>
<td>76.1%*</td>
<td>7.1%</td>
<td>4.0%*</td>
<td>13.3%*</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

*Denotes a category that is statistically unreliable because of high error or small sample size or both.

Figure 127. CHIS, 2009

Residents with a Usual Source of Health Care by Insurance Status and Age Group, South Bay, 2009

Usual Source of Care

The 2009 CHIS survey provides information on usual sources of health care for South Bay residents; however, this data should be interpreted with caution because of statistical instability. Approximately 60% of adult residents report a doctor's office, a health maintenance organization (HMO), or Kaiser as their usual source of care. Approximately 20% report a community clinic, government clinic, or community hospital as their usual source of health care. Around 1 percent report the emergency room or urgent care, or some other place as their usual source.

Table 34. CHIS, 2009

<table>
<thead>
<tr>
<th>Most recent mammogram</th>
<th>Asian</th>
<th>Black or African American</th>
<th>Hispanic or Latina</th>
<th>White</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years or less</td>
<td>67.0%</td>
<td>82.3%</td>
<td>43.3%</td>
<td>75.4%</td>
<td>65.8%</td>
</tr>
<tr>
<td>More than 2 years</td>
<td>21.6%</td>
<td>5.2%</td>
<td>9.1%*</td>
<td>9.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Never had a mammogram</td>
<td>10.8%</td>
<td>12.6%*</td>
<td>42.5%</td>
<td>15.5%</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

*Denotes a category that is statistically unreliable because of high error or small sample size or both.

Mammogram Screening History

South Bay, 2009

Health Care Barriers

Barriers to accessing the health care system can be geographic, cultural, socioeconomic or organizational. There are two geographical areas of Long Beach that have a shortage of health professionals. Long Beach West Central (90806, 90807, and 90810) is federally designated as an Underserved Area by the primary care professional criteria and North Long Beach (90805) is federally designated as an Underserved Area by the mental health professional criteria. Cultural and socioeconomic barriers are more difficult to estimate since the population facing such barriers are often less easily accessed to identify obstacles. When asked if they ever delayed medical care that they felt they needed over the previous year, 12.8 percent of South Bay residents reported that they did delay or did not receive health care. The percentage was highest among the White population (17.2%) followed by Black or African American residents (15.2%) and Hispanics or Latino residents (8.5%) and Asian residents (8.3%) (Figure 128).
Immunization Status of Preschool and Kindergarten Students

The California Department of Public Health publishes data on the immunization status of school children. Although the data for 7th to 12th grades is not comprehensive, data is available for preschool and kindergarten students for the 2011-2012 school year.

Immunization data is available for 7,703 Long Beach preschool students of ages between 24 months (2 years) and 59 months (4 years-11 months) (Figure 129). The majority of students, close to 94 percent were reported as up-to-date with their immunization schedules. A limited number (6.5%) were reported as conditional, which meant that the child needed to be followed up on because he/she lacked (i.e., is not yet due for) at least one dose but did not have a personal beliefs or permanent medical exemption, or had a physician affidavit of Temporary Medical Exemption for one or more doses. Personal Belief Exemptions (PBE) were reported for 120 children (1.6%). PBEs indicate that a parent signs an affidavit requesting an exemption from the immunization requirements for entry to school because all or some immunizations are contrary to the parent’s beliefs. A small number of students reported a medical exemption. For kindergarteners, information was available for 6,339 students. Of those, 5,953 were up to date, 310 were reported as conditional, and 71 reported a PBE (Figure 129).

Health Services Inventory

As of June 30, 2011 there are a total of 1,705 hospital beds in the City of Long Beach; the bulk of these inpatient care assets are in the 90806 zip code, where there are 993 licensed beds (Table 35) (OSHPD, 2012). The hospital with the highest number of beds is Long Beach Memorial Medical Center, which is located in the 90806 and houses 462 beds. In addition, there are a total of 27 licensed long-term care facilities totaling 2,750 beds, 14 community clinics, 9 dialysis clinics, 22 home health agencies, and 5 hospice providers (OSHPD, 2012). There is one psychology clinic in Long Beach, The Guidance Center, in 90807. Medical assets in Long Beach are shown in Map 14.
Two Long Beach Medical Service Study Areas are designated Health Professional Shortage Areas, which is a prerequisite for participation in a number of Federal programs. Long Beach West Central (90806, 90807, and 90810) is federally designated as an Underserved Area by the primary care professional criteria. North Long Beach (90805) is federally designated as an Underserved Area by the mental health professional criteria. Table 36 lists medical facilities by Long Beach zip codes.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Zip</th>
<th># Beds</th>
<th>License Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Hospital of Long Beach</td>
<td>90804</td>
<td>208</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>La Casa Psychiatric Health Facility</td>
<td>90805</td>
<td>16</td>
<td>Psychiatric Health Facility</td>
</tr>
<tr>
<td>Miller Children's Hospital</td>
<td>90806</td>
<td>383</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>Long Beach Memorial Medical Center</td>
<td>90806</td>
<td>462</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>Pacific Hospital of Long Beach</td>
<td>90806</td>
<td>148</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>Pacific Hospital-South Campus D/P APh</td>
<td>90813</td>
<td>36</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>St. Mary Medical Center</td>
<td>90813</td>
<td>389</td>
<td>General Acute Care Hospital</td>
</tr>
<tr>
<td>Tom Regidate Memorial Recovery Center</td>
<td>90813</td>
<td>63</td>
<td>Chemical Dep. Recovery Hospital</td>
</tr>
</tbody>
</table>

Map 14. OSHPD Interactive Mapping Tool, Accessed 8/2012

<table>
<thead>
<tr>
<th>Facilities in Zip Code 90802</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Care Facilities</td>
<td></td>
</tr>
<tr>
<td>Colonial Care Center</td>
<td>196</td>
</tr>
<tr>
<td>Wells House</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Number Of Beds</strong></td>
<td><strong>214</strong></td>
</tr>
</tbody>
</table>

Clins

- Children's Clinic Family Health Center at Cesar Chavez
- Dialysis Clinics
- Bio-Medical Long Beach Hemodialysis Unit

**Home Health Agencies**

- Community Health Care Emporium, Inc.
- Optima Health Care Services, Inc.
- Oxford Health Care
- Total Care Home Health Services
- Hospice
- Wells House

Facilities in Zip Code 90803

- Long Term Care Facilities
- Broadway By The Sea
- 98

**Home Health Agencies**

Elevate Health

Facilities in Zip Code 90804

- Long Term Care Facilities
- Bel Vista Healthcare Center
- Country Villa Belmont Heights Healthcare Center
- Marlora Post Acute Rehabilitation Hospital
- Pacific Palms Healthcare
- Regency Oaks Care Center
- Shoreline Healthcare Center
- 75

**Total Number Of Beds**

| 564 |

**Clinics**

- Tichenor Orthopedic Clinic for Children
- Home Health Agencies
- Cambrian Homecare
- Madison Home Health Care
- Hospice
- Rose Room Hospice of South Bay
### Facilities in Zip Code 90805

<table>
<thead>
<tr>
<th>Long Term Care Facilities</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Villa Bay Vista Healthcare Center</td>
<td>70</td>
</tr>
<tr>
<td>Windsor Convalescent Center of North Long Beach</td>
<td>120</td>
</tr>
<tr>
<td>Windsor Gardens Convalescent Center of Long Beach</td>
<td>199</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
<td><strong>389</strong></td>
</tr>
</tbody>
</table>

**Clinics**
- Children's Clinic Family Health Center, N. Long Beach
- West County Medical Corporation

**Dialysis Clinics**
- FMC Dialysis Services Of North Long Beach
- Nephron Dialysis Center Of Lakewood
- Home Health Agencies
- B & F Home Health, Inc.
- Extended Health Care - Parent
- Rainbow Home Health Care Agency
- Hospice
- Home Reach Hospice

### Facilities in Zip Code 90807

<table>
<thead>
<tr>
<th>Long Term Care Facilities</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bixby Knolls Towers Health Care and Rehab Center</td>
<td>99</td>
</tr>
<tr>
<td>Catered Manor Nursing Center</td>
<td>83</td>
</tr>
<tr>
<td>Hillcrest Care Center</td>
<td>154</td>
</tr>
<tr>
<td>Palmcrest Care &amp; Rehabilitation Center</td>
<td>99</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
<td><strong>435</strong></td>
</tr>
</tbody>
</table>

**Dialysis Clinics**
- Bixby Knolls Dialysis
- United Dialysis Center

**Home Health Agencies**
- Accent Home Care, Inc.
- Ace Health Systems, Inc.
- Comfort Home Health Care, Inc.
- Crystal Home Health Care, Inc.
- Excell Home Care Inc.
- Heralds Home Health
- Long Beach Health Care
- Molina Home Health, Inc.
- Royal Majesty Home Care, Inc.
- Santa Rita Home Care, Inc.

### Facilities in Zip Code 90806

<table>
<thead>
<tr>
<th>Long Term Care Facilities</th>
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<tbody>
<tr>
<td>Atlantic Memorial Healthcare Center</td>
<td>109</td>
</tr>
<tr>
<td>Pacific Care Nursing Center</td>
<td>99</td>
</tr>
<tr>
<td>Royal Care Skilled Nursing Center</td>
<td>98</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
<td><strong>306</strong></td>
</tr>
</tbody>
</table>

**Clinics**
- Birth Choice Health Clinic
- Children's Dental Health Clinic
- Planned Parenthood Los Angeles - Long Beach Center
- S Mark Taper Foundation Children's Clinic Family Health Center
- The Children's Clinic Family Health Center in Central Long Beach
- West County Medical Corporation

**Dialysis Clinics**
- Long Beach Harbor (UCLA)
- West Coast Dialysis Center, LLC

### Facilities in Zip Code 90808

**Hospice**
- Life Care Hospice Corp.

### Facilities in Zip Code 90810

<table>
<thead>
<tr>
<th>Long Term Care Facilities</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Fe Convalescent Hospital - Long Beach</td>
<td>90</td>
</tr>
</tbody>
</table>

**Clinics**
- Westside Neighborhood Clinic
Emergency Medical Assets and Use

Emergency transportation services are provided primarily by the Long Beach Fire Department (LBFD), which coordinates eight paramedic rescue ambulances and five basic life support ambulances.

Use of emergency room services in Long Beach hospitals has increased since 2001, as measured by the number of discharges from emergency rooms (Figure 130). The most recent data is available for 2010, when 29,538 discharges were reported. Hospitalization rates are available for Long Beach zip codes (Figure 131), where usage is high and trending upward in West Central (90806) and Southwest (90802 and 90813), high and stable or trending downward in North (90805) and West Central (90807), and lower but trending upward in West Central (90810) and Southwest (90804 and 90814). Hospitalization rates are low and trending downward in Southeast (90803) and East (90808 and 90815) (OSHPD, 2010).

<table>
<thead>
<tr>
<th>Facilities in Zip Code 90813</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long Term Care Facilities</strong></td>
</tr>
<tr>
<td>Genesis Healthcare Center</td>
</tr>
<tr>
<td>Harbor View Center</td>
</tr>
<tr>
<td>Villa Maria Care Center - Long Beach</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
</tr>
</tbody>
</table>

**Clinics**
- Children's Clinic at Long Beach Multi-Service Center
- The Family Clinic of Long Beach
- Vasik Polsk Children's Clinic Family Health Center
- Dialysis Clinics
- Long Beach Dialysis Center

**Facilities in Zip Code 90814**

<table>
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<tr>
<th><strong>Long Term Care Facilities</strong></th>
<th><strong>Beds</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alamitos Belmont Rehabilitation Hospital</td>
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</tr>
<tr>
<td>Edgewater Convalescent Hospital</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
<td><strong>175</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Facilities in Zip Code 90815</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long Term Care Facilities</strong></td>
</tr>
<tr>
<td>Home Health Agencies</td>
</tr>
<tr>
<td>Intercommunity Care Center</td>
</tr>
<tr>
<td>Long Beach Care Center</td>
</tr>
<tr>
<td><strong>Total Number of Beds</strong></td>
</tr>
</tbody>
</table>

**Home Health Agencies**
- Exceptional Home Health Care of So. Calif., Inc.
- Grace Home Health Care

Figure 130. OSHPD Public Discharge Dataset, 2000-2010

Discharges from Emergency Rooms
Long Beach, 2000-2010
Dental Care

Long Beach specific data is not readily available and as a result, dental care data is presented for the South Bay area, which includes Long Beach in addition to other cities.

In the South Bay area, dental coverage is limited and varies by race, socioeconomic status, and age. Overall, 37.2 percent of adults do not have dental insurance (CHIS, 2007). Additionally, 17.5 percent of respondents reported that they could not afford dental care (CHIS, 2003).

Dental Care and Race/Ethnicity

Native Hawaiian or Pacific Islander and Hispanic or Latino respondents are most likely to report a lack of dental care coverage (55% and 48.5%, respectively). Seventy (70.2%) percent of Blacks or African Americans reported having dental insurance, while 59.1 percent of White respondents reported to be covered (CHIS, 2007, OMB). Among Hispanic or Latino, Black or African American, White, and Asian residents of the South Bay area, 26 percent, 16.9 percent, 14.8 percent, and 12.2 percent respectively, reported not being able to afford dental care (CHIS, 2003, Census 2000).

The number of children aged 2-17 years without dental insurance varies across racial/ethnic groups, with 25.1 percent of Hispanic or Latinos, 15.8 percent of Whites and 14.2 percent of Black or African American respondents reported a lack of dental coverage. Compared to their White counterparts, Hispanic or Latino children were less likely to be able to afford dental care (10.8% versus 4.2%) (CHIS, 2007, UCLA CHPR, 2007).

Dental Care and Socioeconomic Status Indicators

Respondents with at least an associate’s degree had higher rates of coverage; 68.6 percent reported having dental insurance, while 73.1 percent of those with a master’s degree had coverage. Adults who completed less than high school were least likely to report having dental insurance (CHIS, 2007).

In addition, while 69.9 percent of respondents with incomes at least twice as high as the Federal Poverty Level reported having visited the dentist in the preceding year, only 47 percent of low income respondents had visited within the last year. The disparity is evident considering the overall reported percent of people having visited a dentist in the last year is 65 percent (CHIS, 2003). Also, 28.8 percent of children from homes at or below the federal poverty line did not have dental coverage (CHIS, 2007).

Men (54.6%) were less likely to report having dental coverage during the preceding year than women (58.1%) (CHIS, 2007). Moreover, while 71.2 percent of women reported having visited the dentist within the last year, only 58.9 percent of men had done so (CHIS, 2003). The disparity increases when looking exclusively at individuals who earn up to 99% of the Federal Poverty Level, where the percent of men and women who visited the dentist in the preceding year is 35.4 percent and 55.1 percent, respectively (CHIS, 2003).

Summary

Recent data indicates that greater than 20 percent of Long Beach residents are uninsured; however, the percentage uninsured is much higher for those with lower educational attainment. Close to 50 percent of those that did not complete high school are uninsured. Populations for which there is more affordable and available public coverage, such as children and those over 65, are the most likely to have health insurance. A slightly higher percentage of those between 100 and 199 percent of the Federal Poverty Level are uninsured (35.7%) than those at or below the FPL (30.0%). This may reflect the greater availability and eligibility of public programs for those at lower incomes. Individuals in the next lowest income brackets may still be unable to afford health insurance, but are no longer eligible for public programs.

Hispanics or Latinos report higher percentages uninsured than other races and ethnicities (31.8%). Hispanic or Latina women are also the least likely to access preventive screenings, such as mammograms. More than 40 percent of Hispanic or Latina women over 30 reported that they had never had a mammogram.
The recent economic downturn has likely had a negative effect on health care access and utilization in Long Beach. Since 2005, there has been a yearly increase in the percentage of women waiting until their second trimester to first access prenatal care. There has also been more than a 50 percent increase in annual emergency room discharges from Long Beach hospitals between 2001 and 2010.

However, insurance coverage, health care access and utilization, and utilization of preventive services may change in upcoming years due to the passage of the Affordable Care Act. A few aspects of the law should positively impact populations in need in Long Beach, and increase the affordability of preventive care. For instance, states will be able to receive federal matching funds for covering additional low-income individuals and families under Medicaid and in 2014 all discrimination against pre-existing conditions will be prohibited. As of June 2012, there were 128 Long Beach subscribers to the Pre-Existing Condition Insurance Plan, and participation in that program has been increasing rapidly. All new plans must cover certain preventive services such as mammograms and colonoscopies without charging a deductible, co-pay or coinsurance. The new law also includes rules to prevent insurance companies from denying coverage due to a pre-existing condition. Hopefully, these changes will support an improved picture of health care access and utilization, especially for preventive services, in upcoming years.

APPENDICES

Appendix 1 – Key Informant Interviews & Community Forums

Key Informant Interviews

Background: In order to paint a comprehensive picture of the health status of the City of Long Beach, the community health assessment sought community perspectives regarding key health issues in addition to the analysis of secondary data. Over 25 community leaders were invited to participate in the key informant interview. Of those, 13 leaders from community organizations representing the diversity of Long Beach participated in face-to-face interviews conducted by trained Long Beach Department of Health and Human Services (LBDHHS) staff. The interviews took place between June-August 2012. The summary below highlights key strengths, opportunities and issues perceived as important by a group of community leaders.

I. GENERAL QUESTIONS

1. What communities do you represent? (For example, racial/ethnic groups, general population, elderly, youth).

The key informants represented organizations that serve a broad and diverse cross section of the Long Beach community. The diversity in the populations served by the community-based organizations represented by the key informants reflect individuals from various ethnic groups, socioeconomic strata, educational levels, age, sexual orientation, and geography. These organizations also serve the underserved populations in Long Beach.

“Our agency serves substance abusing adults, mostly in the age range of 25-34 years. This age group represents 35% of our total client population. Over half (55%) are Latinos and about 40% are African Americans. An overwhelming majority of our clients are male. We have a 70 to 30 male to female ratio. This group we serve is very much underserved.”

“We serve the Latino community in Long Beach. Our focus is youth development among young adults ages 16 to 24. Our clients are from all over Long Beach, although a good number of them are from the Central and Westside areas of the City.”

“We serve the gay, lesbian, bisexual, and transgender community. Our agency also serves straight individuals and our clients are of broad age and socioeconomic backgrounds. We serve a very localized community. Most of the people we serve are from around our agency site.”

“We serve the Greater Long Beach area with a focus on Long Beach area. Basically, we cover about 9 to 12 mile radius of Long Beach city. We fund and develop specific programs
like the winter shelter for South Bay area—this gives us a greater sphere of influence. We serve the homeless but our outreach is more passive outside of Long Beach. We don’t do outreach outside of Long Beach.”

“We serve people with low income. But we see individuals and families from all income levels that call us for assistance and information.”

“We serve people infected and affected with HIV/AIDS. They are mostly gay men representing diverse racial and ethnic groups. We also have family programs that provide support for the entire family.”

“We serve the Greater Long Beach South Bay area. We see patients as far as Lake Elsinore. The families that come here are low income from the surrounding Long Beach area like Bellflower.”

“We represent all ethnic groups and low income families. But we see mostly Cambodian families.”

“I represent the Khmer community. We serve young Cambodian women in high school. But some boys now and we have some youth that identify as gay and lesbian. But we don’t turn any youth away.”

2. What makes Long Beach unique or special?

The respondents mentioned a variety of characteristics or qualities that are unique to Long Beach with nearly all of the respondents stating that diversity is most special about Long Beach. Other special qualities about Long Beach mentioned by the respondents included the atmosphere of collaboration and problem solving among community agencies.

“Long Beach has diversity of ethnicity, culture, sexual orientation and socioeconomic status. We are a coastal community with nice ocean and beach activities. Long Beach has a great love for families and pets. I think Long Beach is a proactive and progressive community. Think about our smoking policies and ban on plastic bags. Our social service agencies are connected and very collaborative. We have the California State University of Long Beach that is very much committed to community service. We have nice places to hang out like along 2nd St and the Pike area.”

“We have our own community health clinic, our own health department, our own school district, our own children’s hospital and a bunch of non-profits that work together and we engage the community. We are a community that wants to look at creative solutions for health problems in a broad sense.”

“I like and very much appreciate the diversity we have in Long Beach. We have opportunities to learn about cultural differences and similarities. We also have an infrastructure in the city to support working with these different communities.”

“Long Beach is a small town masked as a large city. People are very connected. It’s much simpler here to link people to care. The agencies know each other. Long Beach takes care of each other. People and agencies talk to each other and the agencies want to help each other. People know who you are. It’s very connected.”

“We are an urban beach community and very regional almost in a parochial way—I mean that in a positive way. Long Beach is not South Bay. We have a very interesting culture.”

“Our diversity is special, however there are segregated areas…not a lot of mixing.”

“It’s a large city with a small town atmosphere.”

3. What groups or communities have difficulty living in Long Beach?

The respondents stated specific populations that have difficulty living in Long Beach. Most of the respondents mentioned that families and individuals from low socioeconomic and educational levels face challenges in meeting their basic living needs, such as food, shelter, and employment.

“People with low socioeconomic status and those living here post-incarceration. They need a lot of services. The economy has been a huge struggle, especially for the men we see here. The men are feeling disillusioned for not being able to fulfill their roles as providers for their families.”

“Definitely the poor--largely due to gentrification. I have also seen a change in public attitude towards the undocumented in a way I have not seen before. This is a real issue now and a very serious challenge for the poor and undocumented population. It’s harder to get work so we see more people living in poverty. This is very stressful for many of our families. I see a lack of hope among undocumented kids. They think “why should I do well in school when there is no future for me.” The Dream Act was a hope for many of these kids. Gentrification is a serious issue.”

“Our young people face challenges living in the city, like not being able to access services that are youth-friendly. They are having a hard time getting a job.”

“Many of our elders do not speak English and they have difficulty understanding information and accessing services. We have a generational gap between the young and elderly members of the Cambodian community. They can’t always communicate and this can lead to feeling of isolation and lack of support for our elders.”

“Uneducated people who have a hard time understanding information like monolingual non-English speakers have a hard time living in Long Beach. They have no concept of what is available to them.”

“The poor, undereducated, underemployed, and unemployable struggle in Long Beach. We have a lot of people living in poverty due to lack of education.”
4. What do you think about the safety of Long Beach? Consider safety at home, work, schools, playgrounds, parks, and mall. Do neighbors know and trust one another?

While many of the respondents noted that safety is of great concern, some mentioned that perceptions of safety depend upon where you live in the city.

“For the middle and high income individuals, safety may not be a major concern. However, for the low-income people, safety is a big issue. The parks where they live are not safe and they have a lot of anxiety and mistrust. I am also seeing an increase in violent crimes in Long Beach. I see more coverage of crimes in the paper.”

“We’ve kind of gone backwards recently. Funding has been cut for community policing and this is a real problem. The more police can be seen in the community as a positive figure is better. We still have significant gang issues. The more socioeconomic problems you have, the more stress you have. This is toxic stress. It starts in our childhood and follows us well into the rest of our lives.”

“I think racial minorities such as African Americans and Cambodians have a hard time living here. Also, the gay community. I would say they have a hard time living in Long Beach too.”

“I think we need to fix our environment. We need to teach people how to exercise. Exercise is a big antidote for depression.”

“We need to look at our built-in environment. We need to educate people about what to eat. We need to get the community engaged and get consistent messaging among nonprofits and the health department. Let’s make it hip to carry a water bottle.”

“Get people educated and trained to have good jobs. People are not going to focus on health if they cannot provide the basic necessities for their families.”

II. HEALTH AND HUMAN SERVICES

1. What are the top three most important health issues in Long Beach?

The respondents mentioned a variety of key health and social issues in Long Beach. Social issues are recognized as key factors affecting the overall health status of the community. The list below shows the most commonly mentioned health and social issues stated by the respondents.

Most commonly mentioned health issues:
- Obesity-includes physical activity, nutrition, better access to fresh fruits and vegetables, more fun and free options for exercise activities or programs, better education on how to make healthy choices, policies addressing the built environment (street walkability and bikeability)
- Access to care-includes transportation, language and cultural barriers and lack of youth-friendly clinics and services
- Diabetes
- Asthma
- Mental health
- High blood pressure
- Other health issues mentioned include: smoking, breast and cervical cancer, sexually transmitted diseases, HIV, substance abuse, health needs of the aging population, air and water quality

Most commonly mentioned social issues:
- Poverty
- Unemployment
- Lack of affordable housing
- Community safety (includes gangs, violence, and crimes)
- Lack of education and English language proficiency
- Homelessness

2. What are your ideas for addressing these health issues?

The respondents offered a variety of potential solutions to the identified health issues. However, there were common themes from the solutions provided by the respondents, such as more education in the community and policy changes that impact behavior change.

“We have very limited resources and so much more to do, we need to continue to serve the underserved by providing evidence-based interventions. We need more one stop shop for services where we can integrate health, social, and employment services under one roof.”

“For mental health I would love to see a multifaceted approach like early screening and addressing depression and anxiety for kids. We need to address the stigma associated with mental health.”

“We need to fix our environment. We need to teach people how to exercise. Exercise is a big antidote for depression.”

“We need to look at our built-in environment. We need to educate people about what to eat. We need to get the community engaged and get consistent messaging among nonprofits and the health department. Let’s make it hip to carry a water bottle.”

“Get people educated and trained to have good jobs. People are not going to focus on health if they cannot provide the basic necessities for their families.”

III. PHYSICAL ENVIRONMENT

1. Please identify any environmental concerns or dangers in Long Beach.

The majority of the respondents mentioned air and water quality as environmental concerns in Long Beach. Several respondents specifically mentioned the impact of the Port of Long Beach on air quality in the city.
The respondents mentioned the availability of recreational activities offered by the Department of Parks, Recreation and Marine. Many appreciated the close proximity of the beach and the creation of more biking paths in certain parts of the city while others stated the need for more specific activities targeted to underserved groups.

“We have plenty of summer activities offered by Parks and Recreation. We also have afterschool programs through the parks. We have an abundance of activities for those who can afford them but fewer options for low income families to participate.”

“We have a lot in Parks and Recreation but we need more like increasing zumba classes. We need more free ethnic dances that appeal to others like salsa, zumba, folkorico and Aztec dances. We need a variety of sports activities that appeal to kids.”

“It’s difficult for youth to access parks and recreation activities because of hours. We need to get out of the 9 to 5 mode. Many low income and working families are not able to access the services and facilities because they hold more than one job. They get home late and they don’t feel safe going to the parks at night. We don’t have enough open spaces. Programs for seniors are not available everywhere.”

“I think recreational activities in Long Beach are very accessible and plenty but they are not promoted well enough. You really have to search for them. People don’t seem to know they are available. They need to be better publicized.”

“Park and Rec have great programs but not affordable for all. There are also safety concerns.”

**COMMUNITY FORUMS**

**Background:** The LBDHHS conducted a series of community forums (i.e., focus groups) to engage Long Beach residents in identifying key health issues in their respective neighborhoods. Community members were asked to offer potential solutions to the health issues they identified and share their thoughts on a number of social issues affecting the quality of life in Long Beach. The LBDHHS conducted a total of four community forums from July through September 2012, which garnered over 40 participants. To optimize community participation, food, transportation, childcare and raffle prizes were provided. In addition, language interpretation in Spanish and Khmer were provided to participants. LBDHHS staff facilitated the focus groups. The focus group consisted of eight questions and strived to provide texture and local relevance to the primary and secondary data synthesized in the community health assessment. The opinions expressed by community members in the forums mirrored the issues and sentiments expressed by the key informant interviews with regards to key health and social conditions in Long Beach.

**1. What do you like about Long Beach? What makes you proud to live in Long Beach?**

- Long Beach is the best place. We have a lot of city departments.
- It’s easy to get around.
- I didn’t like the violence in the inner city. Now I feel safe in a different area.
- I like the openness and diversity in Long Beach.
• We have our systems like our own health department, school system, police department and the port just to name a few.
• Love the community. There are lots of benefits the city offers.
• We are open to looking for solutions.
• We have good transportation. Easy accessibility.
• Diversity. But also integration of differences like language and sexual orientation.
• Accessibility. We get email updates from City councilmembers.
• Good shopping and transportation opportunities.
• We have good parks.
• We have a wide range of services like the passport bus.
• I love the climate.
• Long Beach has touristy feel. It’s a pleasant place to live.
• Long Beach appears progressive and engages in problem solving.
• There is health promotion among the senior population.
• Summer activities like the Aquarium and movies on the beach.
• Resources are easier to find in Long Beach.
• One can find affordable childcare and activities for kids like swimming lessons.
• The City works more toward the American dream.
• We have employees that are passionate about their jobs.
• We have a lot of services and projects to improve our health.

2. What are the top health issues in Long Beach? (in alphabetical order)
• ADHD
• Air quality
• Asthma
• Autism
• Breast cancer
• Dental care for adults
• Diabetes
• Drugs
• Eczema
• Growing import of food products that may not have our standards
• Growing senior population with increasing needs
• Growing tendency for families that decide that immunizations are dangerous
• High blood pressure
• HIV
• Lack of education regarding sexually transmitted diseases
• Lack of homeless education regarding available services
• Limited access to good nutrition
• Negative impact of climate change on people’s health
• Obesity
• SIDS
• Too much trash thrown away
• Violence
• Water quality
• Youth needing more activities

3. What ideas do you have for addressing these health issues?
• More education and outreach.
• Interactive education may be needed.
• Conduct more presentations in person rather than just giving out brochures.
• Peer to peer education is very helpful. Peers are trusted.
• We can look at our successes in other public health topics like tobacco control and polio eradication.
• Change policies and look at evidence-based studies.
• More support groups in our education system.
• More parenting and health classes for parents.
• Plant more trees.
• Write to Congress and use political voice.
• We don’t have well lit streets and parks at night.

4. Where do you get your information about community resources?
• Newspapers, TV, brochures, local cable TV, billboards, flyers, bus schedules, PadNet.
• Social media is very useful especially for young people. The City needs to be more visible in Facebook and Twitter.
• Coordinate with culturally diverse organizations to provide information to the community.
• Cross promotion of services among agencies is very important.
• Look at where people congregate and go there, like schools and churches.
• Need flexibility of outreach and education sessions in the community.
• Word of mouth
• Healthcare providers, hospitals, and doctor’s office
• WIC office
• Internet
• Existing programs like Black Infant Health (BIH) program
• Health programs from the Long Beach Health Department
• Schools and organizations like the Long Beach Alliance for Children with Asthma

5. What are barriers to getting health services and information?
• Lack of flexibility in service hours. Sometimes timing is driven by staff preferences versus client needs.
• Lack of access to healthcare
• Lack of knowledge or information about where to look for resources and information
• Lack of income
• Lack of transportation
• Lack of housing
• Lack of childcare
• Laziness

• Water quality
• Youth needing more activities
• Long wait for healthcare providers
• Fees for services
• Lack of money to afford services

6. What can we do to address those barriers?
• Deal with the problem before it happens. Focus on prevention.
• Reward those that use preventive health services.
• Find ways to support people through their places of employment.
• Promote the Affordable Care Act to those who do not have health insurance.

7. How can the Long Beach Health Department serve you better?
• The Health Department needs to go to City Council more often to present on what they
  are doing in the community. We don't "toot our horn" enough.
• Increase visibility in the community. Consider a uniform for staff that highlights the Health
  Department.
• More community meetings

8. What do you and your family need to live a healthy and productive life?
• Good information about services and resources in my community
• Better quality and affordability of fruits and vegetables
• A safe and clean environment
• Better and cleaner public transportation
• Jobs and safe place to live, good nutrition, and childcare

Appendix 2 - Acronyms and Glossary of Terms

<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Terms</th>
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<td>ACS</td>
<td>American Community Survey</td>
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<td>CCHI</td>
<td>California Children’s Health Initiatives</td>
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<tr>
<td>CDC</td>
<td>United States Center for Disease Control and Prevention</td>
</tr>
<tr>
<td>CDE</td>
<td>California Department of Education</td>
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<tr>
<td>CHIS</td>
<td>California Health Interview Survey</td>
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<td>CHKS</td>
<td>California Healthy Kids Survey</td>
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<td>CDPH</td>
<td>California Department of Public Health</td>
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<tr>
<td>CDPH-CCR</td>
<td>California Department of Public Health – California Cancer Registry</td>
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<td>CLPPP</td>
<td>Long Beach Childhood Lead Poisoning Prevention Program</td>
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<td>EPA</td>
<td>United State Environmental Protection Agency</td>
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<tr>
<td>FBI</td>
<td>Federal Bureau of Investigation</td>
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<tr>
<td>FPL</td>
<td>Federal Poverty Level</td>
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<td>GLAVCD</td>
<td>Greater Los Angeles Vector Control District</td>
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<tr>
<td>LADPH</td>
<td>Los Angeles County Department of Public Health</td>
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<td>LBDDHS</td>
<td>Long Beach Department of Health &amp; Human Services</td>
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<tr>
<td>LBPD</td>
<td>Long Beach Police Department</td>
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<td>LBUSD</td>
<td>Long Beach Unified School District</td>
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<tr>
<td>MRMIB</td>
<td>Managed Risk Medical Insurance Board</td>
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<td>OSHPD</td>
<td>The Office of Statewide Health Planning and Development</td>
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<td>PBE</td>
<td>Personal Belief Exemptions</td>
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<td>Supplemental Nutrition Assistance Program</td>
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<td>UCLA CHPR</td>
<td>University of Los Angeles Center for Health Policy Research</td>
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<td>UCSF/FHOP</td>
<td>University of California San Francisco/Family Health Outcomes Project</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>USDHHS</td>
<td>United States Department of Health and Human Services</td>
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<td>ZCTA</td>
<td>Zip Code Tabulation Area</td>
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GLOSSARY OF TERMS

Definitions of Communicable Diseases
Source: Centers for Disease Control (CDC) and Prevention, A-Z Index, www.cdc.gov

Campylobacteriosis is an infectious disease caused by bacteria of the genus Campylobacter. Most people who become ill with campylobacteriosis get diarrhea, cramping, abdominal pain, and fever within two to five days after exposure to the organism. The diarrhea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts one week. Some infected persons do not have any symptoms. In persons with compromised immune systems, Campylobacter occasionally spreads to the bloodstream and causes a serious life-threatening infection.

Chlamydia is a common sexually transmitted disease caused by the bacterium, Chlamydia trachomatis, which can damage a woman’s reproductive organs. Even though symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur “silently” before a woman ever recognizes a problem. Chlamydia also can cause discharge from the penis of an infected man.

Gonorrhea is a sexually transmitted disease (STD) caused by a bacterium. Gonorrhea can grow easily in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

HIV/AIDS—HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS. HIV damage a person’s body by destroying specific blood cells, called CD4+ T cells, which are crucial to helping the body fight diseases.

Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium Bordetella pertussis. Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After fits of many coughs, someone with pertussis often needs to take deep breaths that result in a “whooping” sound. Pertussis most commonly affects infants and young children and can be fatal, especially in babies less than 1 year of age. The best way to prevent pertussis is to get vaccinated.

Salmonellosis is an infection with bacteria called Salmonella. Most persons infected with Salmonella develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons, the diarrhea may be so severe that the patient needs to be hospitalized.

Syphilis is a sexually transmitted disease caused by the bacterium Treponema pallidum. Syphilis can cause long-term complications and/or death if not adequately treated. Syphilis is transmitted from person to person by direct contact with a syphilitic sore, known as a chancre. Chancres occur mainly on the external genitals, vagina, anus, or in the rectum. Chancres also can occur on the lips and in the mouth. Transmission of syphilis occurs during vaginal, anal, or oral sex. Pregnant women with the disease can transmit it to their unborn child.

Tuberculosis (TB) is a disease caused by a bacterium called Mycobacterium tuberculosis. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. If not treated properly, TB disease can be fatal. TB disease was once the leading cause of death in the United States.

Typhus is specific to flea-born typhus, a disease transmitted to humans by fleas. Flea-borne typhus (Murine Typhus) is a disease spread by fleas living on rodents (rats, mice), opossums, cats and raccoons. Flea-borne typhus is not spread from person to person. The most common symptoms of flea-borne typhus are high fevers, severe headaches, body aches and a rash. The disease is rarely fatal, but people can become sick enough to be hospitalized. Prior to 2006, flea-borne typhus was not known to be present in the City of Long Beach.
Appendix 3 - Sources and Literature Cited

Sources
Below we provide an annotated list of the primary sources for the data we used in the Long Beach Community Health Assessment. Data was available for different jurisdictional regions depending on the source. If multiple units of comparison were available, we chose to present information by zip code. If information was not available for specific zip codes, we used the City of Long Beach, then the South Beach Service Planning Area, then Los Angeles County.

The Healthy City website compiles multiple data sources and presents them in a user-friendly interface: Healthy City (healthycity.org). When we used data presented by Healthy City we present the web page and the original source when more clarity was required. For the primary data sources below, an asterisk denotes sources that are available via healthycity.org. Healthy City also provides some original data, such as a mapping function, which are cited as products of Healthy City and cited as such.

Census Data
The U.S. Census Bureau conducts a comprehensive census that attempts to capture data from the entire population only once every 10 years, but in 2006, the Census Bureau also instituted the American Community Survey, which uses a statistical sub-sampling of the population to provide annual information. All census data is available from the Bureau's data portal, http://factfinder2.census.gov, which provides original data tables with a standardized naming convention. When possible, we provide the name of the table used as a data source.

*American Community Survey 1-Year Estimates
The American Community Survey collects data every year on age, sex, race or ethnicity, family, employment, and other important information. One-year estimates are available to geographic areas with a population of 65,000 or more. The Census recommends users compare derived measures such as percents, means, medians, and rates rather than estimates of population totals.

*American Community Survey 5-Year Estimates
The 2005-2009 ACS 5-year estimates are based on data collected between January 2005 and December 2009. These estimates represent the average characteristics over the 5-year period of time and are published for small geographic areas.

*U.S. Census Bureau Decennial Census
Every 10 years the U.S. Census counts every resident in the United States and gathers data on age, sex, race/ethnicity and household characteristics of the population. The census data is often available by “Zip Code Tabulation Area” which is a very close approximation of zip codes.

Non-Census Data
AIRNow
The U.S. EPA, NOAA, NWS, tribal, state, and local agencies developed the AIRNow.gov Web site to provide the public with easy access to national air quality information.

California Children's Health Initiatives
CCHI is a collaboration of local Children's Health Initiatives (CHI) in 30 counties across California. http://www.cchi4kids.org/

California Department of Education (CDE)
The California Department of Education provides descriptive data for individual schools and school districts through DataQuest (http://data1.cde.ca.gov/dataquest/). Public data includes Adequate Yearly Progress reports, information on dropouts, and results from annual physical fitness tests.

*California Department of Public Health (CDPH)
The California Department of Public Health's Office of Health Information and Research produces a variety of reports on the health and well-being of Californians, and is often available by zip code. Live births data is presented by four key health status indicators (mother’s age, mother's race/ethnicity, trimester prenatal care began, and infant's birth weight).

*California Health Interview Survey (CHIS)
California's large state health survey is conducted via telephone every two years to give a detailed picture of the health and health care needs facing the state. The survey provides statewide information on the overall population including many racial and ethnic groups and local-level information for most counties. Much of the CHIS data is only available at the level of Service Planning Areas, and the South Bay planning area includes an area larger than Long Beach.

California Healthy Kids Survey
The California Healthy Kids Survey (CHKS) is an annual survey of students in grades 5, 7, 9, and 11, describing resiliency, protective factors, and risk behaviors in California.

Los Angeles County Health Survey
The Los Angeles County Health Survey is a population-based telephone survey that provides information concerning the health of Los Angeles County residents. This data source needs to be used with care in Long Beach, because it focuses on areas of the county that do not have their own health departments, and there are not always good sample sizes for Long Beach.
Managed Risk Medical Insurance Board
The Managed Risk Medical Insurance Board is dedicated to improving the health of California by increasing access to affordable, comprehensive and quality health care coverage. The Board oversees operation of four programs that serve lower income and high health risk individuals: The Healthy Families Program, Access for Infants and Mothers, Pre-Existing Condition Insurance Plan and Major Risk Medical Insurance Program.

Office of Statewide Health Planning and Development
Office of Statewide Health Planning and Development is the leader in collecting data and disseminating information about California's healthcare infrastructure, promoting an equitably distributed healthcare workforce, and publishing valuable information about healthcare outcomes.

*WestEd Healthy Kids Survey*
Survey-based data on health behavior and risk designed to identify needs among youth populations.

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Contact Information
For questions or ideas on how to improve the Community Health Assessment: (562) 570-7920 or Cheryl.Barrit@longbeach.gov
Website: www.longbeach.gov/health
Facebook: https://www.facebook.com/LBDHHS
Twitter: https://twitter.com/LongBeachDHHS
Address: 2525 Grand Avenue, Long Beach, CA 90815