

Community Health Status Assessment (CHSA)



Air Quality & Health Overview

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Community Health Status Assessment (CHSA) Summary of Findings

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CHSA Methods – Overall Themes

- * Community Health Status Assessment identifies priority community health and quality of life issues.
- * Questions answered include: "How healthy are our residents?" and "What does the health status of our community look like?"
- * The Community Health Status Assessment process includes the collection and synthesis of a variety of data from reliable secondary sources at the county, SPA, and community level
- * Assessment focuses primarily on data and indicators related to air quality:
 - Asthma, cardiovascular disease, and low birth weight infants
 - Linked to ultra fine particles produced by the goods movement in these communities.
- * Health and socioeconomic status included to display any potential health disparities

CHSA Methods- Data Sources & Considerations

- * TDA program staff began their efforts by using a variety of sources to capture easily obtainable data on the three health areas of focus for these communities:
 - Available online databases for local, statewide, and national organizations/agencies to capture
 - Easily obtainable data on the three health areas of focus for these communities.
- * Program staff used zip code level data and created detailed asset maps for each community.
- * Engage key partners and community members in helping to create an accurate understanding of the community health status in Long Beach and Boyle Heights.
- * All assessment materials prepared have been presented for review and revised based on planning team member feedback.

Summary of Findings

- * Poor Air Quality as represented by high values of PM2.5, PM 10, and Ozone
- * Increased incidence of heart disease, low birth weight, and asthma

Figure 4: Asthma Hospitalization Rates per 100,000 individuals in Boyle Heights, 2007.

Geographical Area	Hospitalization Rate- all individuals	Hospitalization Rate- under 18 only
Boyle Heights (90033)	135.7*	128.8*
California	86.2	102.5

Source: Office of Statewide Health Planning and Development (OSHPD), 2007. An asterisk indicates value is greater than the state rate. Retrieved from www.healthycity.org.

Figure 4: Asthma Hospitalization Rates per 100,000 individuals by Zip Codes

Zip Code	Hospitalization rate- all individuals	Hospitalization rate- under 18 only
90802	102.4	71.6
90813	177.1*	132.6*
90805	171.6*	155.7*
90807	89.2	135.9*
90804	127*	175.2*
90806	132.2*	122.4*
90810	129.5*	97.1
California	86.2	102.5

Source: Office of Statewide Health Planning and Development (OSHPD), 2007. An asterisk indicates value exceeds state allowable standard level. Retrieved from www.healthycity.org.

Air Quality

- * Figures 1 and 2 below show a comparison of particle measurements collected in Los Angeles County. Boyle Heights, by the Air Quality Management District.
- * Values exceed the national and statewide standards for PM_{2.5} and PM₁₀ indicators. The California annual standard for PM₁₀ is 20 µg/m³ and the annual standard for PM_{2.5} is 12 µg/m³.

Figure 1: Los Angeles County Annual PM_{2.5} Summary, 2010.

Monitoring Site	Days Above National Std.	Annual Maximum	
		1-Hr Maximum	1-Day Average
Burbank-W Palm Avenue (-)	9	155.0	49.5*
Burbank-W Palm Avenue (C)	0	113.0	35.1
Glendora-Laurel (-)	3	183.0	58.1*
Glendora-Laurel (A)	0	47.0	22.4
Los Angeles-North Main Street (-)	8	95.0	50.5 *
Los Angeles-North Main Street (C)	0	31.2	31.2
Los Angeles-North Main Street (D)	2	87.0	44.4*
North Long Beach (-)	1	98.0	40.0*
North Long Beach (E)	0	94.3	35.9*
Reseda (C)	0	88.0	25.6*
Santa Clarita (A)	0	161.0	28.8
South Long Beach (-)	3	178.0	37.2 *

Note: An asterisk next to the on day average if national 24 hour standard level is exceeded. Bold items are measurements taken at monitoring sites closest in proximity to Boyle Heights. Source: California Air Resources Board, 2010.

Figure 2: Los Angeles County Annual PM₁₀ Summary, 2010.

Los Angeles County Annual PM ₁₀ (Local) Summary Data - 2010		
Micrograms/Cubic Meter (µg/m ³)		
Monitoring Site	Annual Maximum	
	1-Hr Maximum	1-Day Average
Glendora-Laurel	525.0 *	75.1 *
Los Angeles-North Main Street	330.0 *	76.8 *
North Long Beach	493.0 *	57.5 *

Note: An asterisk indicates value exceeds state allowable standard level. Bold items are measurements taken at monitoring sites closest in proximity to Boyle Heights.

Heart Disease- Elevated Rates

Figure 7: Age Adjusted Heart Disease Hospitalization Rates for SPA 8 South Bay

	Rate of Hospitalization Per 10,000
Los Angeles SPA 8 South Bay	1,073.2*
San Diego County	814.9
Statewide	1,064.1

Source: California Healthcare Foundation, 2005. An asterisk indicates value is greater than the state rate.

Figure 8: Years of Potential Life Lost Due to Heart Disease/Stroke and LA County Rankings, 2000-2002

	Years of potential life lost per 100,000 per year	Ranking out of all LA County Cities
Long Beach, CA	1,603*	110
Malibu, CA	503	12
Pasadena, CA	1,079	56

Note: rank 1=lowest number of potential life lost, 133=highest number of potential life lost.

Source: Los Angeles County Department of Health Services, 2006. An asterisk indicates value exceeds state allowable standard level.

Figure 7: Age Adjusted Heart Disease Hospitalization Rates for SPA 4 Metro

	Rate of Hospitalization Per 10,000
Los Angeles SPA 4 - Metro	1,625.1*
San Diego County	814.9
Statewide	1,064.1

Source: California Healthcare Foundation, 2005. An asterisk indicates value is greater than the state rate.

Figure 8: Heart Attack and Heart Failure Hospitalization Rates, 2007

	Rate of Hospitalization Per 100,000
Boyle Heights (Zip: 90033)	437.6*
California	368.7

Source: OSHPD, 2007. Retrieved from www.healthycity.org. An asterisk indicates value is greater than the state rate.

Low Birth Weight Infants

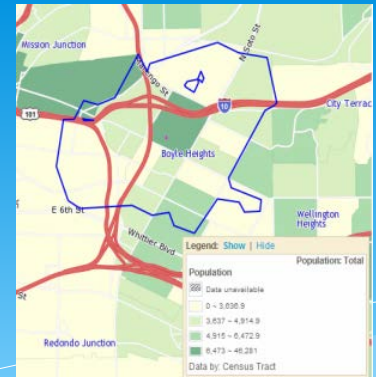
- * Elevated low birth weight rates in Long Beach
- * African Americans experienced highest rates

Figure 5: CDPH 2009 Rate per 1,000 of Low Birth-weight by Zip Code and Mother's Race – Long Beach

Zip Code	Mother's race			
	Hispanic	White	African American	Asian
90802	54.6	22.7	119.3*	46.5
90803	0.0	75.5*	200.0*	0.0
90804	71.6*	64.2*	126.2*	113.2*
90813	53.2*	105.3*	198.7*	113.3*
90814	46.9	87.0	62.5*	0.0
90815	59.5	83.3	0.0	70.2
90805	64.0	31.9	109.2*	160.0
90807	75.0	79.6	119.4*	81.1
90810	72.5	133.3*	88.2*	114.6
90808	85.1*	103.8*	153.8*	163.8*
California	61.6	61.8	120.5	80.6

Source: Birth Statistical Master File, 2007. Weight is <2500 grams. An asterisk indicates value is greater than the state rate.

Trends in Boyle Heights



Asthma:

- * Boyle Heights is located in service planning area (SPA) 4 of Los Angeles County. Figure 3 compares asthma prevalence rates of SPA 4 with the state of California. Asthma diagnosis rates in Los Angeles SPA 4 Metro (overall) are similar to rates statewide; however, asthma-related hospitalization averages are higher in Boyle Heights when compared to California.
- * Both the overall and child hospitalization rates for asthma are greater than the statewide average indicating a higher severity of illness and increased burden of morbidity in this community.

Low Birthweight Infants:

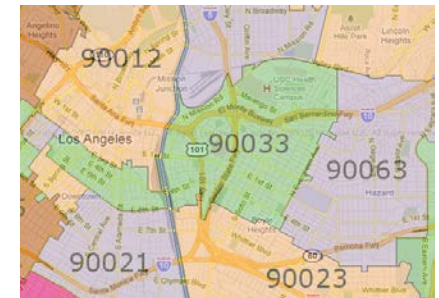
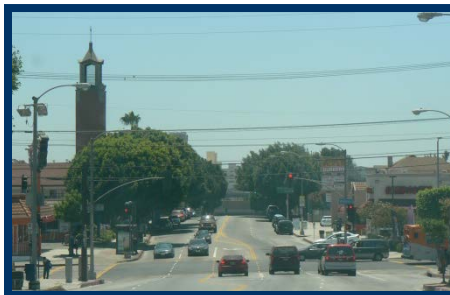
- * Residents of Boyle Heights have low birth weight rates very similar to the statewide averages.

Cardiovascular Disease :

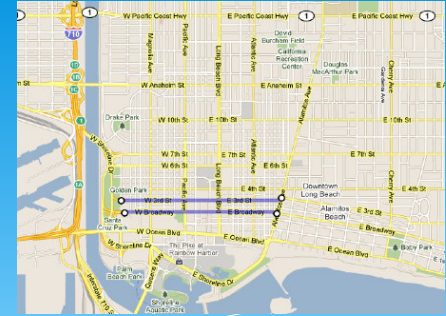
- * Age adjusted cardiovascular disease hospitalization rates in the Boyle Heights, CA area, SPA 4 and overall hospitalization rates for Boyle Heights, CA are both higher than the statewide averages.

Summary :

- * Boyle Heights, CA exhibits values exceeding the allowable standards for PM2.5 and PM10 indicators, exceeding national indicators, and has elevated rates for asthma hospitalizations and cardiovascular disease hospitalizations.



Trends in Long Beach



Asthma

- * Asthma diagnosis rates in Long Beach are similar to rates statewide; however, the asthma hospitalization rates in Long Beach are high with several Long Beach zip codes exhibiting rates more than double the state average.

Low Birthweight

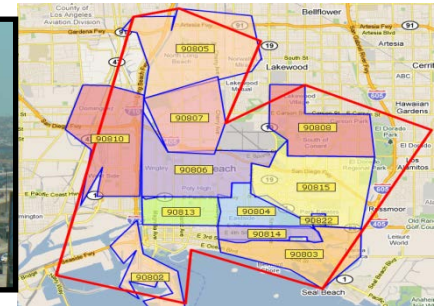
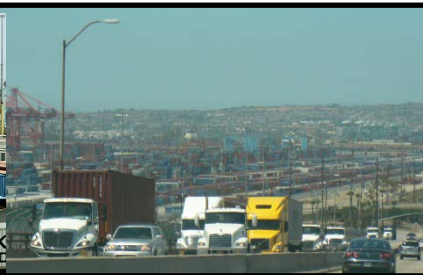
- * Residents of 90813, 90804, and 90808 zip codes have low birth weight rates much higher than the state averages.

Cardiovascular Disease

- * Age adjusted cardiovascular disease incidence and death rates in Long Beach, CA (SPA 8) are slightly higher than the statewide averages. Long Beach residents also have had more years of potential life lost than individuals living in most other Los Angeles County cities, with a ranking of 110 out of 133 .

Summary

- * Long Beach, CA exhibits values exceeding the allowable standards for PM2.5 and PM10 indicators, exceeding national indicators, and has elevated rates for low birthweight infants, asthma hospitalizations, and cardiovascular disease morbidity.



Speakers Panel 1: Current Findings on Air Quality & Health

- * **Facilitator: Hector Ornelas Diaz, RN**, Community Liaison Public Health Nurse, LA County Dept of Public Health SPA 3 & 4
- * **Air Pollution and Heart Health: Wayne E. Cascio, MD, FACC, FAHA**, Director, Environmental Public Health Division, US EPA
- * **Asthma and School Age Youth: Kim Uyeda, MD, LAUSD**, Student Health Services, LAUSD Asthma Program
- * **Air Pollution and Birth Weight: Jo Kay C. Ghosh, PhD, USC** Department of Preventive Medicine, Division of Epidemiology