Protecting and Promoting the Public's Health: A Data-Driven Process

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"Assessment" a Core Function of Public Health

• "Every public health agency [should] regularly and systematically collect, assemble, analyze, and make available information on the health needs of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems."

Source: The Future of Public Health, Institute of Medicine, 1988



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Why do we need to regularly assess the health of the community?







<u>Crude Death Rate for Infectious Diseases,</u> <u>United States, 1900 - 1998</u>



* Rate is per 100,00 people

MMRV, CDC, 1999

Annual Adult per Capita Cigarette Consumption, United States, 1900 - 1998



MMWR, CDC, 1999



Lung and Bronchus Cancer Mortality Rates per 100,000 for California and the US Minus California, Age 35 Years and Older, 1970 to 2007



Rates are per 100,000 and age adjusted to the 2000 US std population (19 age groups-Census-P25-1130) standard. Source: California Cancer Registry, California Department of Public Health. Prepared by the Cancer Surveillance Section, California Cancer Registry.



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Tobacco Prevention and Control: Smoking Prevalence Among High School Students, LAUSD, 1997-2017



Source: Youth Risk Behavior Survey

Prevalence of Obesity and Diabetes Among Adults in Los Angeles County, 1997-2015



Source: Los Angeles County Health Survey, Department of Public Health

Prevalence of Obesity and Diabetes Among Adults, by Race/Ethnicity, LA County, 2015



Cities/Communities with Lowest and Highest Childhood Obesity Prevalence, 2010

Top 10^{*}

Bottom 10^{*}

City/Community Name	Obesity Prevalence (%)	Rank of Economic Hardship (1 - 117)	City/Community Name	Obesity Prevalence (%)	Rank of Economic Hardship (1 - 117)
Manhattan Beach	2.8	5	LA City Council District 8	29.3	98
Agoura Hills	4.0	10	El Monte	29.3	99
Palos Verdes Estates	5.6	2	LA City Council District 9	29.4	117
Calabasas	6.4	15	Pomona	29.8	91
Beverly Hills	7.5	18	South Gate	30.7	101
South Pasadena	7.5	16	Huntington Park	30.7	105
Arcadia	8.8	25	Florence-Graham	31.1	116
El Segundo	8.9	7	East Los Angeles	31.1	109
Santa Monica	10.2	9	West Whittier-Los Nietos	31.3	73
La Crescenta-Montrose	10.6	23	South El Monte	34.1	97
Average 10 lowest	7.2%		Average 10 highest	30.7%	
Ave Median Household Income		\$100,184	Ave Median Household Income		\$39,846



COUNTY OF LOS ANGELES

* Excludes cities/communities where number of students with BMI data < 500.

Sources: California Department of Education Physical Fitness Testing Program (5th, 7th, and 9th graders enrolled in LAC public schools); U.S. Census Bureau, 2005-2009 5-Year American Community Survey (MHI in 2009 inflation-adjusted dollars)







Homicide Rate Among Non-Hispanic Black Males 15-24 Years of Age, LA County vs Rest of California, 2000-2015



Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1992 2015 or DC WONDER Online Database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2015, as compiled from data the bubies of beautiful statistics cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Mar 22, 2016

Homicide Rate Among Hispanic Males 15-24 Years of Age, LA County vs Rest of California, 2000-2015



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How are the data from community health assessments used?

- To help define priorities and inform resource allocation decisions
- Plan programs
- Support advocacy and funding requests
- Evaluate the impacts of programs, services, and other interventions
- Gain insights on factors contributing to community health problems (and community health improvements)
- Help anticipate and prepare for future needs





Sources of Data

- Vital statistics (births and deaths)
- Medical and clinical laboratory records
- Administrative data (e.g., hospital discharge data, pharmacy data)
- Disease registries (e.g., cancer, birth defects)
- Surveys (e.g., Los Angeles County Health Survey, California Health Interview Survey)
- Census
- Other (e.g., data from "non-health" sectors, social media, and "big data")



Ethical Considerations

- Tension between the rights of individuals (e.g., privacy, autonomy) and government's responsibility to protect and promote the public's health
- Public health agencies have access to personal health information without informed consent. Ethical requirements:
 - Information must only be used for public health actions to improve population health, reduce health inequities, serve vulnerable populations, and prevent harm
 - Information must be maintained in a confidential manner
 - Should only collect the minimum information needed
 - Processes should be transparent and should engage community stakeholders





Los Angeles County Health Survey (LACHS)





Key Objectives of LACHS

- Started in 1997 by LADPH
- Obtain reliable population estimates for health indicators
- Identify disparities across population sub-groups
- Track health trends
- Compare health of LA County residents with state and national data and national health objectives



Methodology

- Population-based random digit-dial (RDD) telephone survey of LA County residents
- Conducted every 2-4 years
 - 1997, 1999, 2002, 2005, 2007, 2011, 2015
- 6 languages: English, Spanish, Mandarin, Cantonese, Vietnamese, Korean
- Data weighted to reflect non-institutionalized population of LA County



LACHS Components

- Adult (18+ years old):
 - Data collect on ~8,000 respondents
 - 1 randomly selected adult per household
- Child:
 - Data collected on ~6,000 sufficiently knowledgeable adult of children 0-17 years old



Adult Questionnaire Topic Areas

- Demographics
- Chronic Disease
- Health Related Quality of Life
- Health Behaviors
- Access to Care & Preventive Services
- Built Environment
- Housing and Food Security
- Emergency Preparedness
- Starting 2015: Intimate Partner Violence



Child Questionnaire Topics

- Demographics
- Child Health Status and Conditions
- Child Health Insurance & Access to Care
- Child Care
- Child Behaviors and Routines
- Child Nutrition and Physical Activity
- Parental Behaviors/Perceptions
- Breastfeeding and Hospital Practices





Limitations

- Self-reported data
- Those without phones not included in sample
- Does not represent persons living in group quarters (e.g., nursing homes, college dormitories, jails)
- Does not survey adolescents directly
- Questionnaire content limited by time constraints
- Declining response rates to telephone surveys



Who Uses LACHS Data?

- LA County Department of Public Health
 - Program and policy planning and evaluation, grant proposals, health impact assessment
- Other County departments: Health Services, Mental Health
- Other government organizations
- Health advocates (community based organizations, non-profit health organizations)
- Health care providers, community clinics
- Researchers





Intimate Partner Violence Questions

- Included in 2015 and 2018
- "The next questions are about different types of violence in relationships with an intimate partner. By an intimate partner I mean someone you were dating, or romantically or sexually intimate with at any time in your life."
 - Has an intimate partner EVER hit, slapped, pushed, kicked, or hurt you in any way?
 - Have you EVER experienced any unwanted sex by a current or former intimate partner?
- LA County domestic violence hotline number offered to all respondents

Percent of Adults (18+ years old) Who Reported Ever Experiencing Physical, Sexual, or Either Type of Intimate Partner Violence in LA County



Percent of Adults Who Reported Ever Experiencing Intimate Partner Violence by Race/Ethnicity & Gender



Percent of Adults Who Reported Ever Experiencing Intimate Partner Violence by Sexual Orientation



Los Angeles County Health Survey, 2015

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Percent of Adults Who Reported Ever Experiencing Intimate Partner Violence by Nativity and Gender



Percent of Adults With Housing Instability, by Whether or Not Experienced Intimate Partner Violence



Percent of Adults* Who Reported Food Insecurity, by Whether or Not Experienced Intimate Partner Violence



Los Angeles County Health Survey, 2015 * With Household Income <300% FPL



Percent of Adults With Firearms in/around the Home, by Whether or Not Experienced Intimate Partner Violence





Percent of Adults With Fair/Poor Health Status, by Whether or Not Experienced Intimate Partner Violence



Percent of Adults Ever Diagnosed with Depression, by Whether or Not Experienced Intimate Partner Violence



Percent of Adults with Current Depression, by Whether or Not Experienced Intimate Partner Violence



Potential Collaborations

- How do we report these data?
- What do they mean?
- How do we make data more useful for your work?
- What data are needed to help move the field forward?
- Feedback and input on DPH reports/products that include IPV data



Thank you. Questions?

