

The Changing Face of American Communities: “No Data, No Problem”

E. Richard Brown, PhD

Director, UCLA Center for Health Policy Research
Professor, UCLA School of Public Health
Principal Investigator, California Health Interview Survey

**America in Transition: A View from California
Institute of Medicine Roundtable on Health Disparities
July 28, 2008**

UCLA CENTER FOR
HEALTH POLICY RESEARCH



www.healthpolicy.ucla.edu

Change in American Communities

- ▶ **Changes have been sweeping many states and local communities**
 - ▶ Deep demographic changes that have developed new populations — and new communities — throughout the country

- ▶ **No data, no problem: What we don't know can hurt us**
 - ▶ Disparities in health and health care by race/ethnicity, income, urban-rural residence, and other social characteristics
 - ▶ Disparities may be not be recognized, acknowledged, or addressed
 - ▶ We would not know about the disparities without good data

Changes have been sweeping many states

- ▶ Deep demographic changes have established new populations – and new communities – throughout the country

	Asian & Pacific Islander		Hispanic/Latino	
	1970	2007	1970	2007
Georgia	0.1%	3.2%	0.6%	7.9%
North Carolina	0.1%	2.2%	0.4%	7.2%
Minnesota	0.2%	3.9%	0.6%	4.1%
Kansas	0.2%	2.6%	2.1%	9.0%
Idaho	0.5%	1.7%	2.6%	10.0%
Utah	0.6%	2.6%	4.1%	11.8%
California	2.8%	13.7%	13.7%	36.7%



Change in American Communities

- ▶ In new communities and established communities:



- ▶ Disparities in health and health care by race/ethnicity, income, wealth, urban-rural residence, and other social characteristics

- ▶ Disparities related to

- ▶ Person-environment exposures: Diet, physical activity, smoking, neighborhood social influences
- ▶ Physical and social environmental exposures: Environmental injustice
- ▶ Differences in health care access and quality due to social characteristics of the individual and community – not differences in health need

Example 1: Children's access to dental care

▶ Dental care

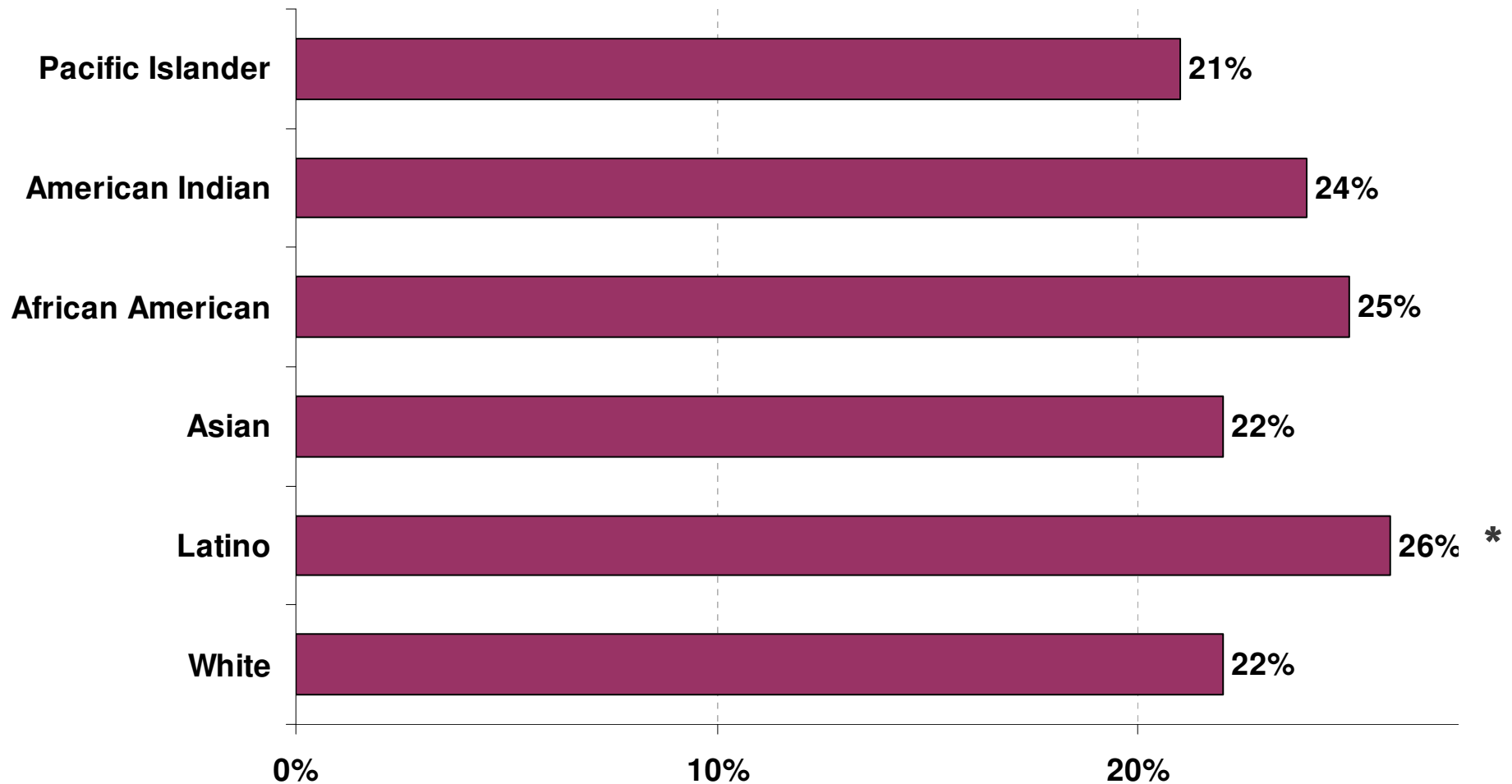
- ▶ Critical to children's healthy eating and development
 - ▶ Oral health problems are main cause for children absences from school
- ▶ Critical to adults' healthy eating and social integration

▶ Health insurance is essential to good access to dental care

- ▶ Lack of dental insurance is a major reason for not visiting the dentist, after controlling for other socio-demographic factors

▶ But even controlling for dental insurance, racial and ethnic disparities in children's dental visits remain...but they would not be visible without good data

Latino children more likely than white and Asian children never to have visited dentist



Latino children significantly different from white and Asian children

Time Since Last Visit to Dentist, Children Ages 0-11, 2005

Source: 2005 California Health Interview Survey

Pourat N, *Haves and Have-Nots: A Look at Children's Use of Dental Care in California, 2005*, Oakland:

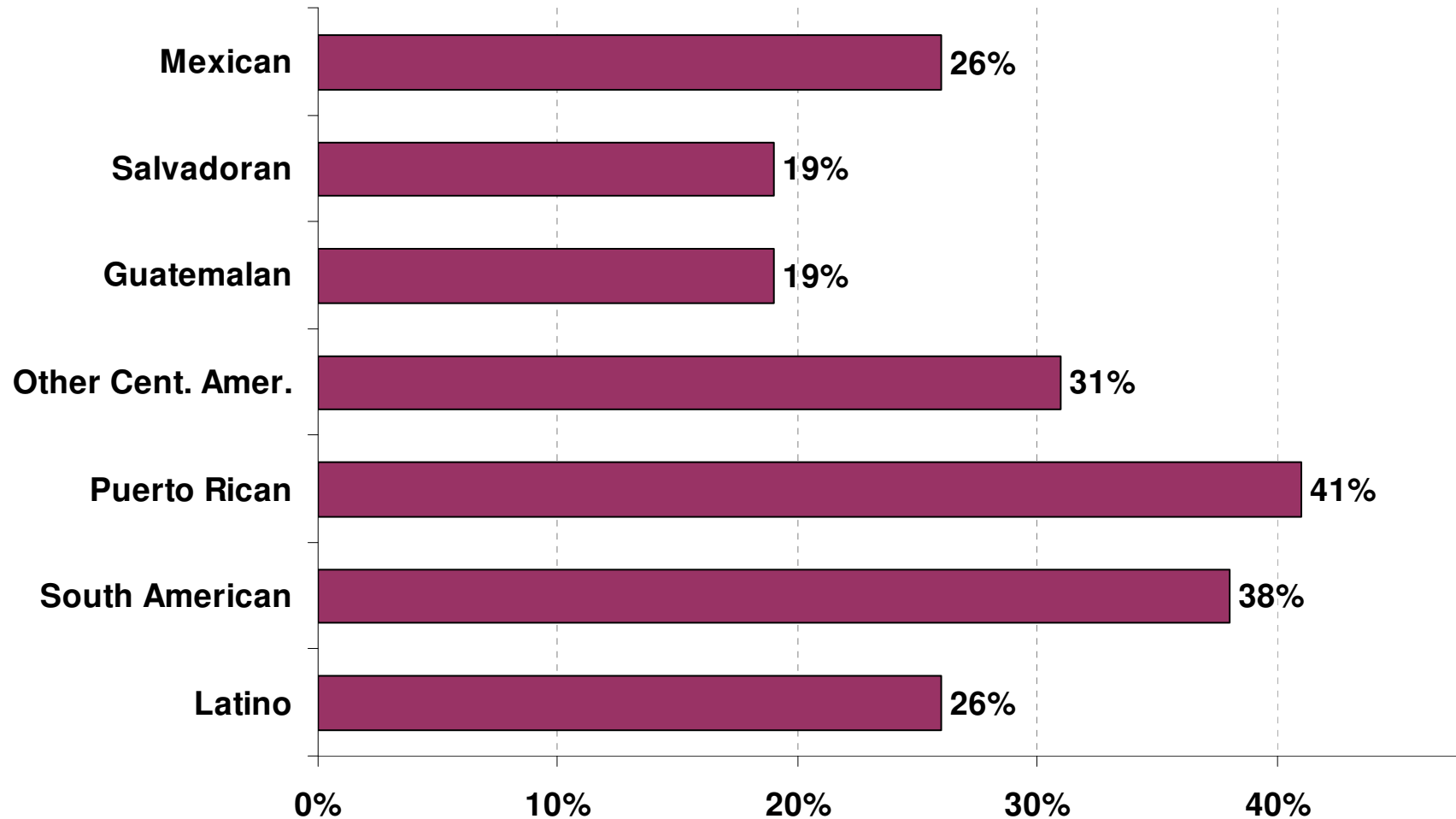
California HealthCare Foundation, 2008

UCLA CENTER FOR
HEALTH POLICY RESEARCH



www.healthpolicy.ucla.edu

Among Latinos, Salvadoran and Guatemalan children least likely not to have visited dentist



Salvadoran and Guatemalan significantly different from other Latino children

Time Since Last Visit to Dentist, Children Ages 0-11, 2005

Source: 2005 California Health Interview Survey

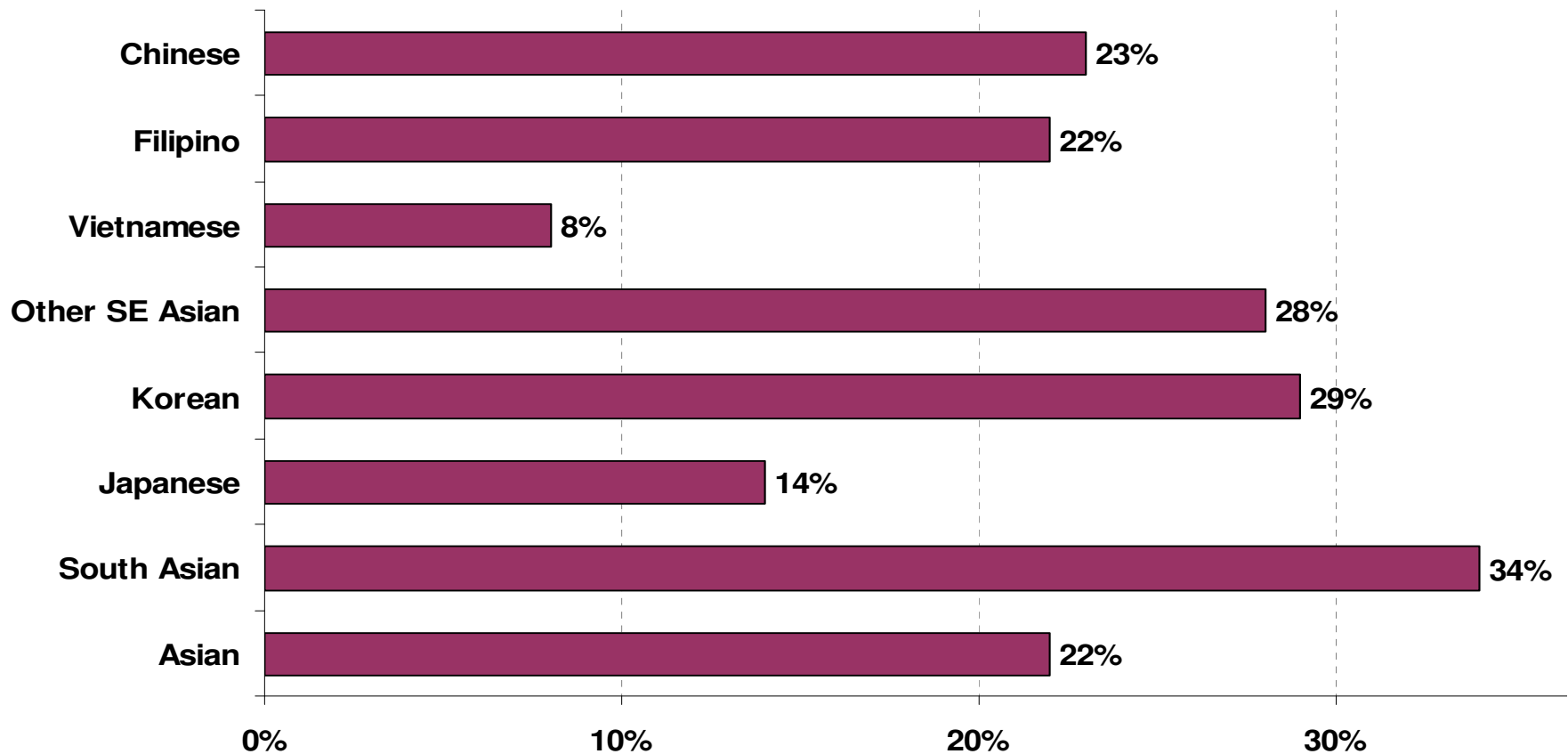
Pourat N, *Haves and Have-Nots: A Look at Children's Use of Dental Care in California, 2005*, Oakland:

California HealthCare Foundation, 2008



www.healthpolicy.ucla.edu

Among Asians, South Asian, other SE Asians, and Koreans least likely to have visited dentist



Vietnamese, South Asian, other Southeast Asians, and Koreans significantly different from other Asian children

Time Since Last Visit to Dentist, Children Ages 0-11, 2005

Source: 2005 California Health Interview Survey

Pourat N, *Haves and Have-Nots: A Look at Children's Use of Dental Care in California, 2005*, Oakland: California HealthCare Foundation, 2008

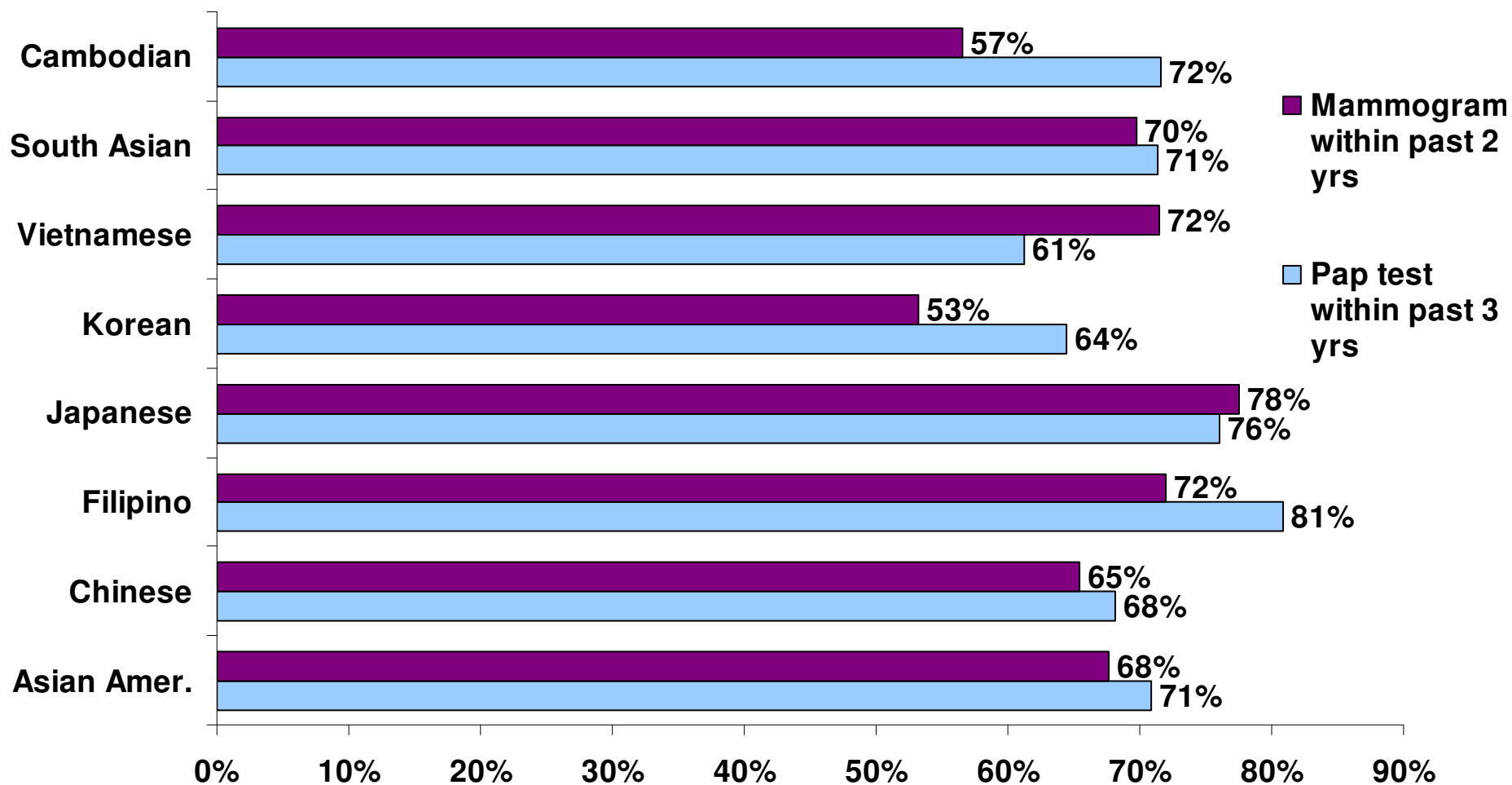
Example 1: Children's access to dental care

- ▶ **Thus, racial and ethnic disparities exist in children's basic access to dental care**
 - ▶ Differences in use of services are related to health insurance coverage as well as to non-financial barriers
 - ▶ Even controlling for dental insurance coverage, racial and ethnic disparities in children's dental visits remain
- ▶ **But these disparities would not be visible without good data**

Example 2: Mammogram and Pap test access differs across Asian ethnic subgroups

- ▶ Asian American women have lowest cervical and breast screening rates of all ethnic groups
- ▶ Among Asian ethnic subgroups, access to mammogram and Pap test also differs – and the reasons for poor access differ

Mammogram and Pap test access differs across Asian ethnic subgroups



Mammogram screening and Pap test rates differ among women by Asian ethnic subgroup

Source: 2001 California Health Interview Survey

Kagawa-Singer M, Pourat N, Breen N, Coughlin S, Abend McLean T, McNeel TS, Ponce NA, "Breast and Cervical Cancer Screening Rates of Subgroups of Asian American Women in California," Medical Care Research and Review 2007; 64: 706-730

UCLA CENTER FOR
HEALTH POLICY RESEARCH



www.healthpolicy.ucla.edu

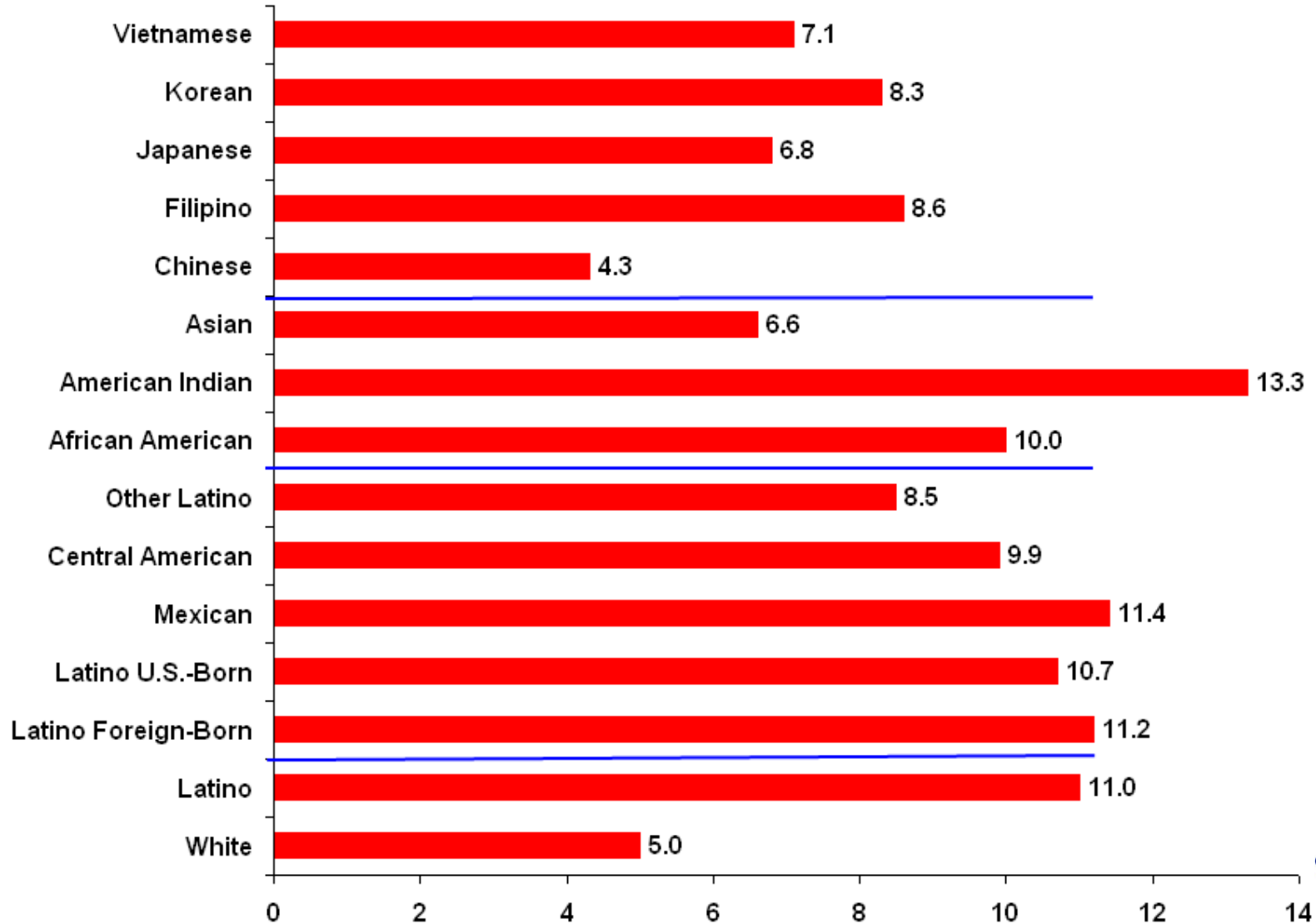
Example 2: Mammogram and Pap test access differs across Asian ethnic subgroups

- ▶ If Asian ethnic subgroups were aggregated (as in most health surveys), we would miss opportunities to...
 - ▶ Identify subgroup differences or understand what factors account for them
 - ▶ Such as health insurance coverage, limited English proficiency, years in U.S., and other aspects of acculturation
 - ▶ Target interventions to specific vulnerable groups
 - ▶ Guided by understanding of subgroup differences
- ▶ Controlling for a variety of socio-demographic differences, disparities in these preventive services remain...
- ▶ But these disparities would not be visible or understood without good data

Example 3: Diabetes rates differ among racial/ethnic groups and ethnic subgroups

- ▶ **Diabetes is major cause of functional limitations, morbidity, disability and death**
 - ▶ Type 2 diabetes is related to obesity, family history of diabetes, and lack of physical activity, as well as other factors
 - ▶ Diabetes can result in blindness, kidney damage, cardiovascular disease, and lower-limb amputations
- ▶ **Wide variation in age-adjusted prevalence of diabetes by race and ethnicity**
 - ▶ Subgroup data suggest directions for appropriate targeting of resources
- ▶ **Group differences would not be visible or understood without good data**

Example 3: Diabetes rates differ among racial/ethnic groups and ethnic subgroups



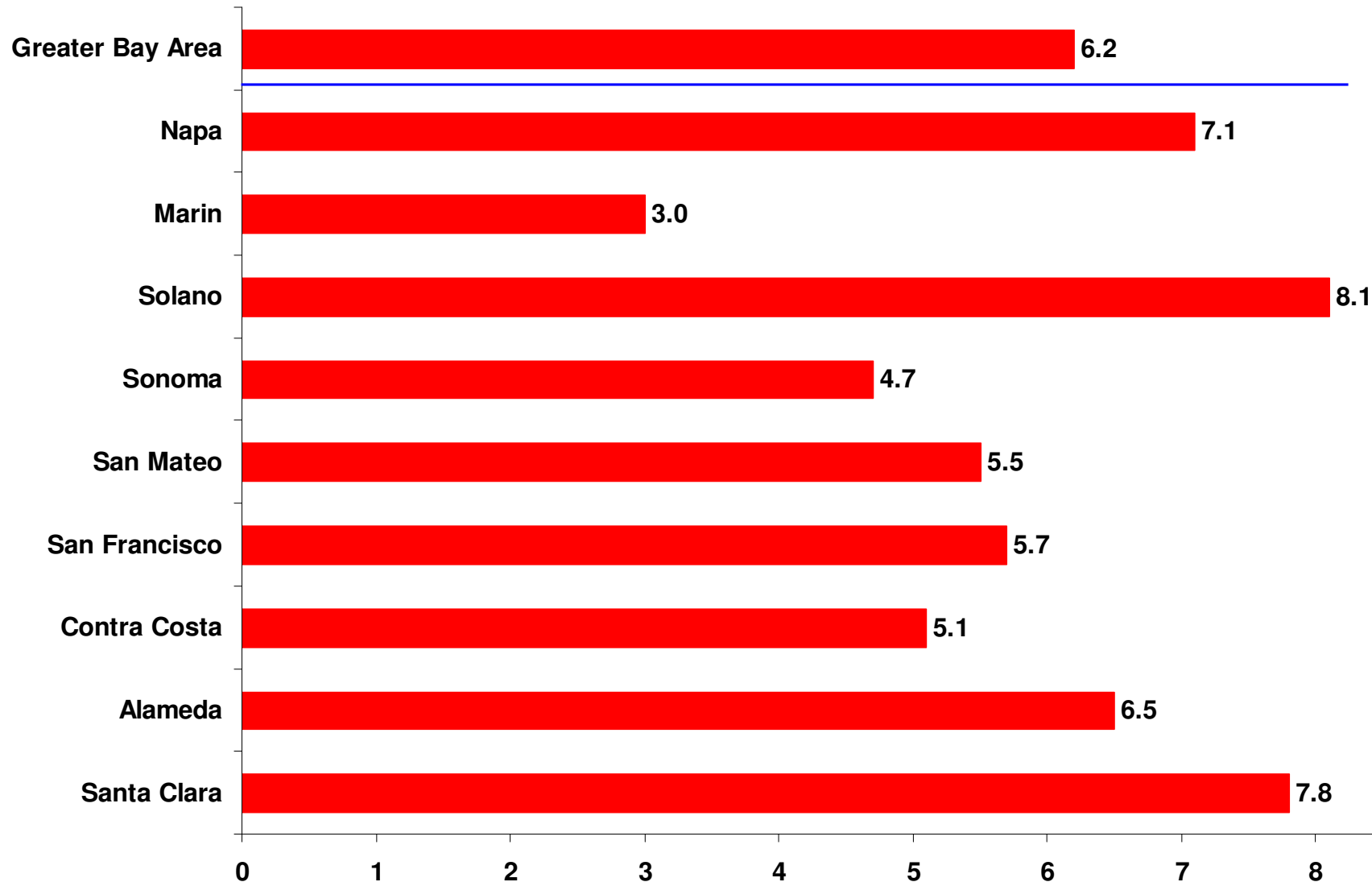
Age-adjusted diabetes prevalence by race/ethnicity, Adults Age 18 and Over, 2005
Source: 2005 California Health Interview Survey



Example 4: Age-adjusted diabetes rates vary by county and other types of communities

- ▶ **Differences in age-adjusted diabetes rates underscore role of both demographics and community factors**
 - ▶ Diabetes prevalence varies by county and local areas due to demographic differences (other than age) – such as obesity, income, education, race/ethnicity – but also by local conditions
- ▶ **Local health departments and other local health organizations need data on their communities to...**
 - ▶ Assess extent of diabetes and other health problems
 - ▶ Identify most at-risk populations and communities
 - ▶ Make clear to residents and community leaders importance of health problem in their community
- ▶ **Geographic differences would not be visible or understood without good data**

Example 4: Age-adjusted diabetes rates vary by county and other types of communities



Age-adjusted diabetes prevalence by Bay Area counties, Adults Age 18 and Over, 2005
Source: 2005 California Health Interview Survey



Example 5: Local environments affect health

- ▶ **Local environments – social, cultural, and physical environments – affect health in many ways, contributing to differences across communities in health conditions**
- ▶ **Food environment is associated with both diabetes and obesity, which is a major risk factor for diabetes**
- ▶ **Geographic differences would not be visible or understood without good data**

Example 5: Local food environments affect health

- ▶ **Retail Food Environment Index (RFEI): Ratio of relative availability of different types of food outlets**
 - ▶ Fast food restaurants and convenience stores
 - ▶ Grocery stores, produce markets and farmer's markets

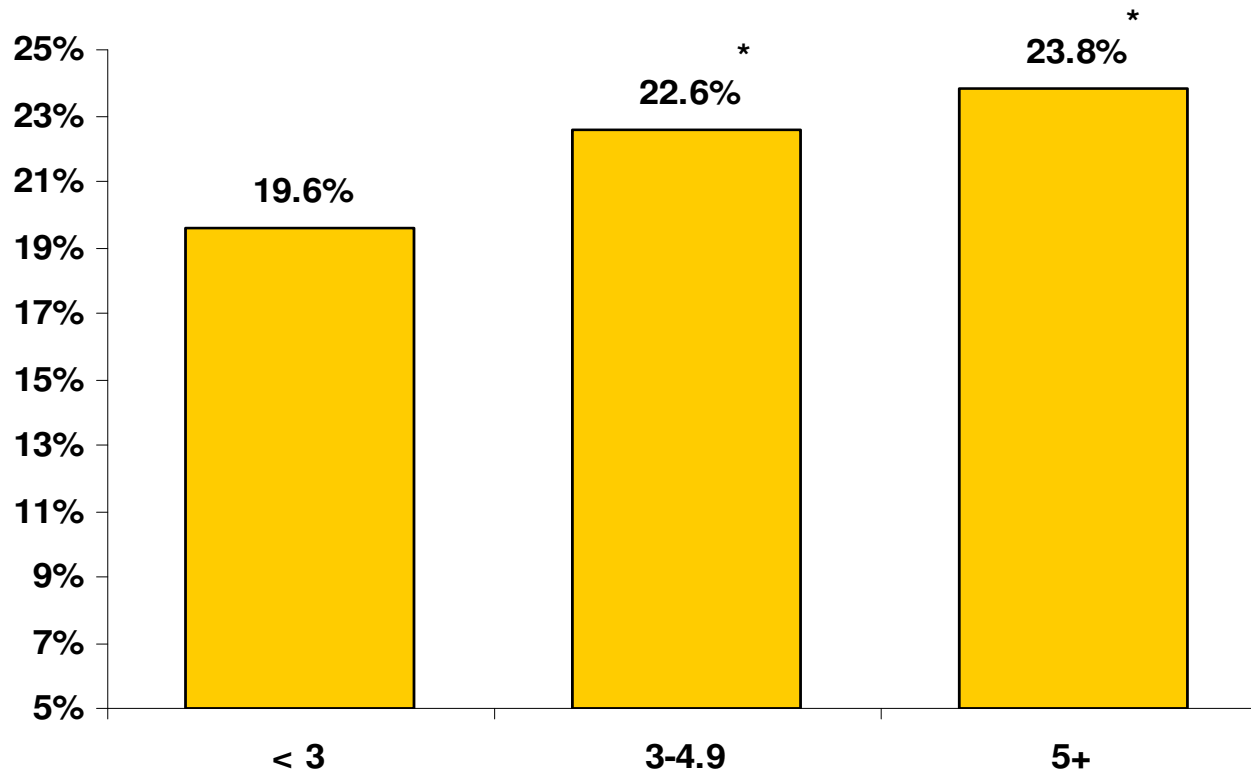
$$\text{RFEI} = \frac{\text{Fast Food + Convenience Stores}}{\text{Grocery Stores + Produce Markets + Farmer's Markets}}$$

- ▶ **Statewide average RFEI is 4.2**
- ▶ **Recent study by UCLA Center for Health Policy Research, California Center for Public Health Advocacy, and PolicyLink**
 - ▶ Uses geocoded data from 2005 California Health Interview Survey and other data sources
 - ▶ See *Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes*

Example 5: Local food environments affect health

► Obesity Associated with Food Environment

Percent Obese as a Function of RFEI Using Urbanicity-Specific Buffers, Adults Age 18 and Over, California, 2005



Note: * Significantly different from "< 3"; $p < 0.05$.



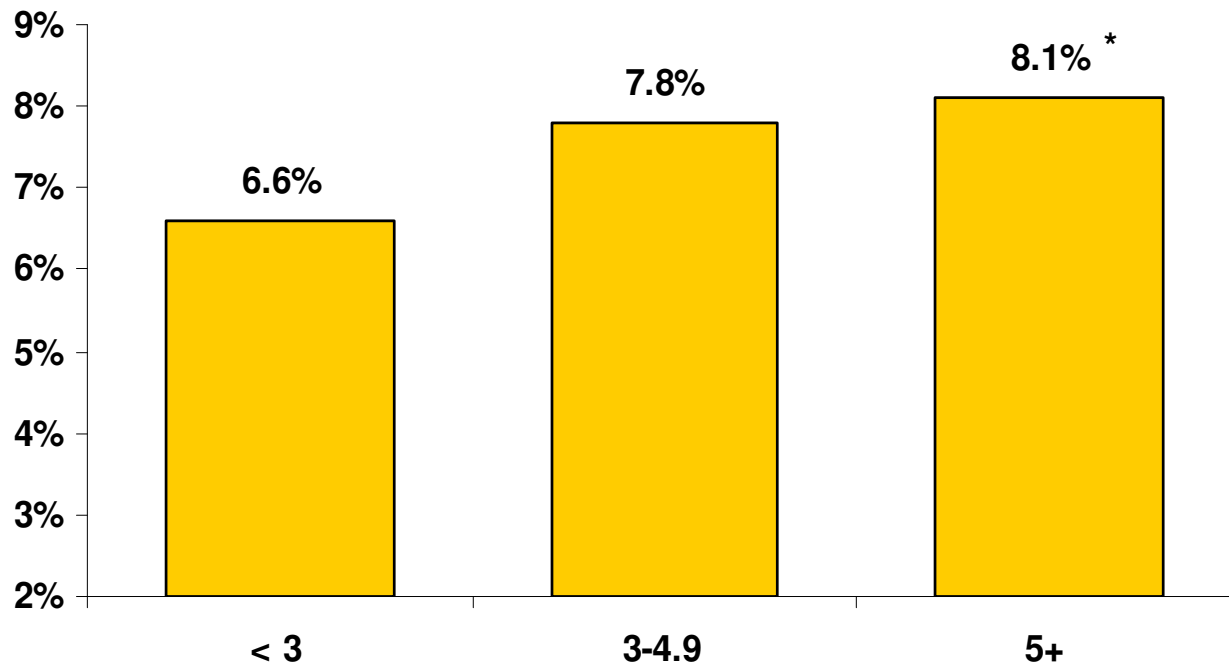
Source: 2005 California Health Interview Survey, 2005 InfoUSA Business File and 2000 US Census

www.healthpolicy.ucla.edu

Example 5: Local food environments affect health

▶ Diabetes Associated with Food Environment

**Percent Diagnosed with Diabetes as a Function of RFEI
Using Urbanicity-Specific Buffers, Adults Age 18 and Over,
California, 2005**



Note: * Significantly different from "< 3"; $p < 0.05$.



Source: 2005 California Health Interview Survey, 2005 InfoUSA Business File and 2000 US Census

www.healthpolicy.ucla.edu

Example 5: Local environments affect health

- ▶ **Thus, food environment affects both diabetes and obesity**
 - ▶ Same study found that among adults living in low-income communities, those whose communities had lower a RFEI had lower rates of obesity and lower rates of diabetes – environmental justice issue
 - ▶ Provides evidence for advocacy and policy change to improve food environment in low-income communities
- ▶ **We and others conduct studies using geocoded CHIS data to assess effects of air pollution on asthma symptom frequencies**
 - ▶ Relationship of higher exposures to several types of air pollution and closer proximity to major vehicular thoroughfares
 - ▶ Associated with higher rates of frequent asthma symptoms and higher rates of ER visits due to asthma – environmental justice issue
- ▶ **Health status differences related to environment would not be visible or understood without good data**

No data, no problem: What we don't know can hurt us

- ▶ Without good data and analysis...
 - ▶ Disparities may be not be recognized, acknowledged, or addressed
 - ▶ Good data and analysis can be used to make disparities visible
 - ▶ We would not know about the disparities without good data
- ▶ We would not understand causes and contributing factors —
 - ▶ Understand role of environment (social, economic, cultural, and physical) and personal risk factors (e.g., demographic characteristics and behaviors)
 - ▶ Good data and analysis can lead to action
 - ▶ Good data on populations in each state and local area as they change

No data, no problem: What we don't know can hurt us

- ▶ Data and analysis don't make policy
- ▶ But data and analysis are essential tools in efforts to...
 - ▶ Identify, track, and understand disparities
 - ▶ Develop and advocate evidence-based policy
- ▶ California Health Interview Survey is key source of comparable statewide and local data on population's health
 - ▶ CHIS is very large survey of Californians' health, representing the state's ethnic, social and geographic diversity
 - ▶ Translated and administered in multiple languages
 - ▶ Conducted every two years
 - ▶ Providing quality data at statewide and local levels
 - ▶ Major investment in dissemination to put data and analysis into hands of those who can use them

www.CHIS.ucla.edu



www.healthpolicy.ucla.edu

Easy access to CHIS data & findings



- ▶ **AskCHIS Internet query system – *your quick and easy access to CHIS data to meet your needs***
 - ▶ *Free and very easy to use*
 - ▶ Available “24-7” via the Internet
 - ▶ Custom, on-the-fly queries of the CHIS data
 - ▶ Allows analysis at the state, region, and county level
 - ▶ Over 16,000 registered users have made more than 310,000 queries of the CHIS data

AskCHIS.com



www.healthpolicy.ucla.edu