# Parental Knowledge and Attitudes about Immunization

Findings from the 2011 Los Angeles County Health Survey (LACHS)

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#### In this issue: WHAT DO PARENTS THINK? KNOWLEDGE AND ATTITUDES ABOUT IMMUNIZATION

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#### For additional information about the LA County Health Survey, visit: www.publichealth.lacounty.gov/ha

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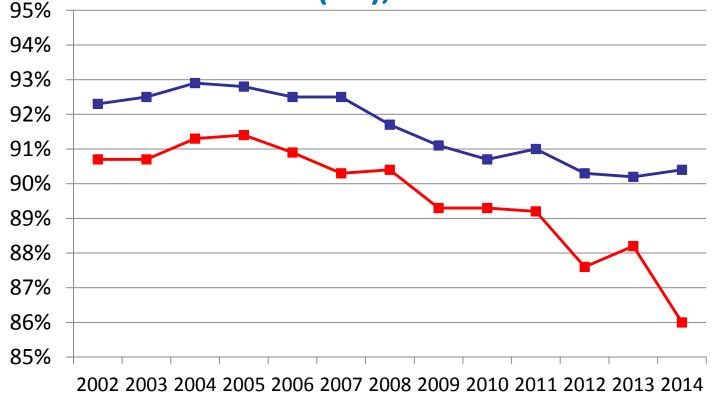


# Introduction

- Dramatic reduction in vaccine-preventable diseases is one of the greatest public health achievements in US.
- Routine vaccination of each US birth cohort prevents approximately 20 million cases of illness and 42,000 deaths.
- Vaccination results in net savings of nearly \$14 billion in direct costs and \$69 billion in total societal costs in United States.



#### Percent of Kindergarten Enrollees up-to-date<sup>¶</sup> with Immunizations, Los Angeles County (LAC) and California (CA), 2002-2014



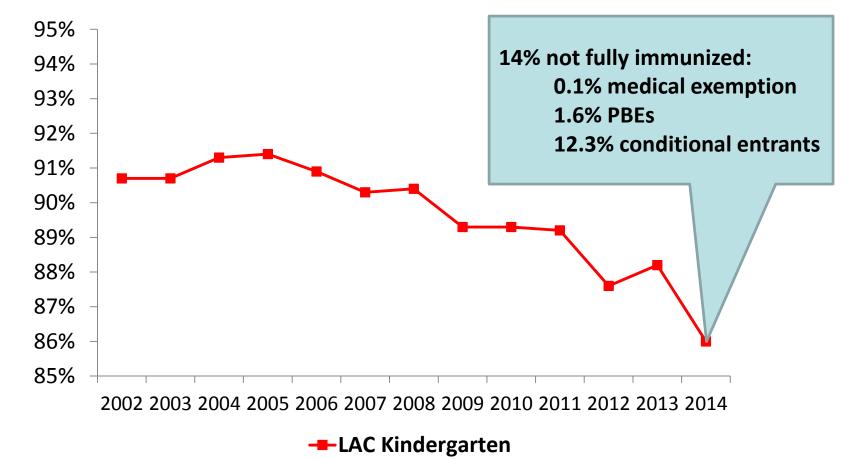
#### 

¶ up-to-date: Kindergarten enrollee has received 4+ DTaP/DTP, 3+ Polio, 2 MMR, 3 Hep B, and 1 Varicella (or physician-documented Varicella Disease).



Data source: DPH Immunization Program.

#### Percent of Kindergarten Enrollees up-to-date<sup>¶</sup> with Immunizations, Los Angeles County (LAC), 2002-2014



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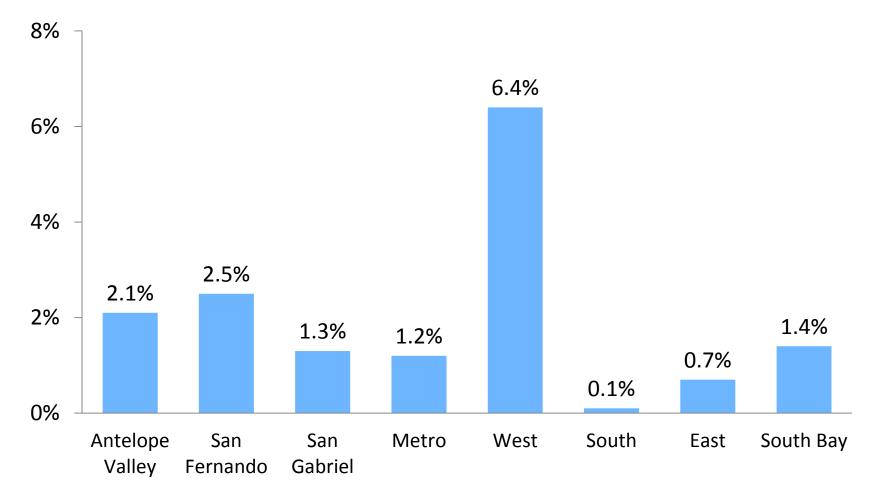
Data source: DPH Immunization Program.

#### Why Do Some Parents Choose Not to Vaccinate Their Children?

- Perceived low risk of contracting vaccine-preventable diseases
- Rapidly expanded immunization schedule for infants and toddlers
- Increased reports of adverse events after immunization
- Fear flamed by the debunked claims that vaccines may cause autism
- Public attention shift from benefits to risks of vaccination
- Media's focus on vaccine-related controversies



#### **Clustering:** Percent of Kindergarteners with Personal Belief Exemptions by Service Planning Area, 2014-15 School Year





Data source: DPH Immunization Program.

#### What's Happening

- Clustering of underimmunized or unimmunized populations contributes to the outbreaks.
- Outbreaks of measles and pertussis have occurred in recent years.
- Recent measles outbreak sickened 28 LAC residents.



## Parental knowledge and attitudes about immunization strongly influence whether a child gets immunized.

## What do parents in the County think?





# Methodology





## LACHS 2011 Child Survey

- Dual frame: landline & cell phone
- Adult survey follow-up & supplemental landline RDD
- 1 child was randomly selected for each randomly selected household.
- Interview the adult in the household who were most knowledgeable about the health and daily routines of the selected child



### LACHS 2011 Child Survey

- Overall sample size: 6,013
  - This report is restricted to parents (including biological, foster, adoptive, and step) of children ages 0-17 years.
  - Sample size for current analysis: 5,372
- Language of interview
  - English, Spanish, Mandarin, Cantonese, Vietnamese, Korean
- Data weighting
- Response rate: RR3=0.202



#### **Immunization questions**

- 1) Do you think that it is safe for a child under one year of age to get immunized?
- 2) Do you think that it is normal or acceptable for a child to experience mild fever, swelling, or mild rash after getting a shot?
- 3) Do you think that parents should be allowed to send their children to school even if they are not immunized?



### **Results**



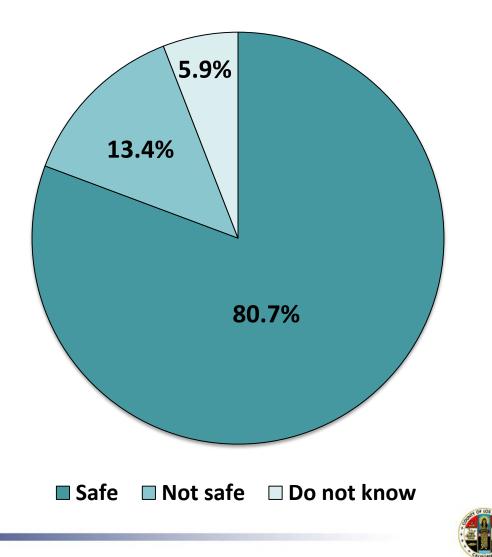


# Q1: Do you think that it is safe for a child under one year of age to get immunized?



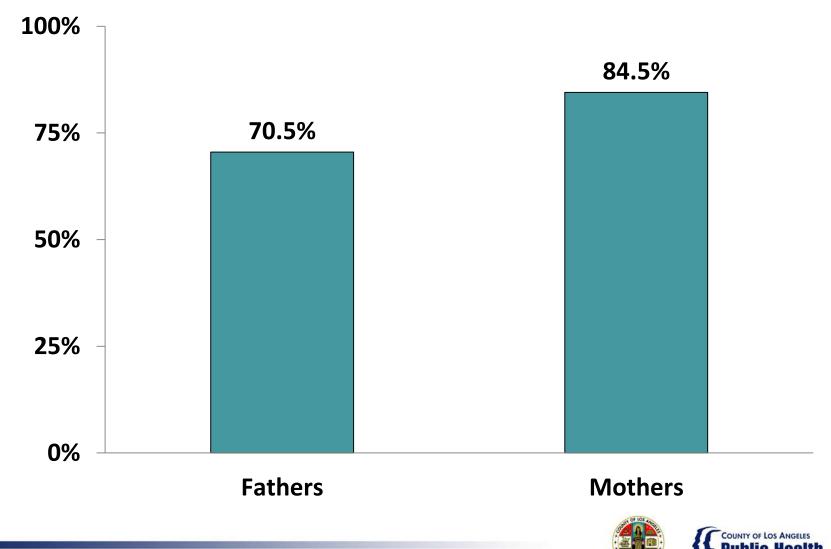


#### Percent of Children (0-17 years old) Whose Parents Think It Is Safe/Unsafe for an Infant to Get Immunized

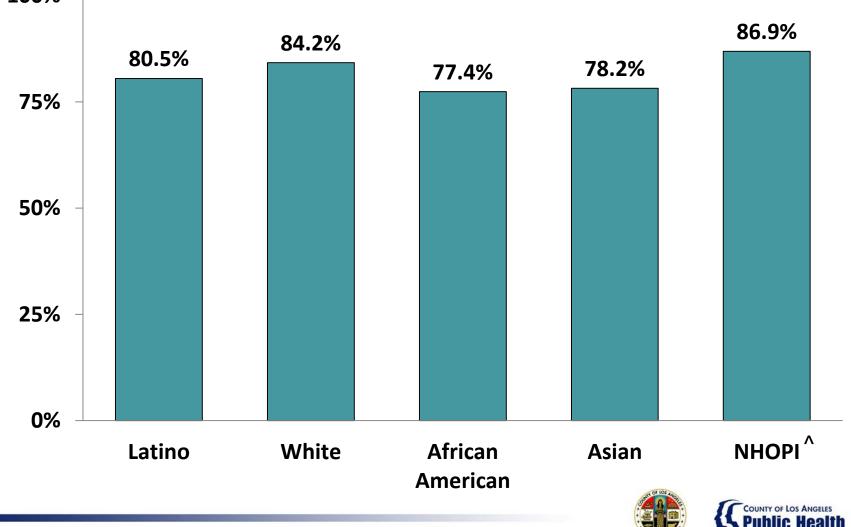




#### Percent of Children (0-17 years old) Whose Parents Think It Is Safe for an Infant to Get Immunized, by Parent Gender

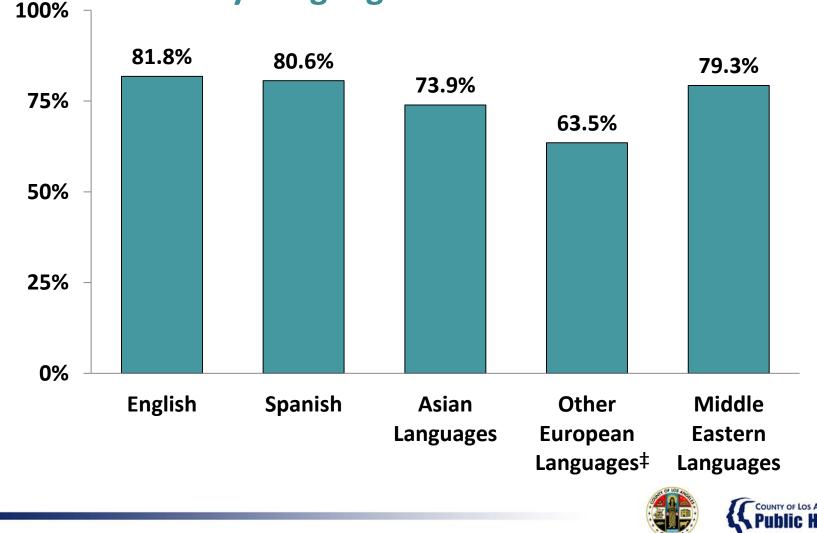


#### Percent of Children (0-17 years old) Whose Parents Think It Is Safe for an Infant to Get Immunized, by Parent Race/Ethnicity



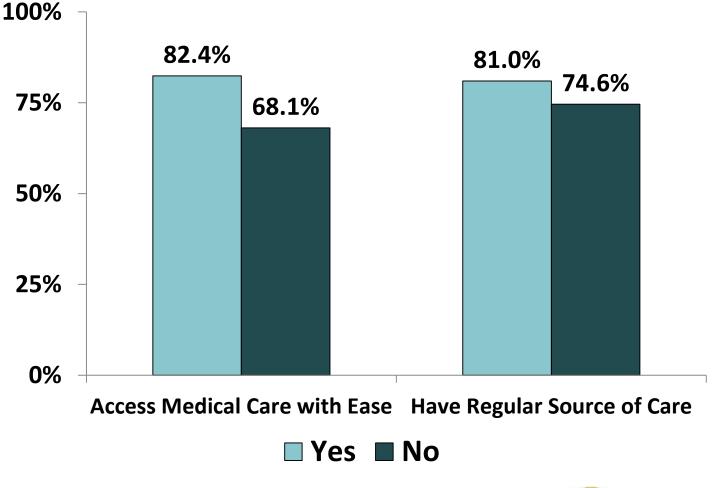
^Native Hawaiian and other Pacific Islander

#### Percent of Children (0-17 years old) Whose Parents Think It Is Safe for an Infant to Get Immunized, by Language Used Most at Home



‡European languages other than English and Spanish.

#### Percent of Children (0-17 years old) Whose Parents Think It Is Safe for an Infant to Get Immunized, by Access to Care



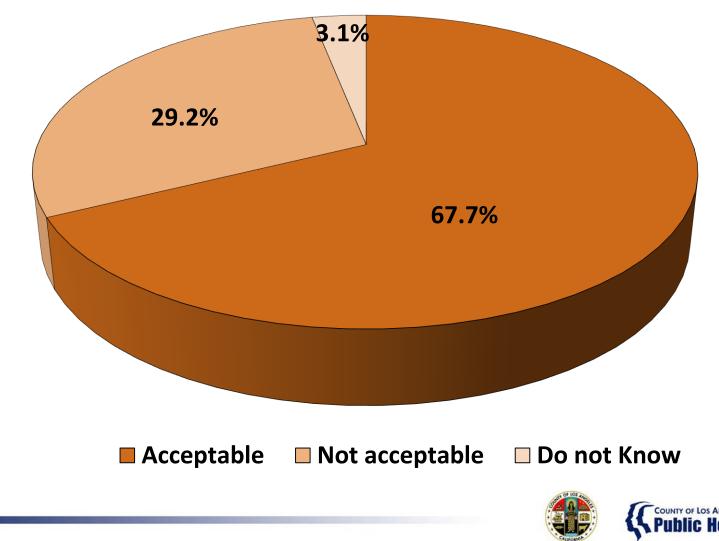


# Q2. Do you think that it is normal or acceptable for a child to experience mild fever, swelling, or mild rash after getting a shot?

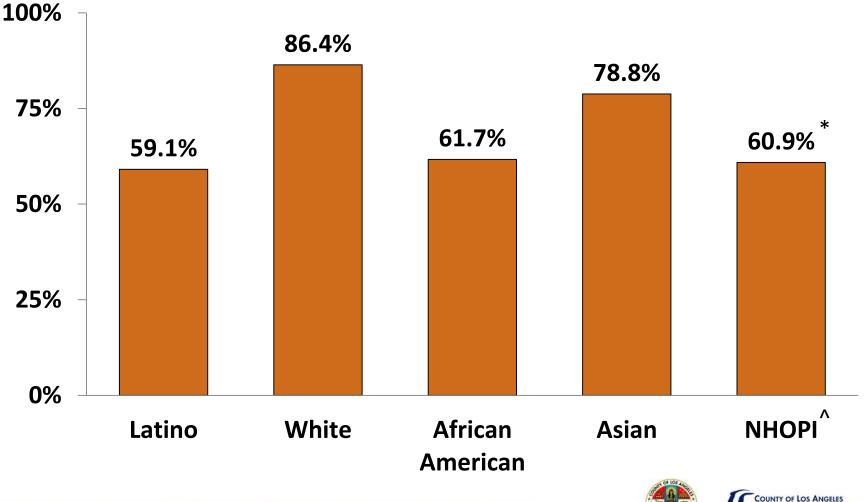




#### Percent of Children (0-17 years old) Whose Parents Think It Is Acceptable/Unacceptable for a Child to Experience Mild Side Effects after Getting a Shot



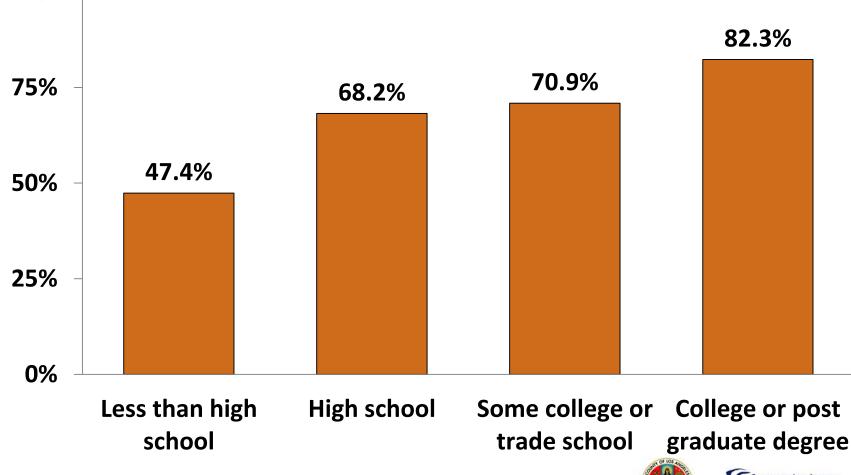
Percent of Children (0-17 years old) Whose Parents Think It Is Acceptable for a Child to Experience Mild Side Effects after Getting a Shot, by Parent Race/Ethnicity



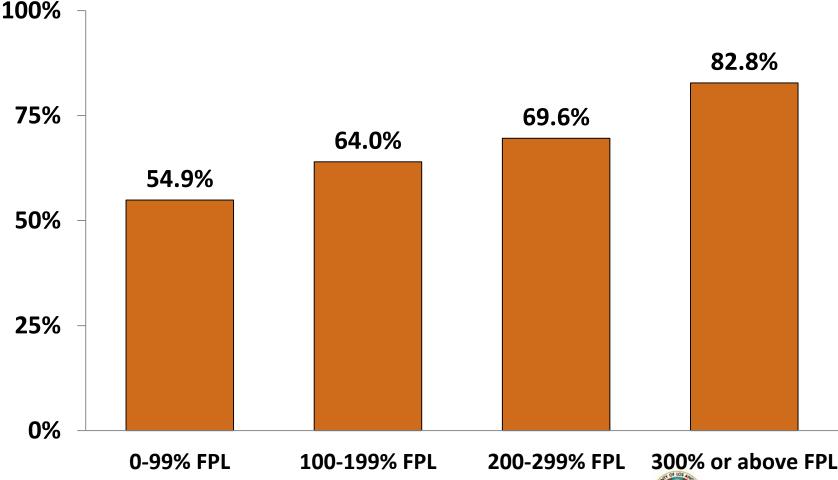
**^Native Hawaiian and other Pacific Islander; \*Unstable estimate** 

#### Percent of Children (0-17 years old) Whose Parents Think It Is Acceptable for a Child to Experience Mild Side Effects after Getting a Shot, by Education

100%

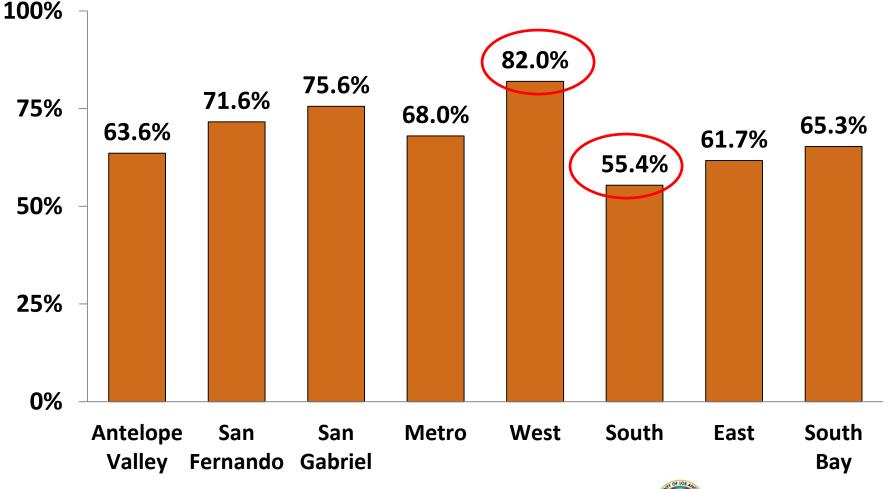


Percent of Children (0-17 years old) Whose Parents Think It Is Acceptable for a Child to Experience Mild Side Effects after Getting a Shot, by Household Income





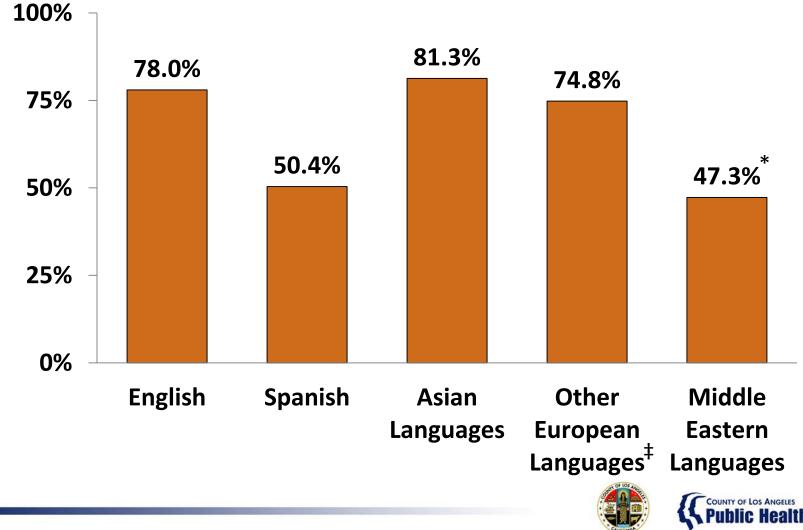
Percent of Children (0-17 years old) Whose Parents Think It Is Acceptable for a Child to Experience Mild Side Effects after Getting a Shot, by Service Planning Area





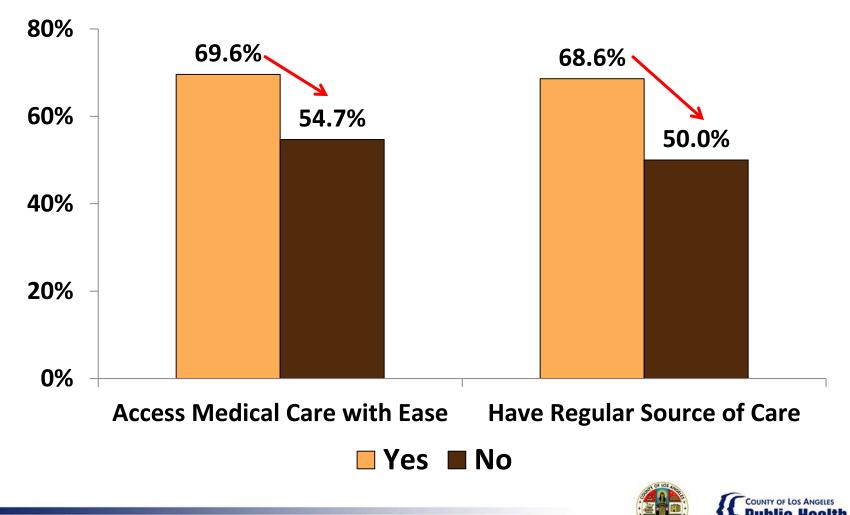
COUNTY OF LOS ANGEI

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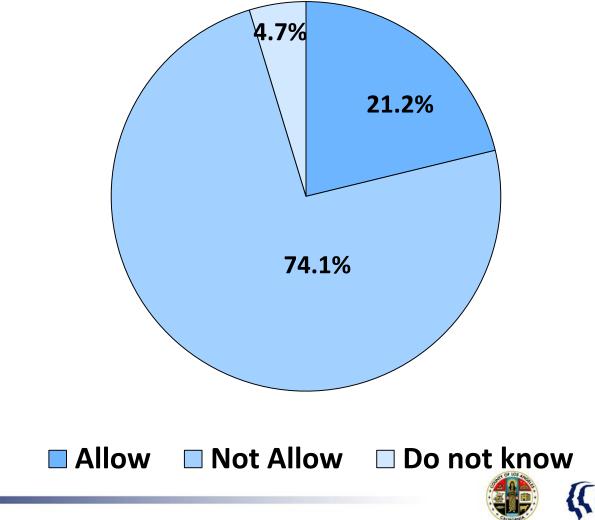


# Q3. Do you think that parents should be allowed to send their children to school even if they are not immunized?



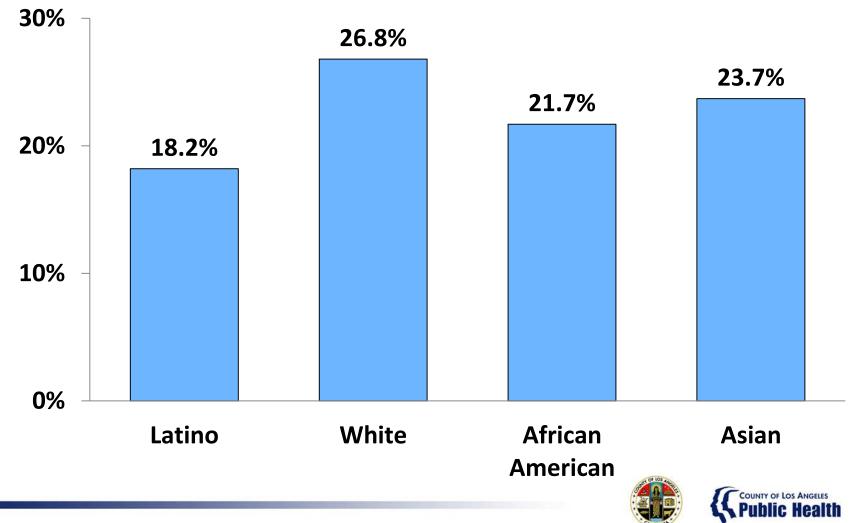


#### Percent of Children (0-17 years old) Whose Parents Think Children Should/Should Not be Allowed to Attend School If They Are Not Immunized



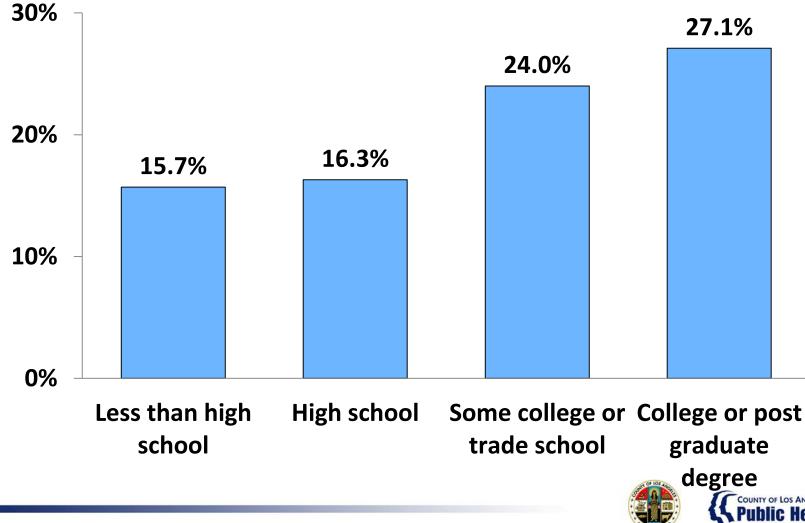
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#### Percent of Children (0-17 years old) Whose Parents Think Children Should be Allowed to Attend School Even If They Are Not Immunized, by Parent Race/Ethnicity

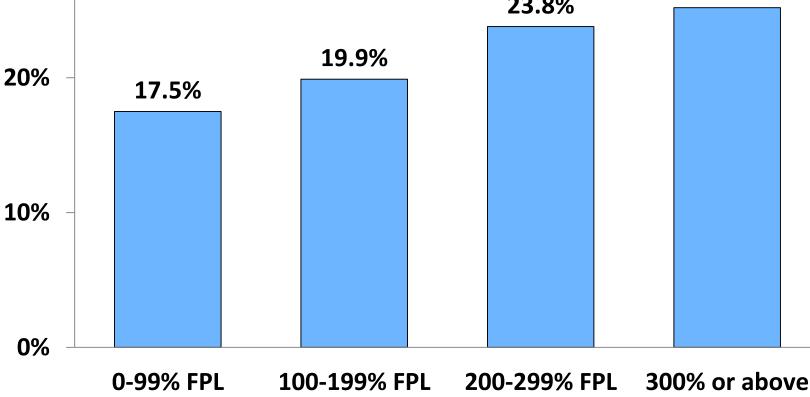


Data for Native Hawaiian and other Pacific Islanders are suppressed.

#### Percent of Children (0-17 years old) Whose Parents Think Children Should be Allowed to Attend School Even If They Are Not Immunized, by Parent Education



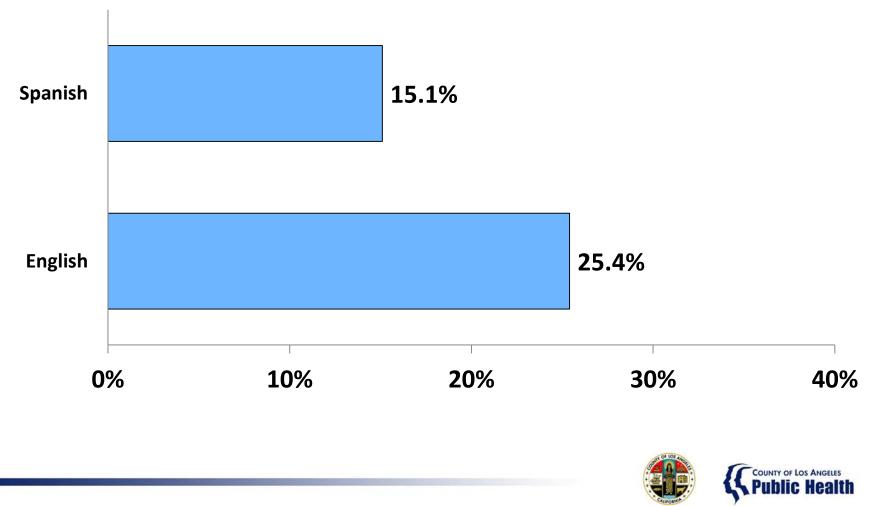
#### Percent of Children (0-17 years old) Whose Parents Think Children Should be Allowed to Attend School Even If They Are Not Immunized, by Household Income 30%



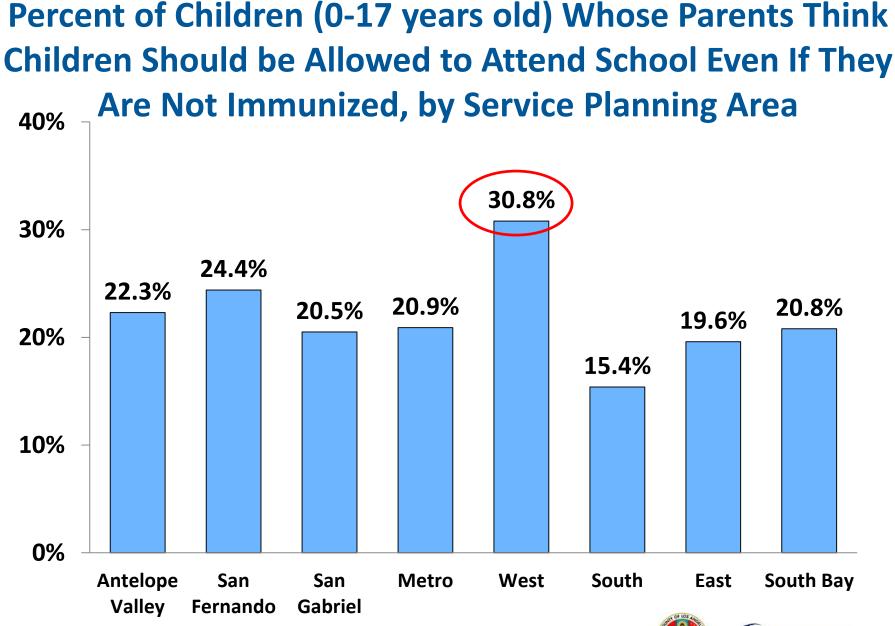




Percent of Children (0-17 years old) Whose Parents Think Children Should be Allowed to Attend School Even If They Are Not Immunized, by Language Used Most at Home



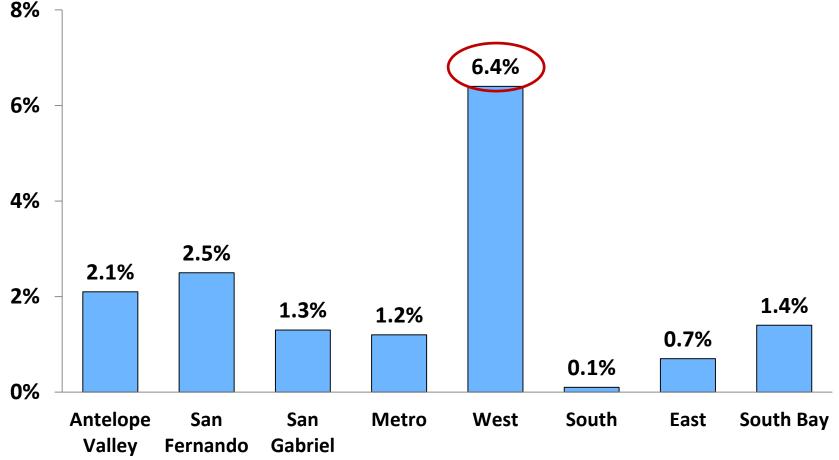
<sup>‡</sup>Data are not stable for children whose parents mainly spoke Asian, other European, and Middle Eastern languages.





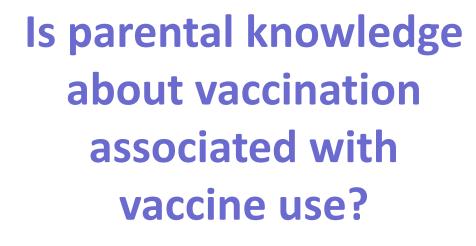


#### Percent of Kindergarten Enrollees with Personal Belief Exemptions by SPA, 2014-15 School Year



Data Source: Los Angeles County Department of Public Health, Immunization Program, 2014-2015 Immunization Status of Kindergarten Students, California (in schools with ten or more kindergarten students enrolled).



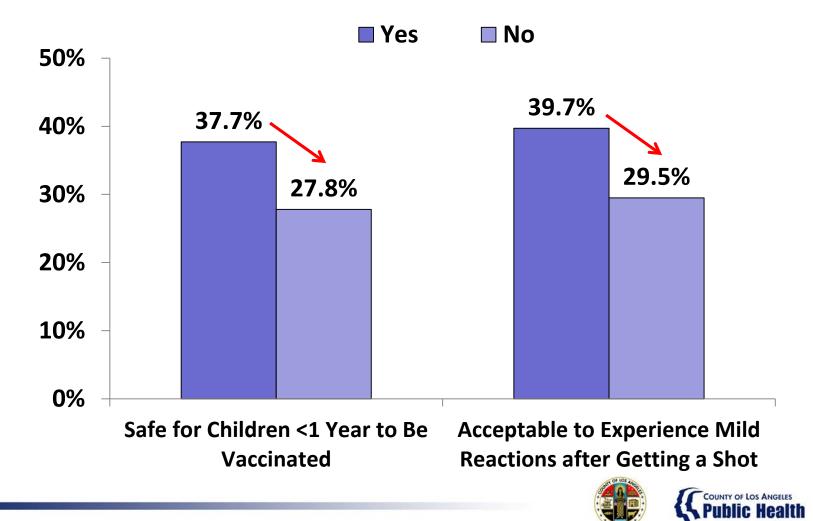








#### Percent of Children (0-17 years old) Who Had Been Vaccinated for H1N1 Flu (at least 1 dose) Since October, 2009, by Parental Concerns about Vaccination



#### **Summary**

The LACHS data reveal disparities in knowledge and attitudes about childhood immunization across different populations of parents in the County. Parents' social, economic, and cultural backgrounds, and their access to medical care for their children, impact their concerns and attitudes about routine childhood vaccination.



#### Recapture

- A lower percentage of parents who spoke mainly Asian languages and other European languages thought it was safe to vaccinate an infant.
- A lower percentage of parents who spoke Spanish believed it was acceptable for a child to experience mild side effects after immunization.
- English-speaking parents were more likely than Spanish-speaking parents to report that children should be allowed to attend school even if they are not immunized.



#### **Recapture -2**

- Parents who reported easier access to medical care for their children had less concern about vaccination safety and side effects.
- A higher percentage of white, highly-educated, and high-income parents understood that mild reactions to vaccination are normal in children.
- A higher percentage of white, highly-educated, and high-income parents also thought that children should be allowed to attend school without immunizations.

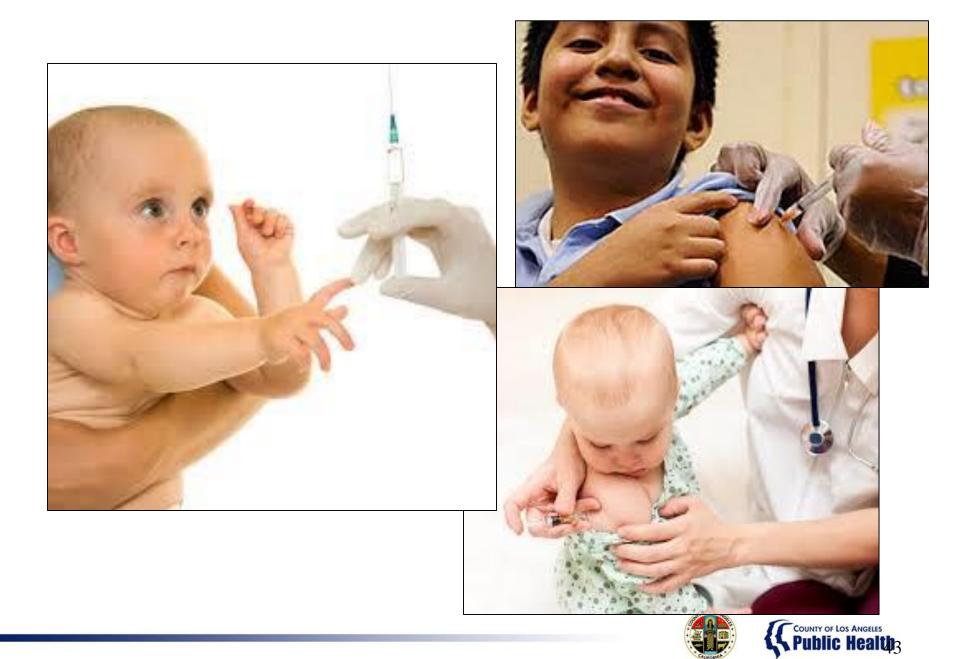




#### Limitations

- Self-reported data
- Does not represent persons living in group quarters
- Low response rate
- Limited sample sizes for some subgroups
- Weighting based on the distribution of children, not parents





# **Thank You**



