

 COUNTY OF LOS ANGELES
Public Health

School-based Immunization Practices and Staff Attitudes in Los Angeles County Schools

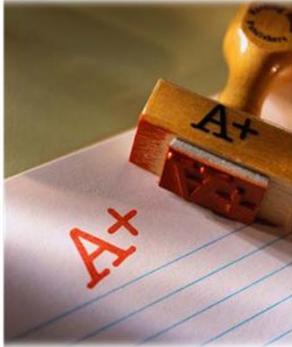
Julia Heinzerling, MPH
Policy and Advocacy Specialist
Los Angeles County Department of Public Health, Immunization Program



 COUNTY OF LOS ANGELES
Public Health

Presentation Objectives

- Describe school-based practices and staff attitudes regarding immunizations in schools located in Los Angeles County
- Identify differences in practices and staff attitudes observed between public and private schools
- Discuss how study findings can be used to enhance school-based immunization practices and resources



1

COUNTY OF LOS ANGELES
Public Health

Background and Methodology

2

COUNTY OF LOS ANGELES
Public Health

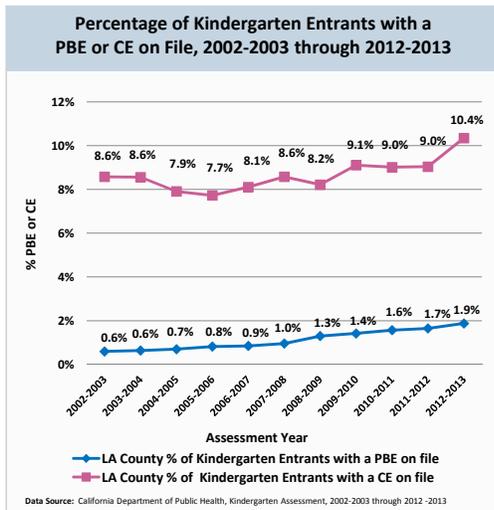
California School Immunization Law

- California kindergarten enrollees are required to receive a series of immunizations before entering any licensed public or private school.
- Students may be exempted from IZ requirements if:
 - Their parents hold personal beliefs that are contrary to immunization: *Personal Beliefs Exemption (PBEs)*
 - Their religion does not permit them to get medical advice or treatment from a health care provider: *Religious Exemption*
 - They have a medical contraindication to vaccination: *Medical Exemption*
- Students who are missing doses that are not yet due may be admitted on condition that they receive them when due.
 - *Conditional Entrants (CE)*



3

Rationale for the Study



- **PBE and CE levels are increasing.**
 - Increased VPD illnesses, deaths, and outbreaks
 - Students being excluded from school due to under-vaccination
 - Increased costs associated with VPD case investigation, school exclusions, diagnosis, and treatment
- **Staff attitudes and school practices may influence PBEs and CEs.**
 - Approaches for Educating Parents
 - Assessment and Follow-up Procedures
 - Student Exclusions

4

School Immunization Practices Survey

- The Los Angeles County Department of Public Health, Immunization Program launched an online survey of area public, private, and charter schools with kindergartens.
 - Primarily closed-ended
 - Expected completion time: 15-20 minutes
 - Data Collection: April 17- June 1, 2012
- Survey Aims
 - **Initial:** Describe school-based immunization practices and staff beliefs regarding immunizations
 - **Initial:** Identify school-based practices and staff beliefs that may be associated with parental use of PBEs and CEs



- **Revised:** Assess whether practices and beliefs differ based on school type and if so, whether the respondent's role mattered

5




Methodology

- Online survey distributed to public, private, and charter schools with kindergarten classes
 - Staff or volunteers who complete immunization-related activities
- **Inclusion Criteria**
 - Located in Los Angeles County
 - Submitted 2010 CDPH Kindergarten Assessment
 - Had ≥ 10 kindergarten enrollees in School Year 2010
 - Met PBE and/or CE case or control criteria
 - 2010 PBE Rate: $\geq 5\%$ (Case) or 0% (Control)
 - 2010 CE Rate: $\geq 5\%$ (Case) or 0% (Control)
- **Exclusion Criteria**
 - Did not meet inclusion criteria
 - Participated in the survey pilot test
 - Email address was not available



6




Survey Promotion

- **Pre-launch**
 - Email to school district administrators, school administrators, and private school organizations to request participation
- **Launch**
 - Invitation, survey link, and survey FAQ emailed to school contacts
 - Promotional postcards mailed to schools that met PBE case criteria
- **Follow-up**
 - Resends to bounce-backs when updated email addresses were located
 - Multiple email reminders to non-responders
 - Reminder phone calls to PBE Case non-responders
- **Incentive**
 - Opportunity to win one of ten \$30 gift cards



7

COUNTY OF LOS ANGELES
Public Health

Key Results: Respondents



8

COUNTY OF LOS ANGELES
Public Health

Response Rate

1,484 schools invited

↓

490 survey responses

↓

140 survey responses excluded

Common Reasons for Exclusion

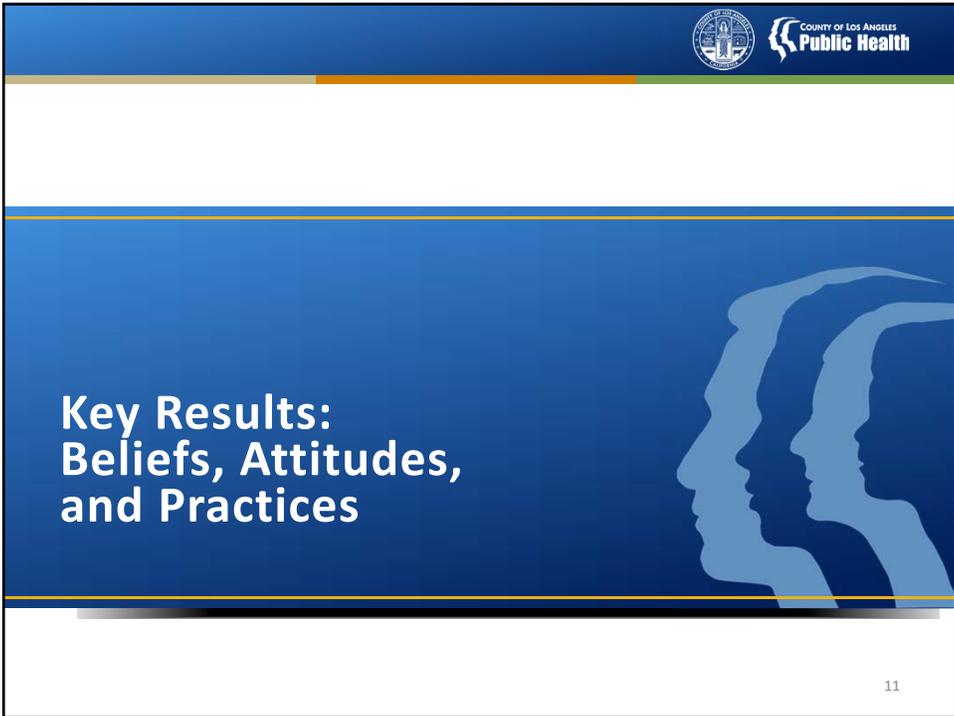
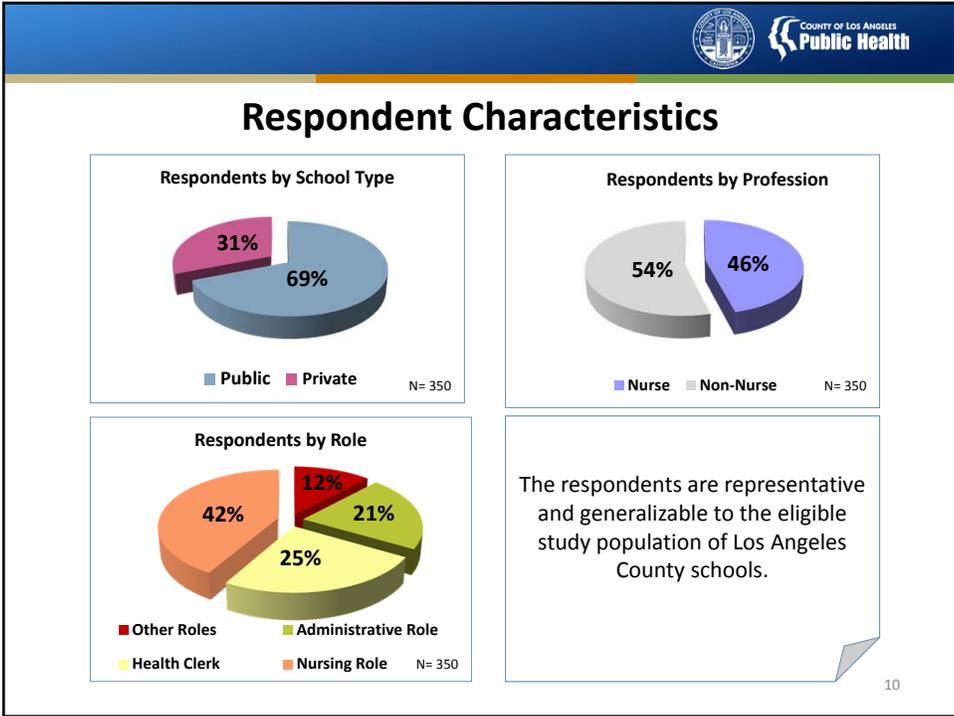
- Ineligible for survey participation
- Could not be assigned to case or control status
- Incomplete survey

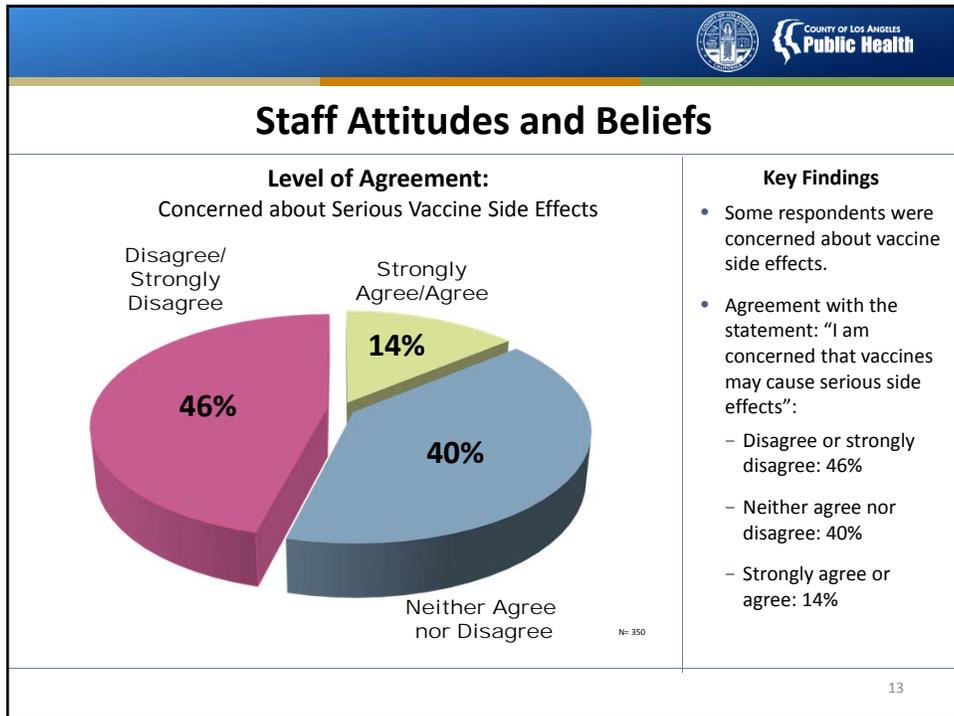
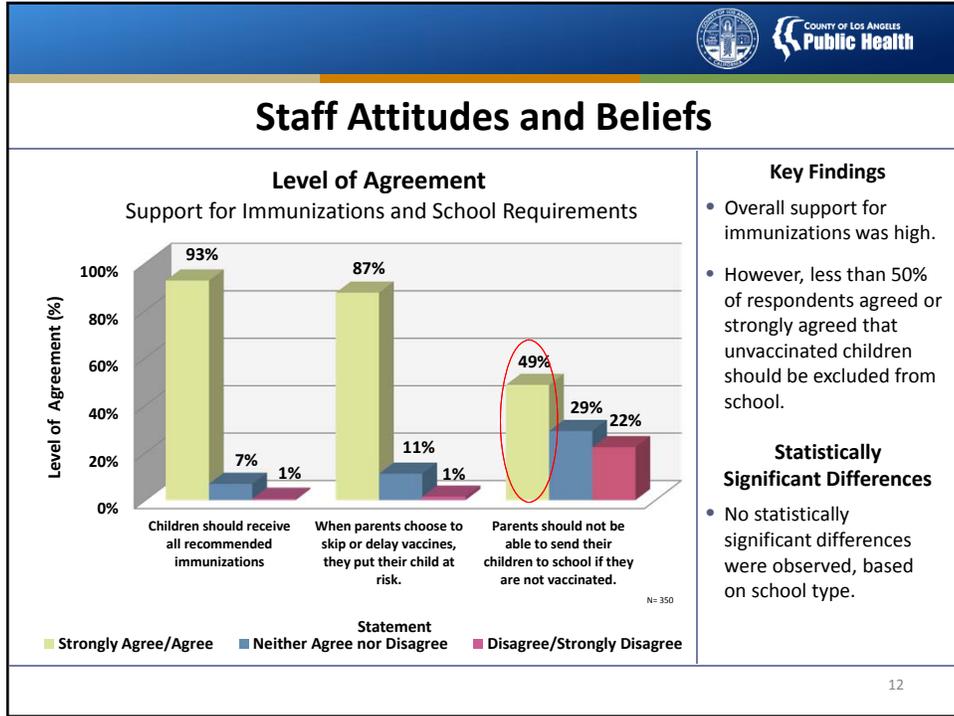
↓

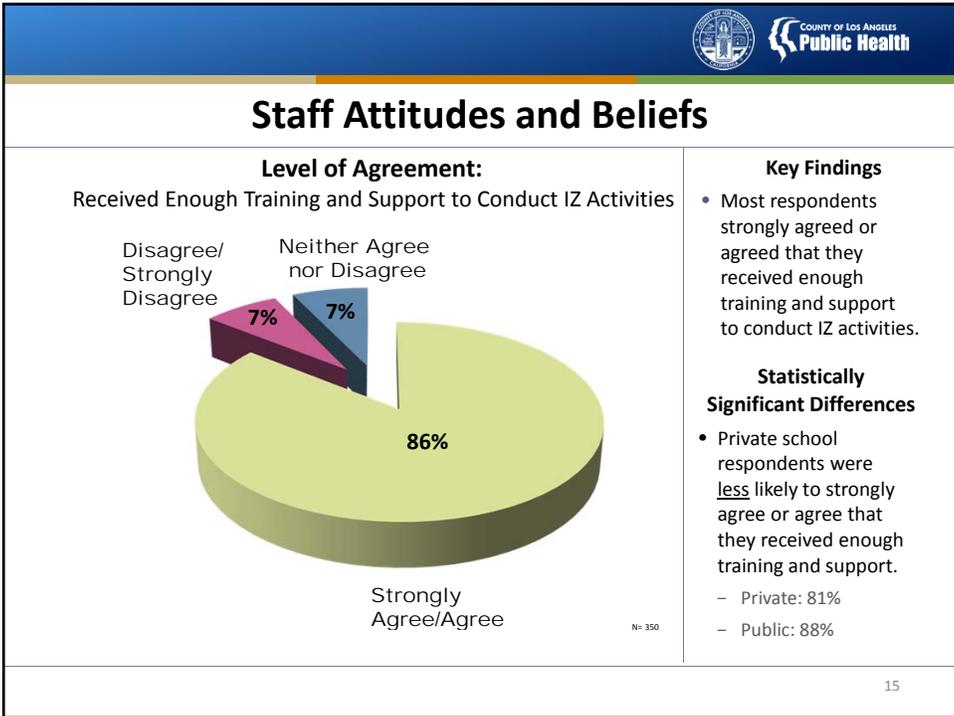
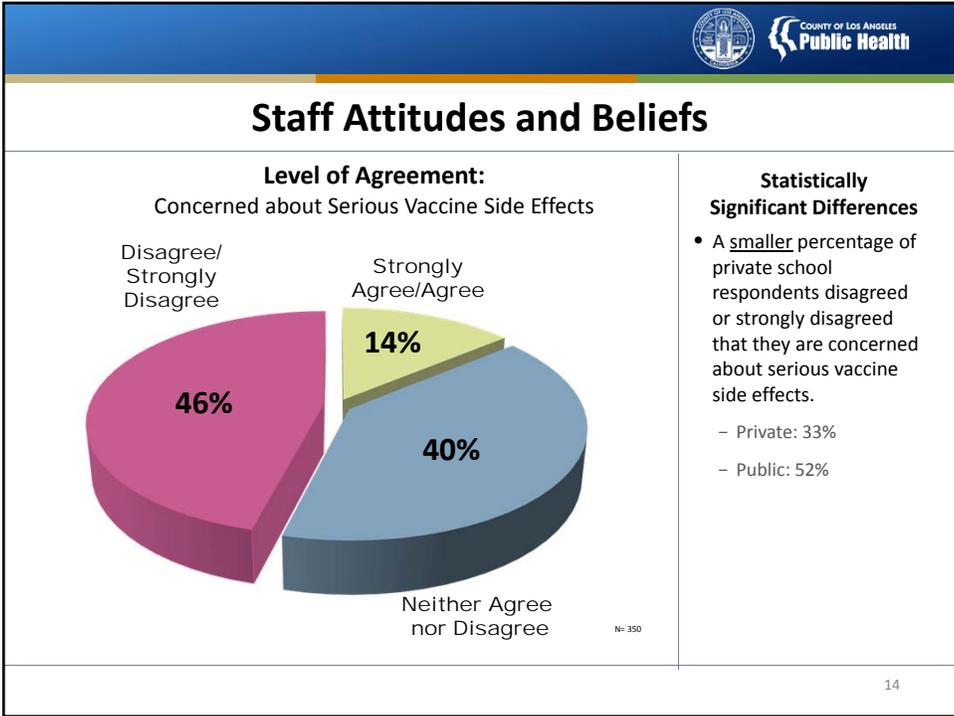
350 survey responses analyzed

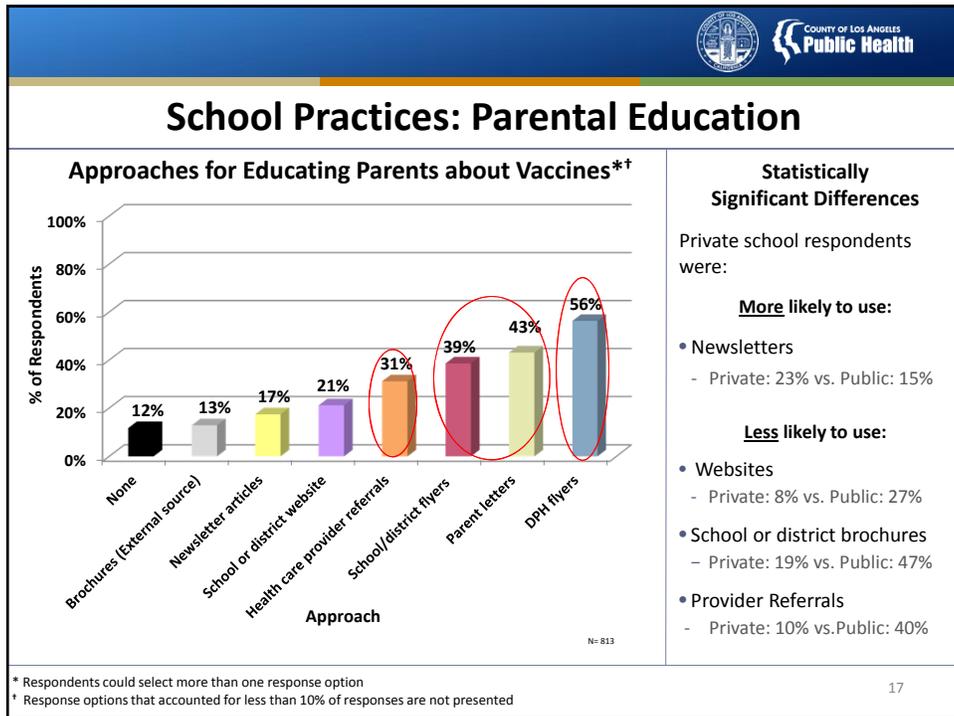
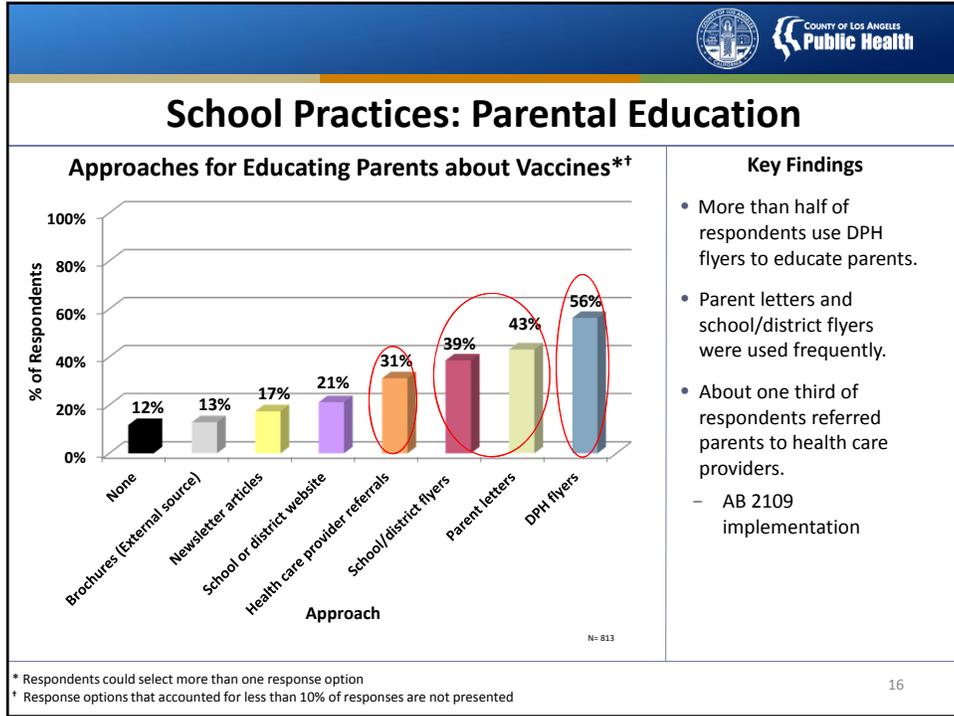
24%
Response
Rate

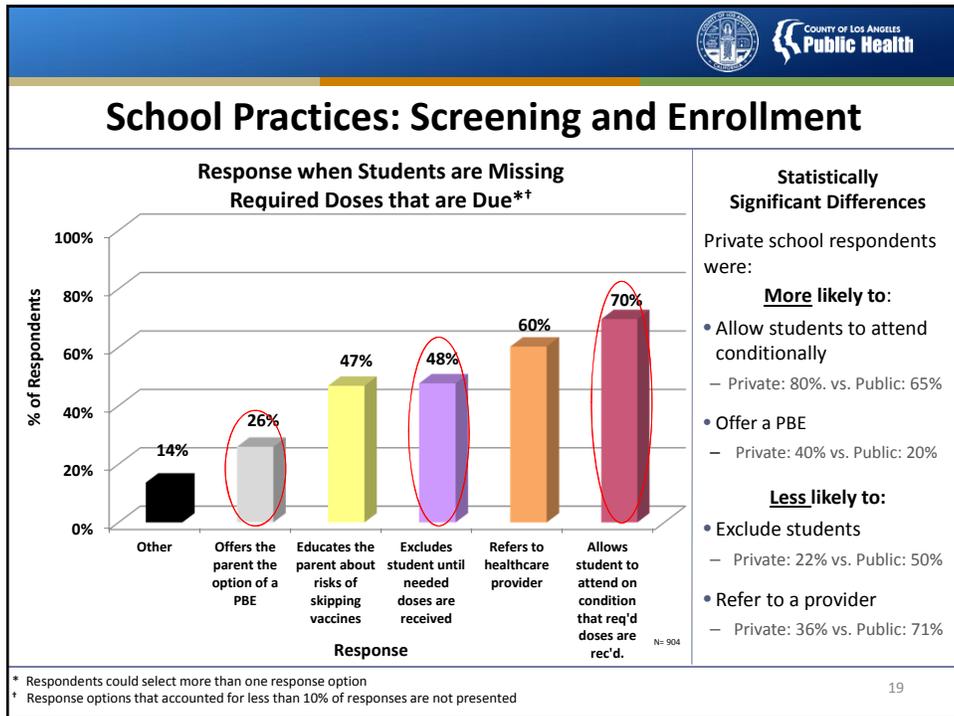
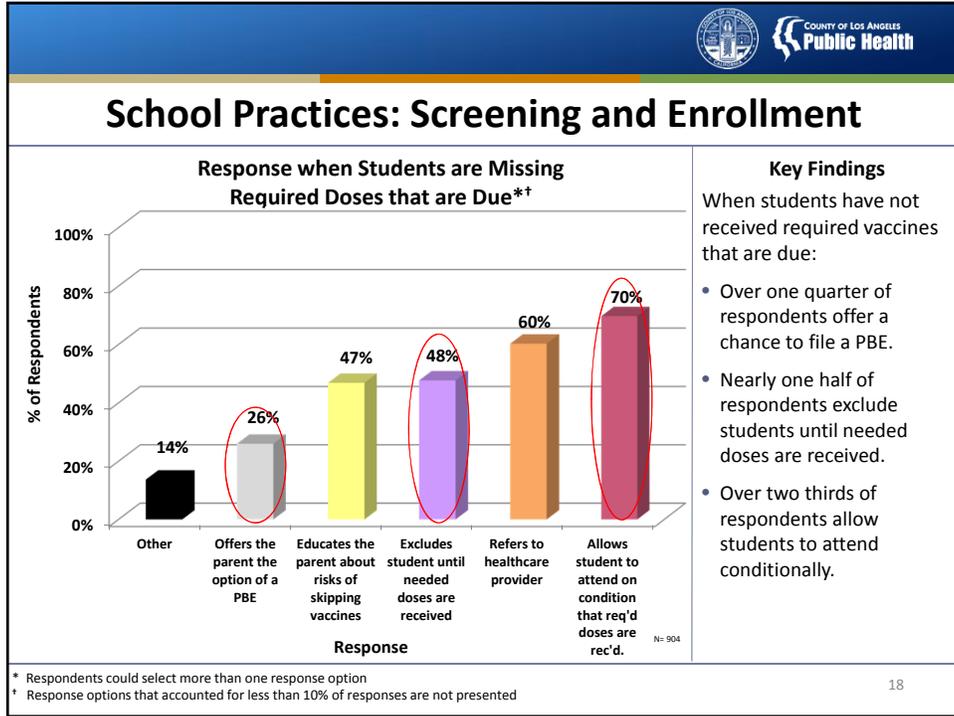
9

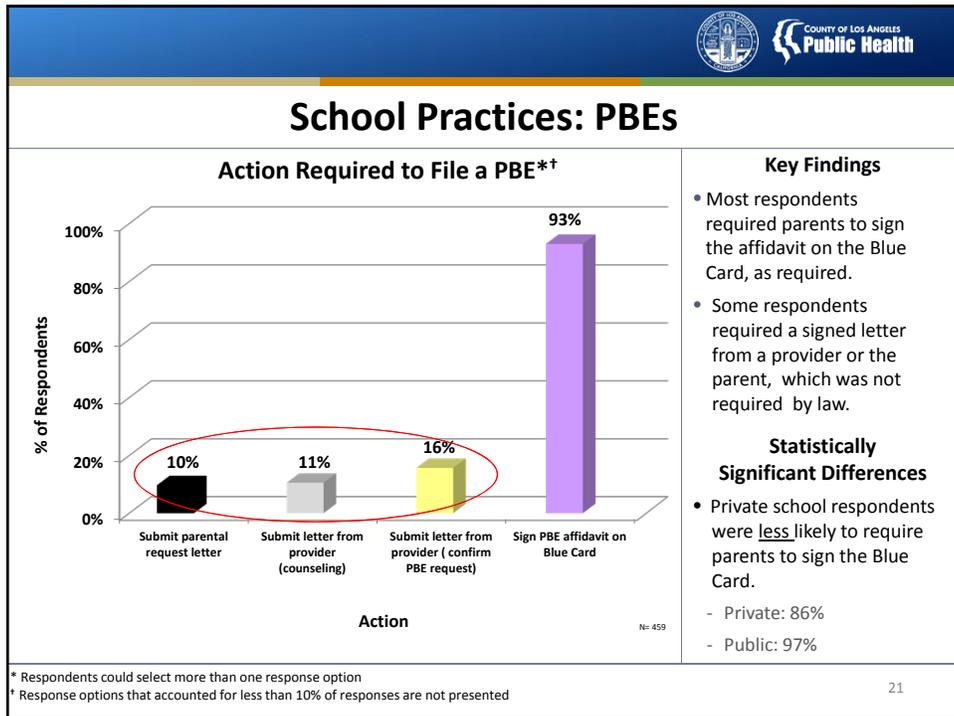
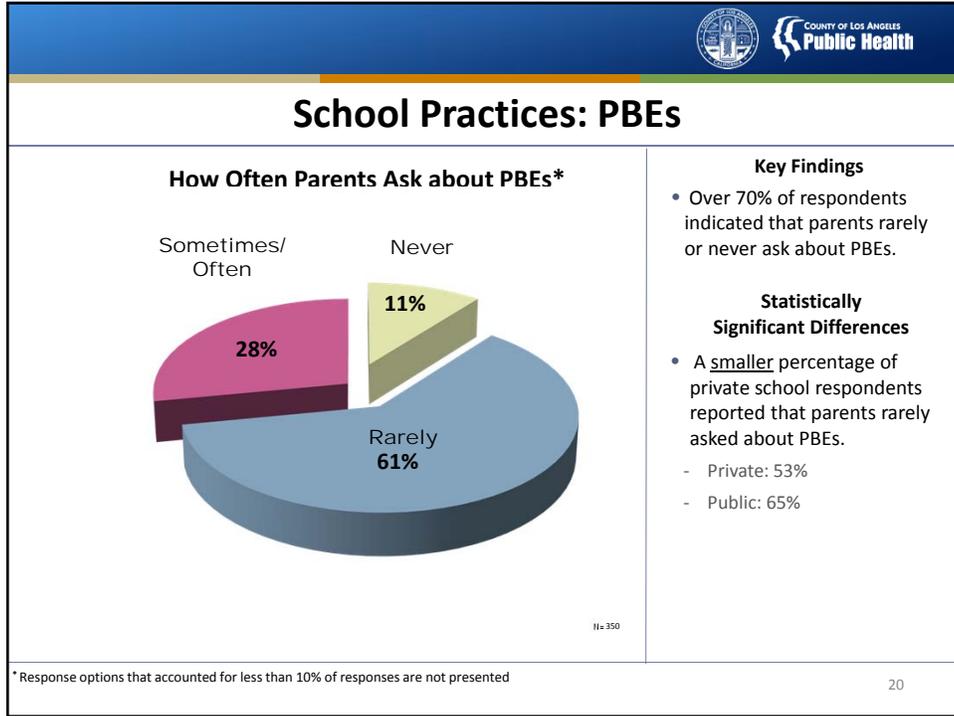


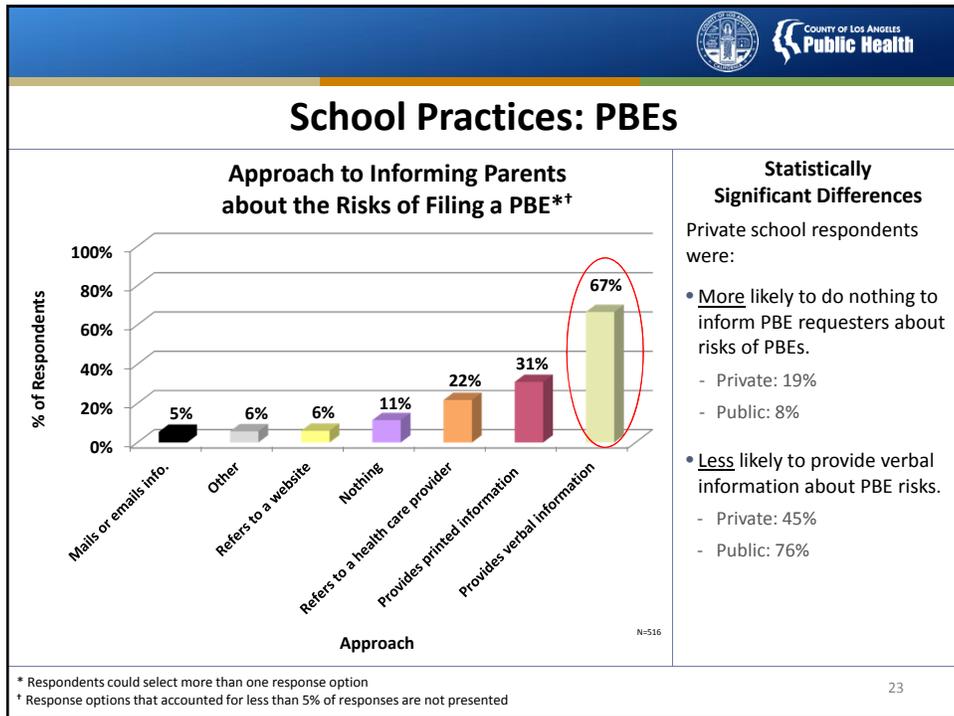
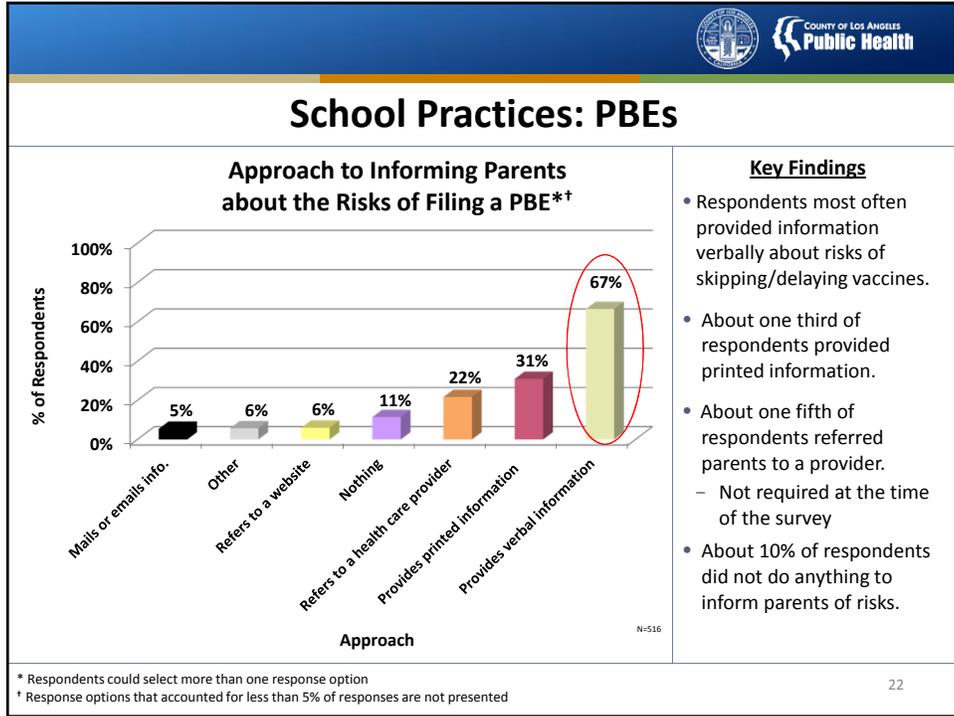


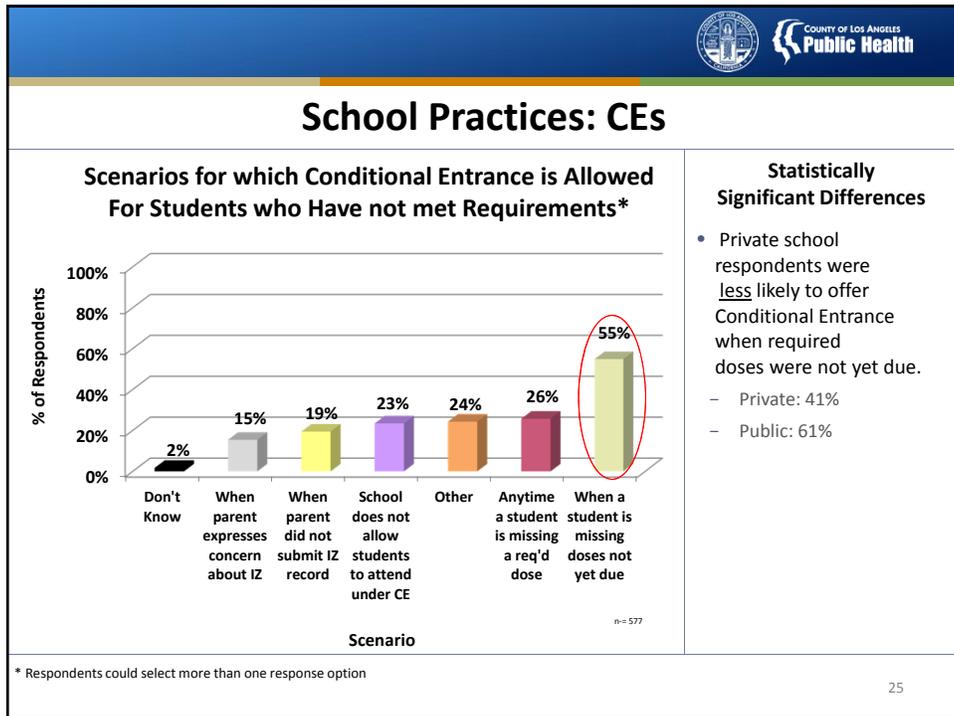
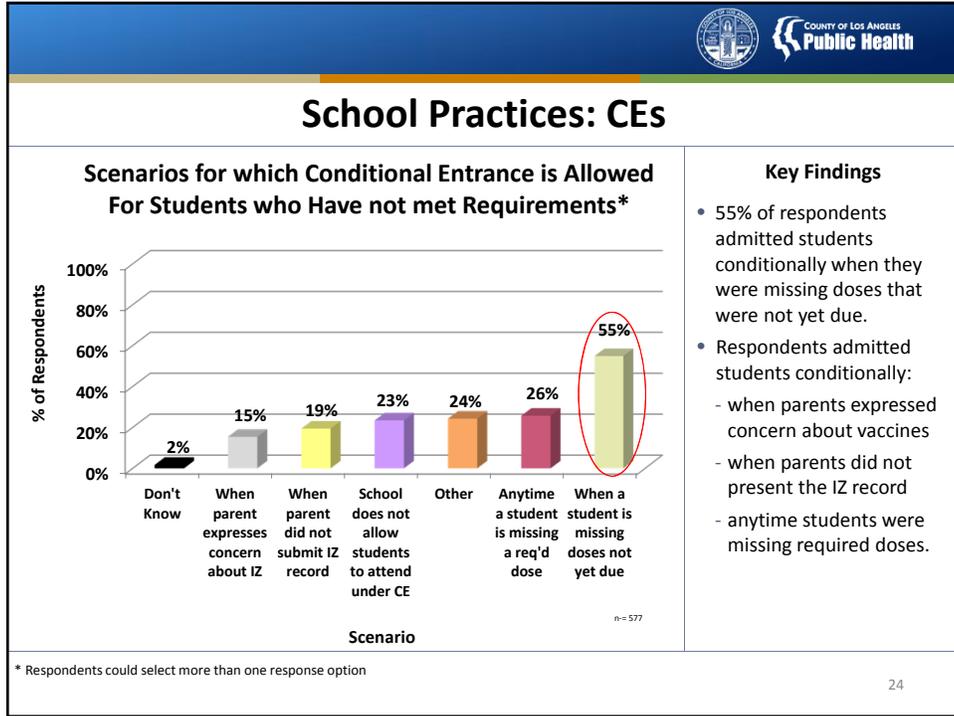


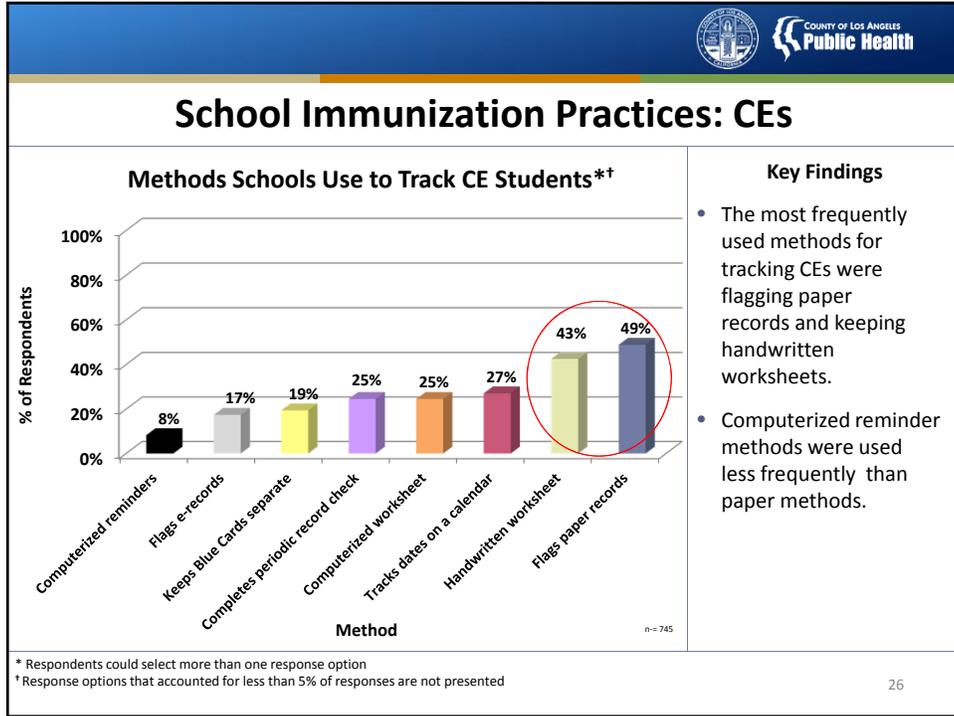








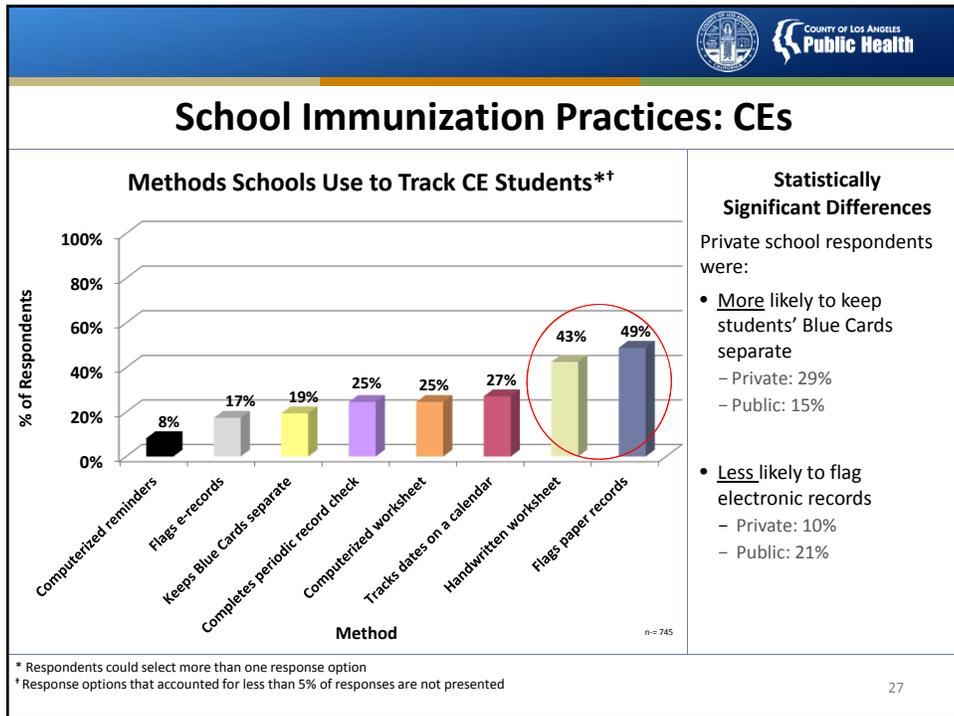




Key Findings

- The most frequently used methods for tracking CEs were flagging paper records and keeping handwritten worksheets.
- Computerized reminder methods were used less frequently than paper methods.

* Respondents could select more than one response option
 † Response options that accounted for less than 5% of responses are not presented

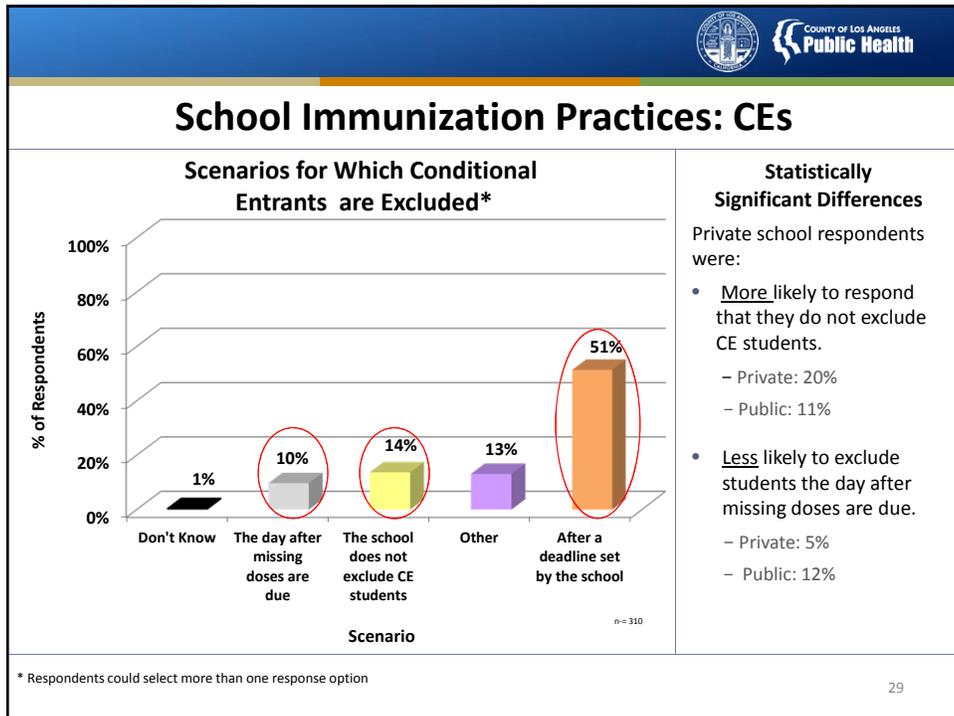
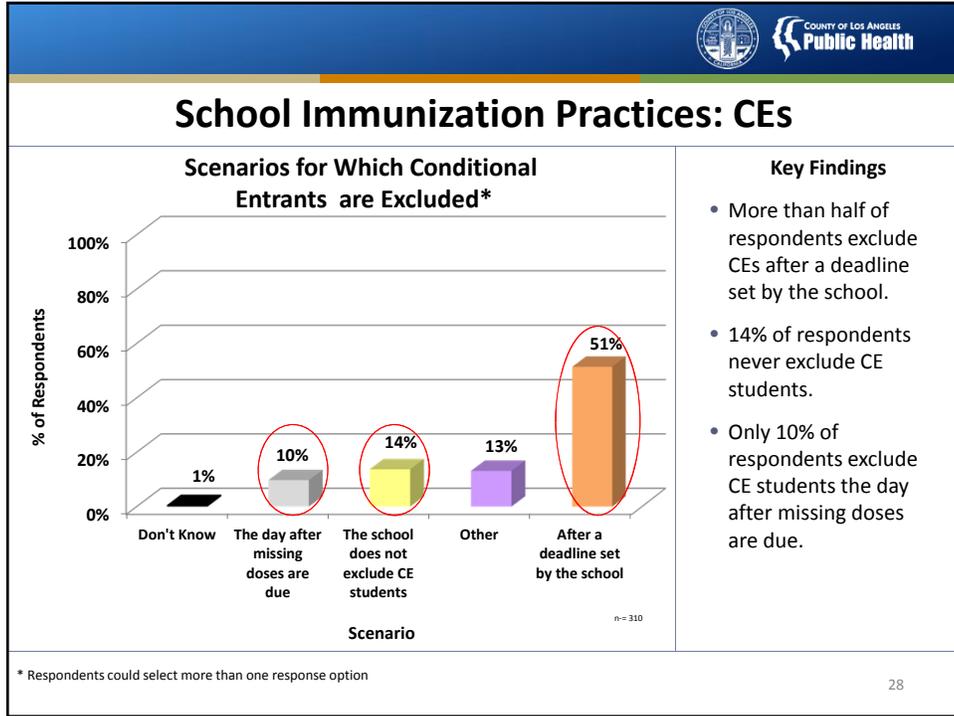


Statistically Significant Differences

Private school respondents were:

- More likely to keep students' Blue Cards separate
 - Private: 29%
 - Public: 15%
- Less likely to flag electronic records
 - Private: 10%
 - Public: 21%

* Respondents could select more than one response option
 † Response options that accounted for less than 5% of responses are not presented



Potential Influence of Staff Role

- Some differences between public and private schools disappeared when looking only at:

NURSES

- Requiring parents to sign the Blue Card for a PBE
- Concern about Serious Vaccine Side Effects
- Use of electronic records to flag CEs for follow-up



NON-NURSES

- Allowing students who are currently due for vaccines to attend conditionally
 - Offering a PBE to under-immunized students
 - Not educating parents about risks of PBEs
- Suggests that role (i.e., nurse vs. non-nurse) may influence beliefs and practices.

Conclusions and Recommendations



Key Findings: Staff Beliefs and Attitudes

- Support for immunizations was high among respondents.
 - Most agreed that children should receive all recommended vaccines and that skipping or delaying doses puts children at risk.
- There are opportunities to improve vaccine confidence and support for school immunization policies.
 - Less than half of respondents agreed or strongly agreed that unvaccinated children should be excluded from school.
 - More than half of respondents may be concerned about serious vaccine side effects.



32

Key Findings: Parental Education

Methods for educating parents about immunizations and requirements varied.

- The most frequently used educational tools were:
 - DPH flyers
 - Parent newsletters
 - School/district flyers
 - Referrals to providers.



33

Key Findings: Personal Beliefs Exemptions

Personal Beliefs Exemption practices varied.

- About one quarter of schools receive questions about PBEs (sometimes or often).
- The majority of schools provided verbal information regarding risks of skipping or delaying vaccines.
 - Fewer used printed info. or provider referrals.
- Most schools followed the CDPH process for filing PBEs (signed Blue Card).
 - Some schools required a signed statement health care provider or the parent.



34

Key Findings: Conditional Entrance

Conditional Entrance practices varied.

- Over 50% of respondents followed CDPH CE criteria but:
 - Some schools entered students conditionally when students might not have qualified for CE.
 - Some schools offered PBEs to students who were missing required doses that were due.
 - Some schools never excluded CEs.
 - Many schools set their own deadline for excluding CEs.
 - Electronic tracking was not widely used for CE follow-up.



35

Key Findings: Variation in Practices

Staff attitudes and practices varied based on school type, with private school respondents being:

- More concerned about vaccine safety.
- Less confident that they had received sufficient training and support.
- More likely to use newsletters and less likely to use websites and school or district flyers.
- More likely to receive questions about and offer PBEs.
- Less likely to exclude CEs the day after doses became due.



Some differences in practices may be driven by the staff member's professional role (i.e., nursing role).

36

Limitations

- Use of self-report data that might be subject to recall bias
- Did not assess the number of nursing staff at each school
 - May underreport nurses' influence on school practices
- Combined private non-religious and parochial schools
 - May mask other differences within private schools
- Despite limitations, this is the first assessment of IZ knowledge and practices related to PBEs and CEs with a representative sample of LA County schools.
 - Makes a contribution to further research



37

Recommendations

- Use surveys, interviews, or focus groups to assess staff immunization beliefs, attitudes, and practices.
- Offer the potential to:
 - Identify best practices and areas for improvement
 - Assess practices associated with PBEs and CEs
 - Target education and training
 - Public versus private
 - Nursing versus non-nursing staff



38

Recommendations

- Offer training and educational resources to:
 - Address staff concerns about vaccine safety
 - Improve understanding of and adherence to CE procedures
 - Encourage the use of electronic systems, including CAIR, for tracking of PBE and CE students
- Promote funding and policies that provide access to nursing staff at schools
- Provide educational flyers and templates to schools



39



Acknowledgements

Los Angeles County Department of Public Health

- Kathleen M. Sanchez, PhD, MPH
- Andrea Soriano, MSW
- Dulmini Wilson, MPH
- Michelle T. Parra, PhD
- Laurel Fowler, MPH, CPHQ
- Eva Weinstein, MPH*
- Kelly Skovira, MPH*
- Kelsey Sprague, MPH*
- Susan Blackwell, MA*
- Vi Nguyen, MPH*
- Duc Pham
- Wendi Cate, MA
- Lisa V. Smith, MS, DrPH

* Formerly of the Los Angeles County Department of Public Health, Immunization Program

California Association of Private School Organizations

Catholic Archdiocese of Los Angeles County

Los Angeles County Office of Education

Los Angeles Unified School District