

Kindergarten Vaccination Rates in Orange County— Assessing the Impacts of SB277

ORANGE COUNTY IMMUNIZATION COALITION
BI-MONTHLY EDUCATION MEETING
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Common Reasons for Vaccine Delay/Refusal

- Concern about long term side effects
- Distrust of vaccines; conspiracy theories (preservatives, heavy metals, long term effects)
- Infants' immune systems will be overwhelmed by vaccines (too many, too soon)
- Risk of infection low; diseases are not that bad; belief in "natural immunity"
- Pain and discomfort due to vaccines
- Other barriers (cost, transportation, inconvenience, philosophical and religious beliefs)
- Permissive state exemption policies

Recent Events Impacting Childhood Vaccinations

2011-----2012-----2013-----2014-----2015-----2016-----2017

- **2011** backdrop of increasing PBEs in CA→AB 2109 introduced → signed in 2012 *with Governor's message
- 2012 8 measles cases in CA
- **2013** 18 measles cases in CA (2 in OC)
- **1/1/14** AB 2109 goes into effect, requires provider documentation of PBE/VPD risks
- **2014** 75 measles cases in CA (24 in OC/13 in LA)
- 2015 125 measles cases in CA (33 in OC/28 in LA) Disneyland/OC Measles outbreak—winter 2014-15
- **2015** SB 277 introduced/signed: elimination of PBEs—effective 1/1/16

So, what happened? LA Times February, 2016



LA Times, April 2017



California County KG Immunization Rates

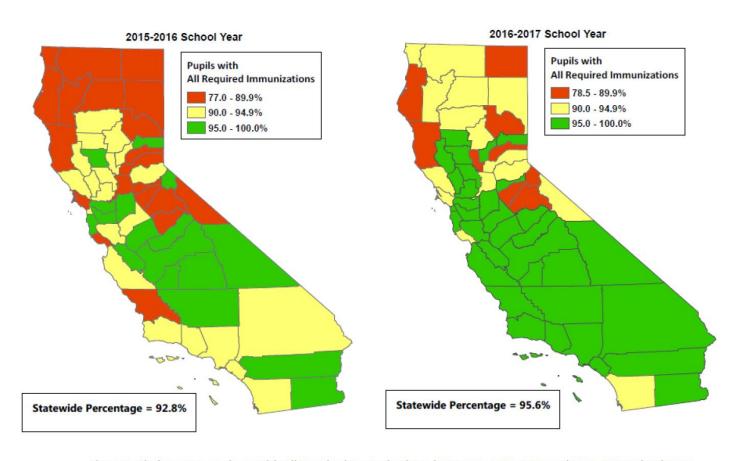
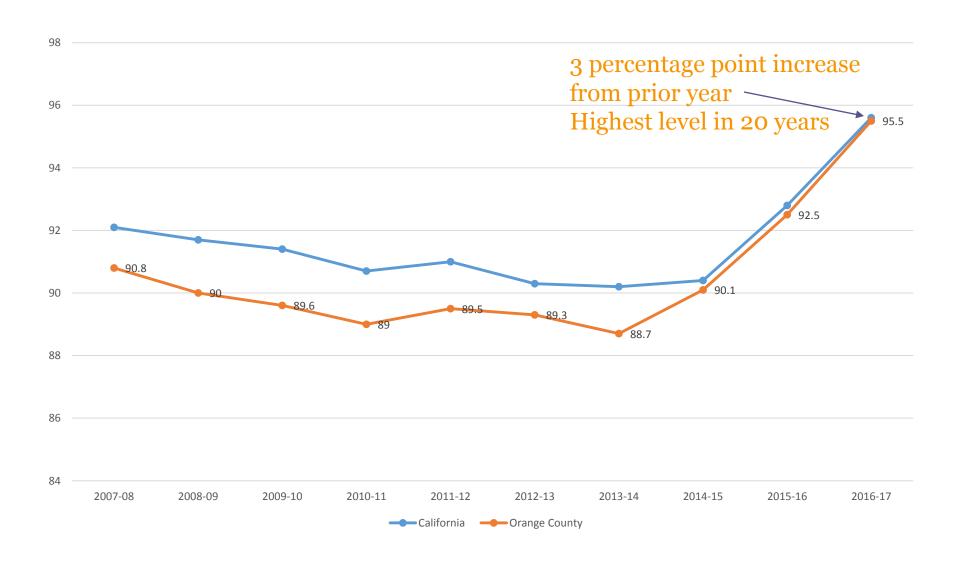


Figure 9. Kindergarten Students with All Required Immunizations, by County, 2015-2016 and 2016-2017 School Years

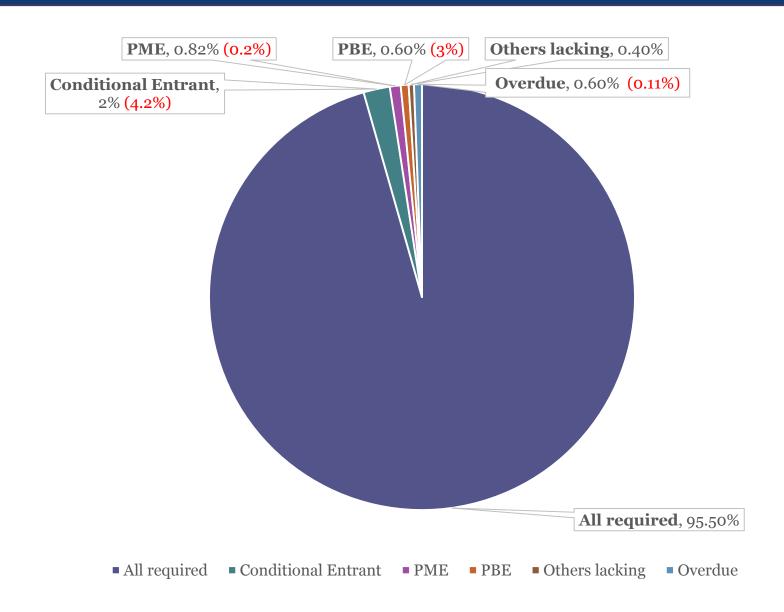
Reasons for the Increase in KG Vaccinations

- CDPH indicated that factors contributing to the improvement in kindergarten vaccination rates may include:
 - Efforts by CDPH, local health departments, schools and community organizations to support implementation of school immunization requirements.
 - Increased public awareness about the importance of immunizations in recent years due to highly visible outbreaks.
 - State audits of local schools in 2016 and 2017 to ensure they are complying with immunization laws.
 - The impact of Senate Bill 277 (Pan and Allen, 2015) and Assembly Bill 2109 (Pan, 2012), which sought to improve vaccination rates in the state. Students entering school in 2016-17 are the first to be subject to SB 277, which ended personal beliefs exemptions for vaccination.

Up-to-Date Immunizations at Kindergarten Entry: Orange County and California, 2007 – 2017



Orange County 2016-17 Admission Status Categories

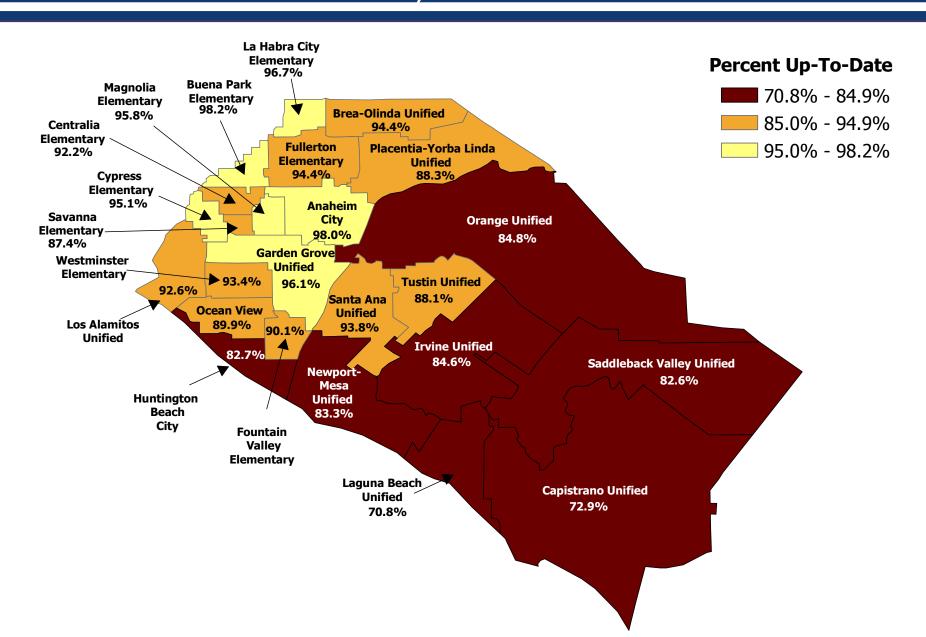


100% of Orange County Schools Reporting!

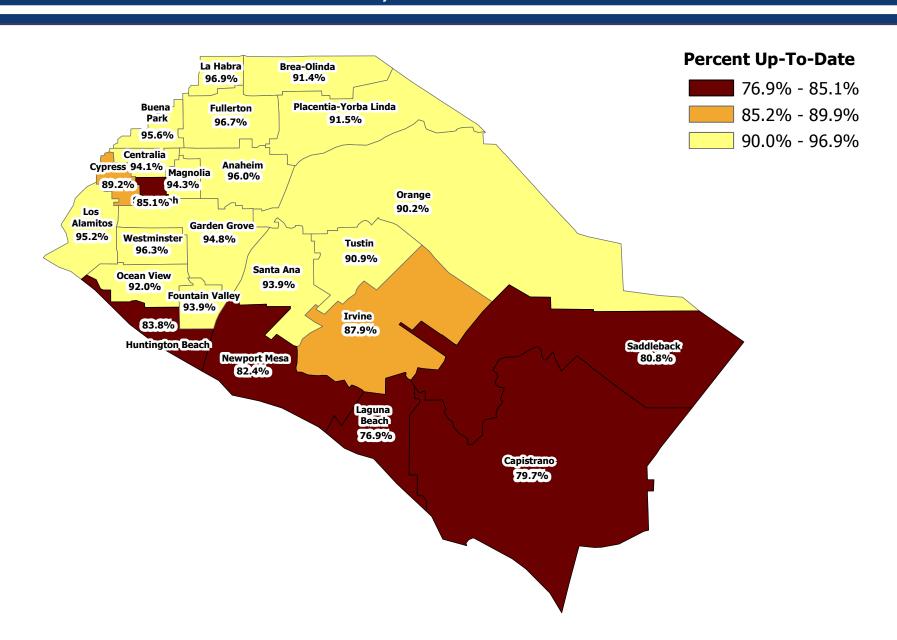
KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2016-2017 TABLE 2: NUMBER AND PERCENTAGE OF SCHOOLS REPORTING, BY COUNTY AND TYPE

			PUBLIC			PRIVATE			
	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING	NUMBER OF SCHOOLS	NUMBER REPORTING	PERCENT REPORTING
STATE TOTAL	8,266	7,820	94.6%	6,051	5,967	98.6%	2,215	1,853	83.7%
ORANGE	609	609	100.0%	397	397	100.0%	212	212	100.0%
PLACER	93	88	94.6%	77	77	100.0%	16	11	68.8%
PLUMAS	9	7	77.8%	5	5	100.0%	4	2	50.0%
RIVERSIDE	393	371	94.4%	293	293	100.0%	100	78	78.0%
SACRAMENTO	317	291	91.8%	240	235	97.9%	77	56	72.7%
SAN BENITO	21	21	100.0%	17	17	100.0%	4	4	100.0%
SAN BERNARDINO	429	428	99.8%	349	349	100.0%	80	79	98.8%
SAN DIEGO	626	624	99.7%	477	477	100.0%	149	147	98.7%
SAN FRANCISCO	147	147	100.0%	76	76	100.0%	71	71	100.0%
SAN JOAQUIN	185	185	100.0%	160	160	100.0%	25	25	100.0%
SAN LUIS OBISPO	60	60	100.0%	45	45	100.0%	15	15	100.0%
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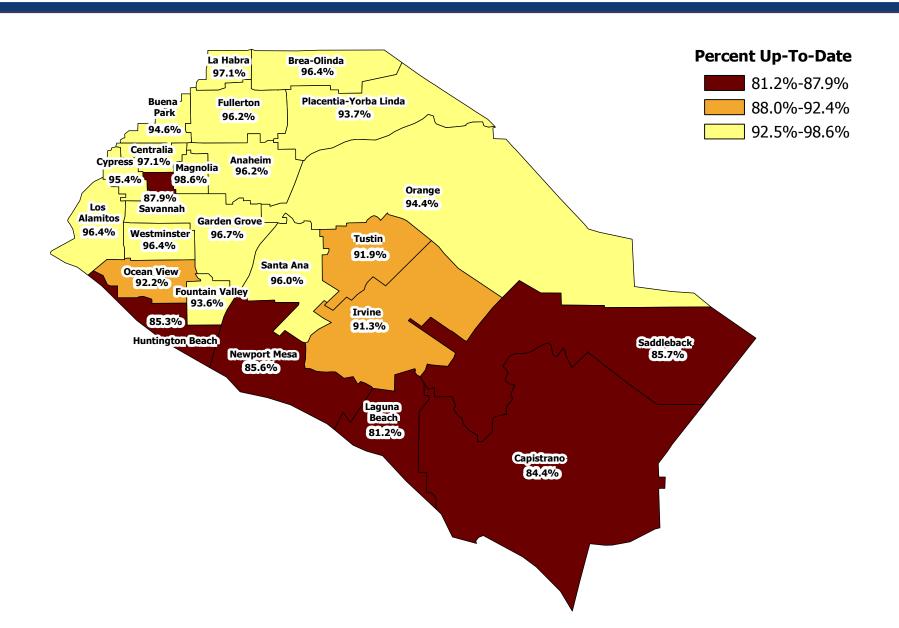
Up-to-Date Immunizations at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2013-14



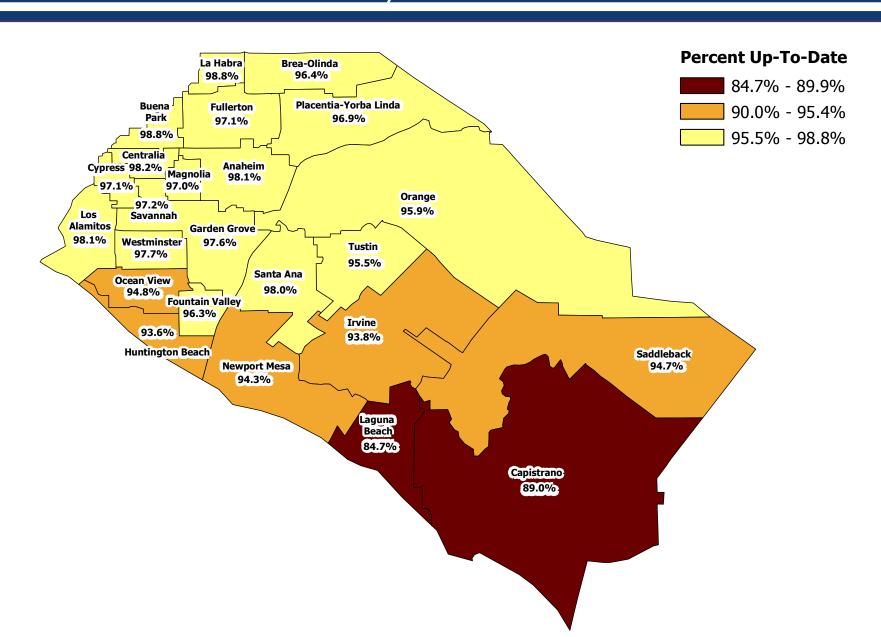
Up-to-Date Immunizations at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2014-15



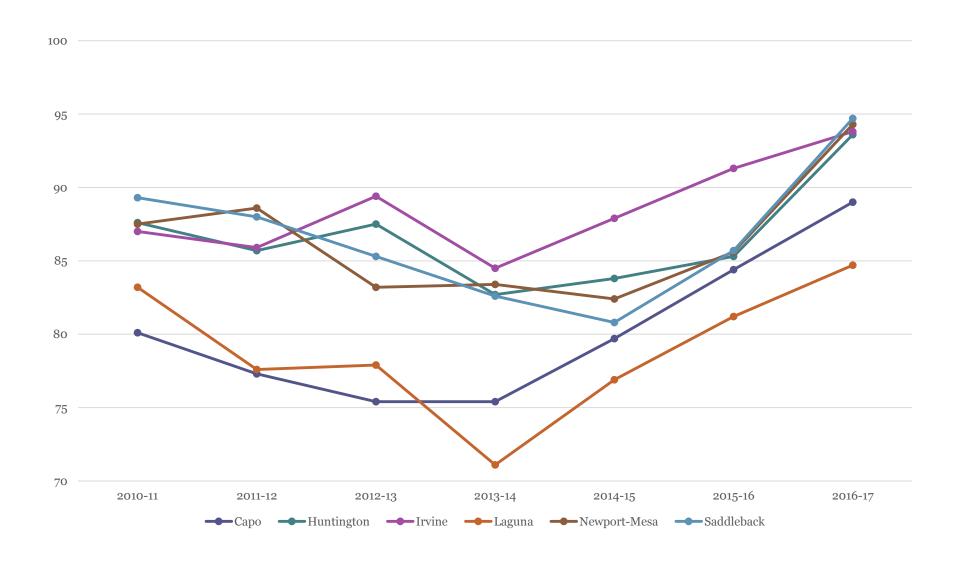
Up-to-Date Immunizations at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2015-16



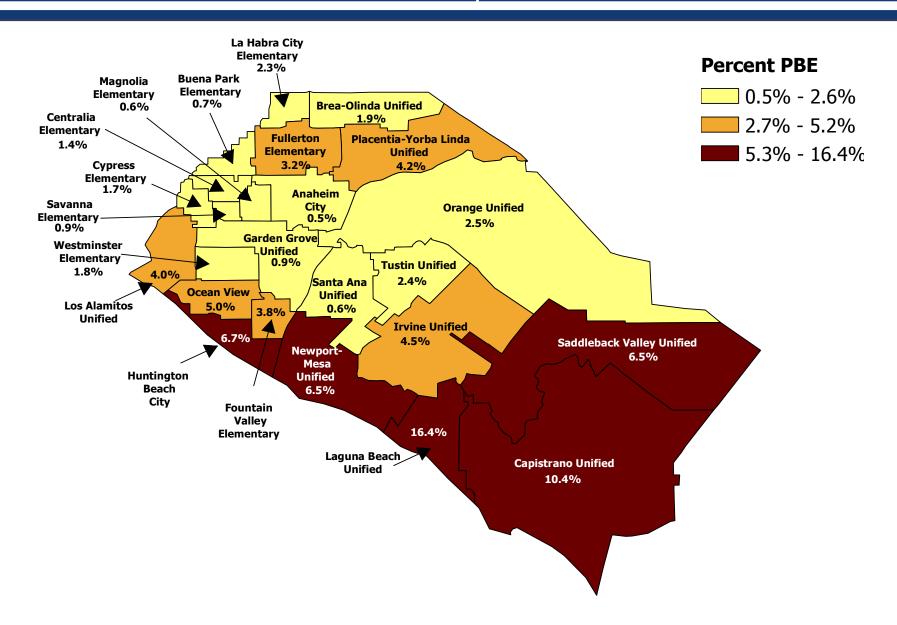
Up-to-Date Immunizations at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



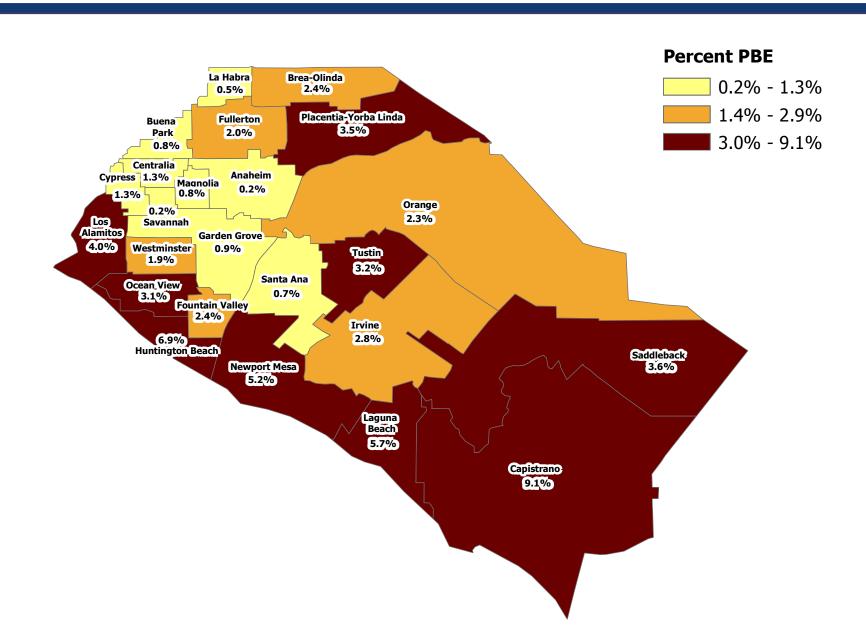
South Orange County School Districts: Percent of Kindergarteners with Up-To-Date Immunizations



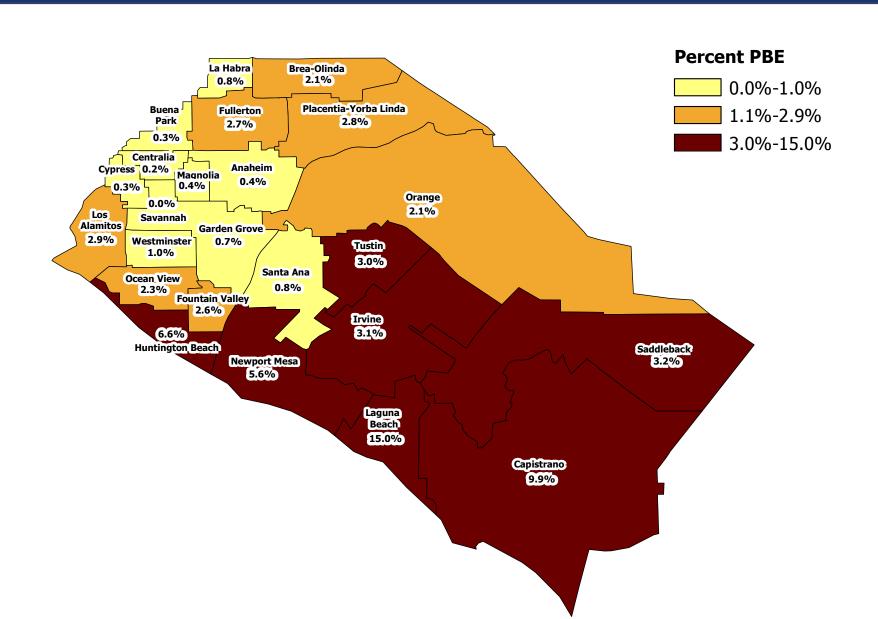
Personal Belief Exemption (PBE) at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2013-14



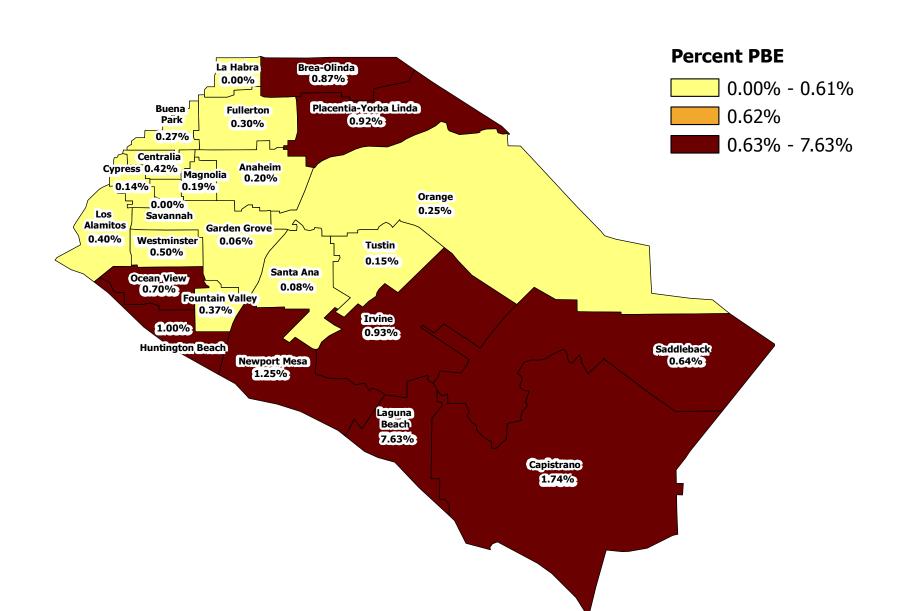
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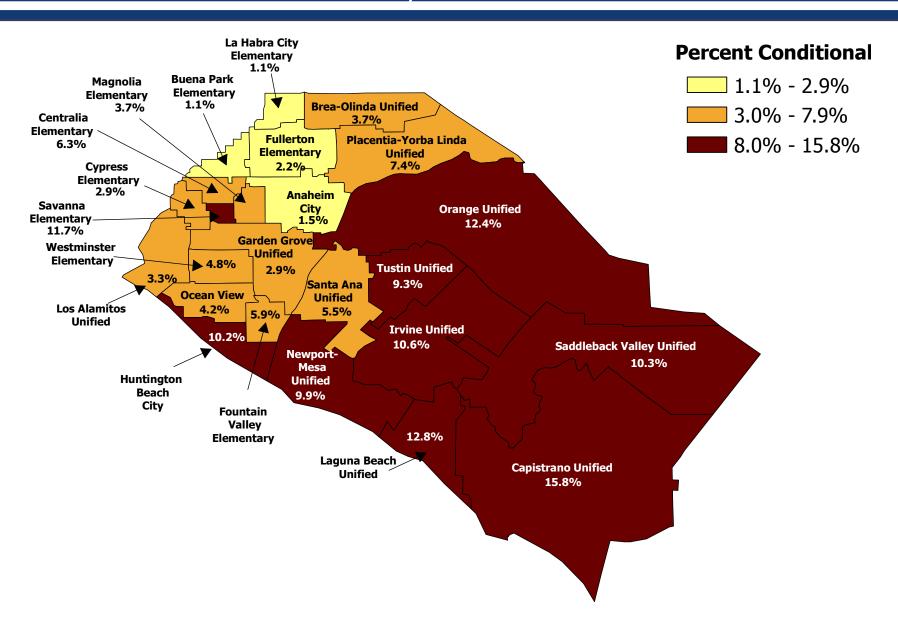
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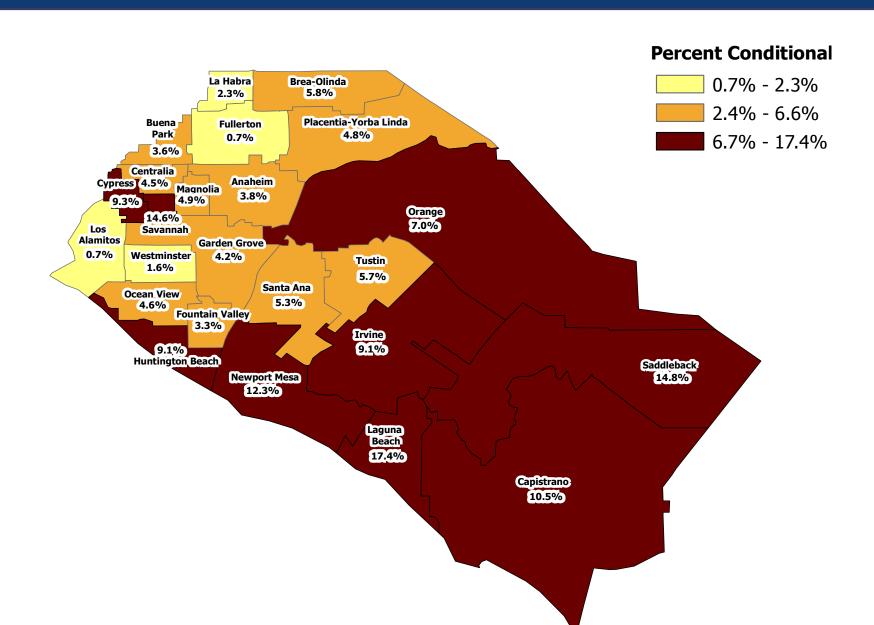
Personal Belief Exemption (PBE) at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17



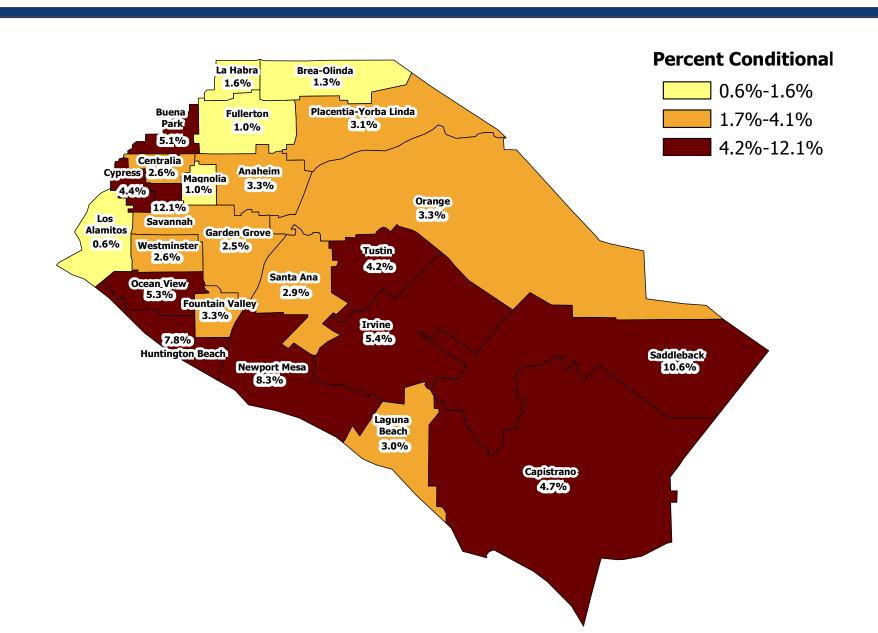
Conditional Enrollment at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2013-14



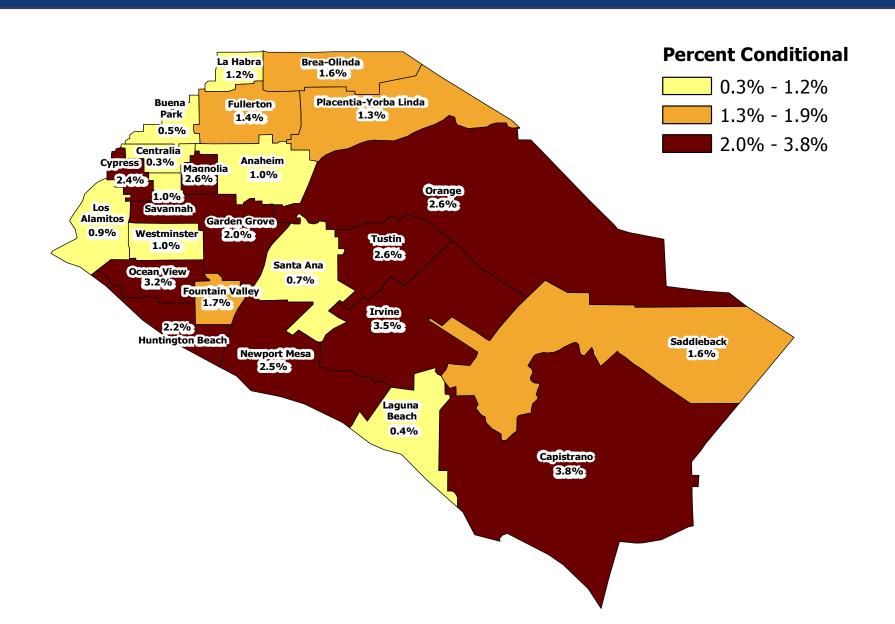
Conditional Enrollment at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2014-15



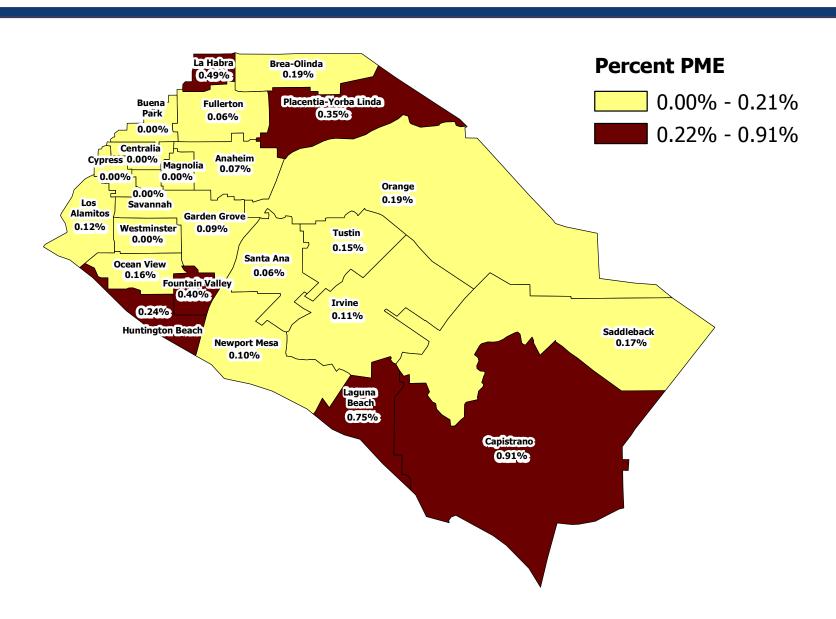
Conditional Enrollment at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2015-16



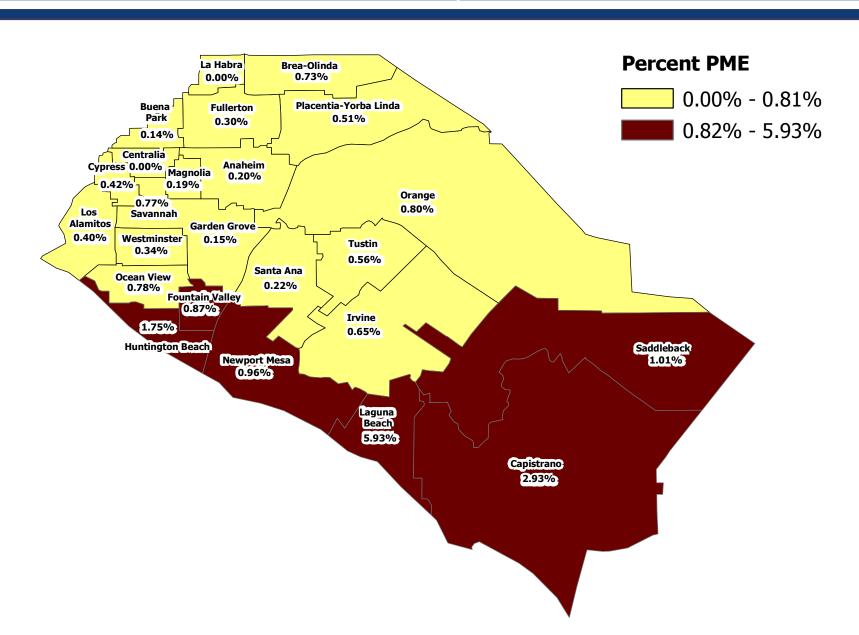
Conditional Enrollment at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17



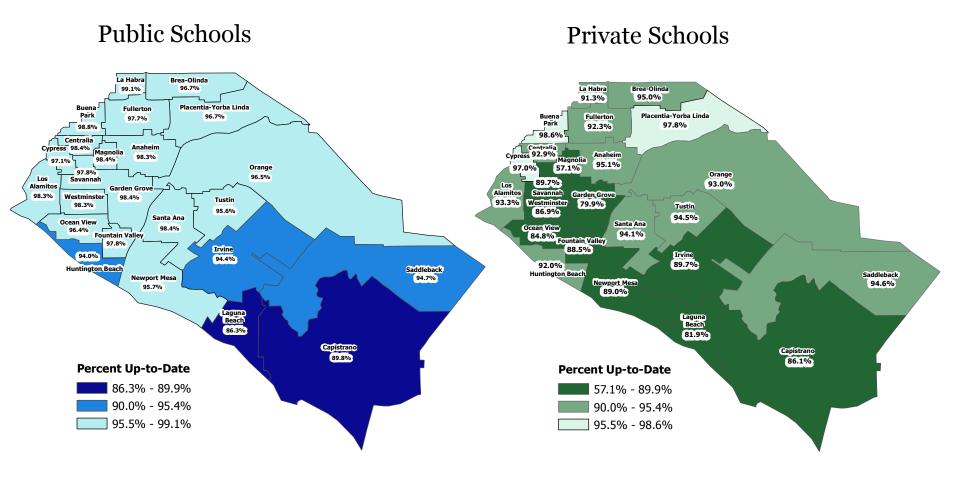
Permanent Medical Exemption (PME) at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2015-16



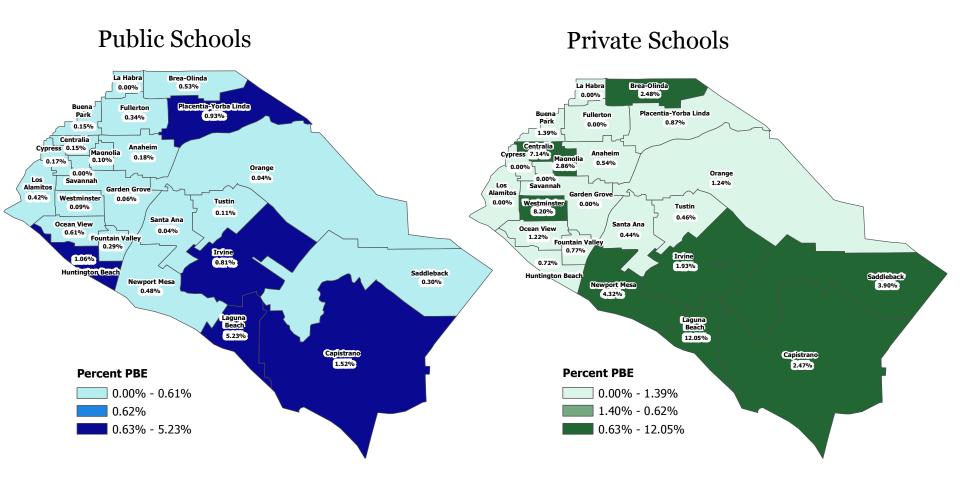
Permanent Medical Exemption (PME) at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17



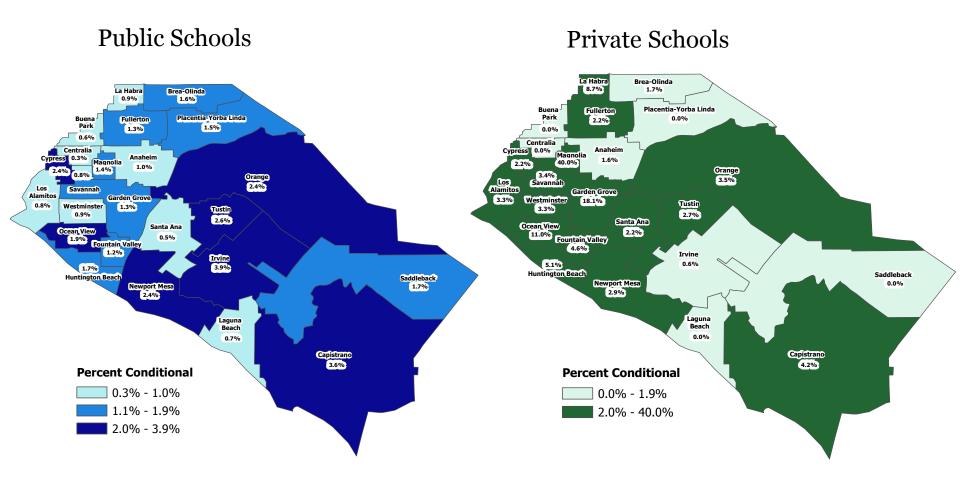
Up-to-Date Immunizations at Kindergarten Enrollment, Private vs. Public Schools Within Each School District, 2016-17.



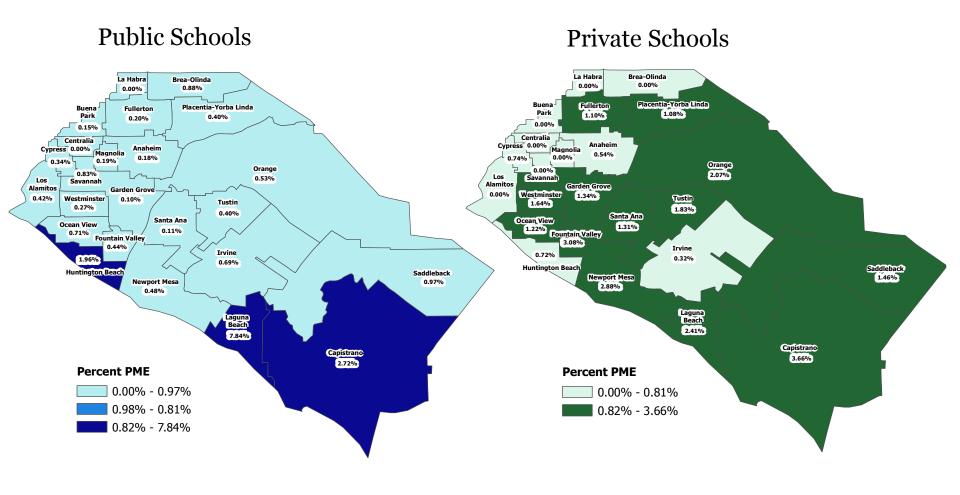
Personal Belief Exemption (PBE) at Kindergarten Enrollment, Private vs. Public Schools Within Each School District, 2016-17



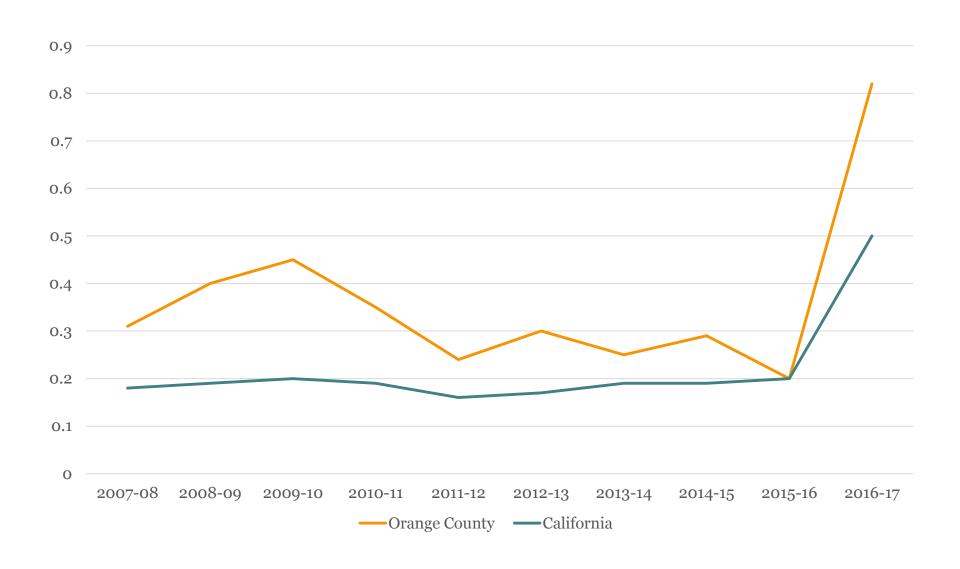
Conditional Enrollment at Kindergarten Enrollment, Private vs. Public Schools Within Each School District, 2016-17



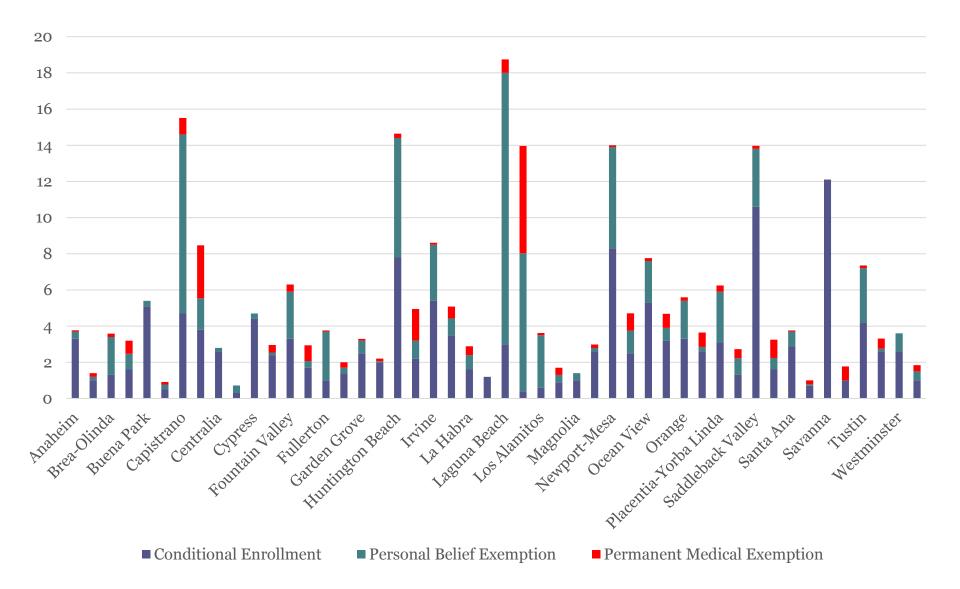
Permanent Medical Exemption (PME) at Kindergarten Enrollment, Private vs. Public Schools Within Each School District, 2016-17



PME Percentage Trends: Orange County and California



2015-16 vs. 2016-17 KG Conditional Enrollment, Personal Belief Exemption, & Permanent Medical Exemption Percentages by School District



Context of PMEs

SB277: "If the parent or guardian files with the governing authority a written statement by a licensed physician to the effect that the physical condition of the child is such, or medical circumstances relating to the child are such, that immunization is not considered safe, indicating the specific nature and probable duration of the medical condition or circumstances, including, but not limited to, family medical history, for which the physician does not recommend immunization, that child shall be exempt from the requirements..."

What's Required for a Medical Exemption?—Shots for Schools

- A parent or guardian must submit a written statement from a licensed physician (M.D. or D.O.) which states:
 - That the physical condition or medical circumstances of the child are such that the required immunization(s) is not indicated.
 - Which vaccines are being exempted.
 - Whether the medical exemption is permanent or temporary.
 - The expiration date, if the exemption is temporary.

OCDE Legal Counsel on PMEs—August, 2015

- No official form for PMEs. "A letter from the doctor which contains all the required information should be sufficient."
- "It is not the role of the school district to determine the legitimacy of the medical exemption. The school district should accept the physician's medical exemption statement, unless it does not, on its face, meet legal requirements."

How are PMEs Being Monitored?

- Senator "Pan said he suspects the increase is primarily because children who had always qualified for medical exemptions had been using personal belief exemptions because they were easier to obtain."
- "He said the state has to monitor whether doctors are providing fraudulent medical exemptions, but he thinks it's most likely that the increase is due to legitimate medical exemptions." (LA Times)

Action by the Medical Board of California



"The Medical Board of California contends in legal documents released Thursday that Sears committed "gross negligence" and deviated from standard practice when he issued a letter in 2014 prescribing no more vaccines for the child."

Contraindications and Precautions to Vaccination

General Best Practice Guidelines – ACIP/CDC

- Contraindications and precautions(a) to commonly used vaccines
- Conditions incorrectly perceived as contraindications to vaccination
- https://www.cdc.gov/vaccines/hcp/acip-recs/generalrecs/contraindications.html

What about Measles?



Quick action praised in Laguna Beach High...



NEWS

Quick action praised in Laguna Beach High School measles case

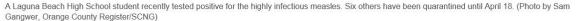
















California County KG MMR Vaccination Rates

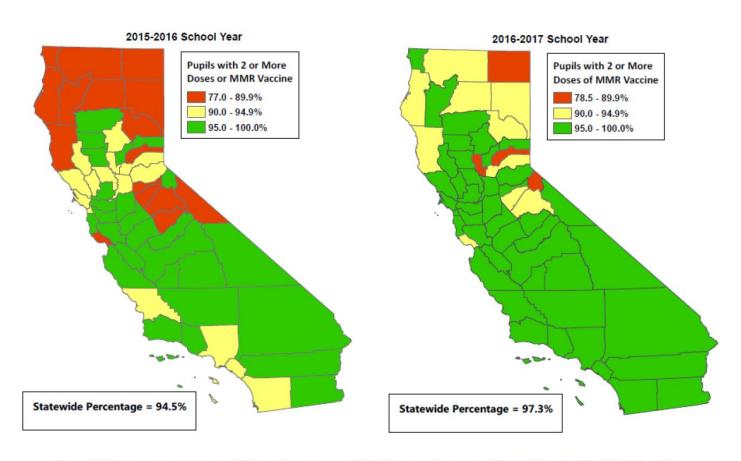
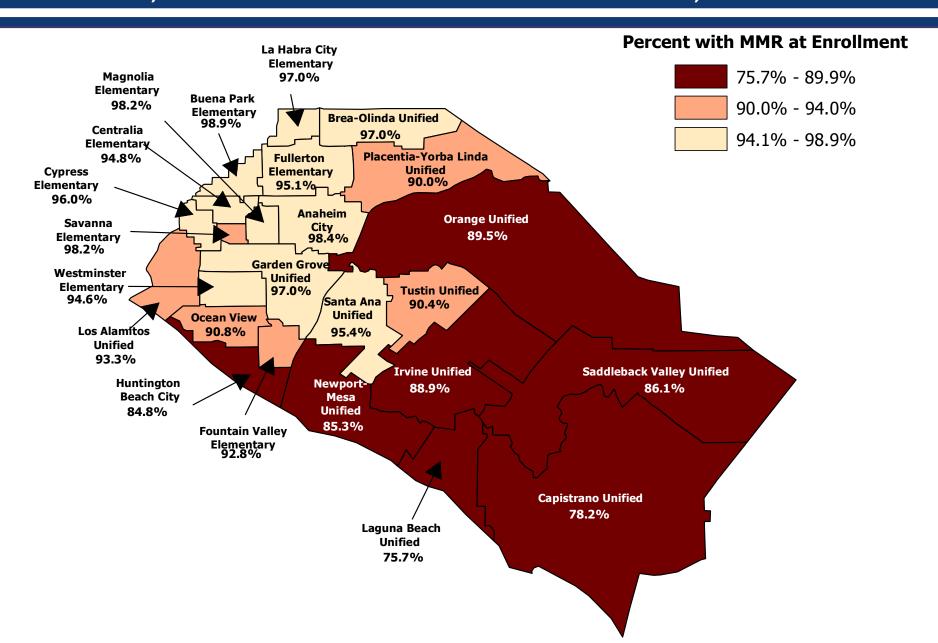
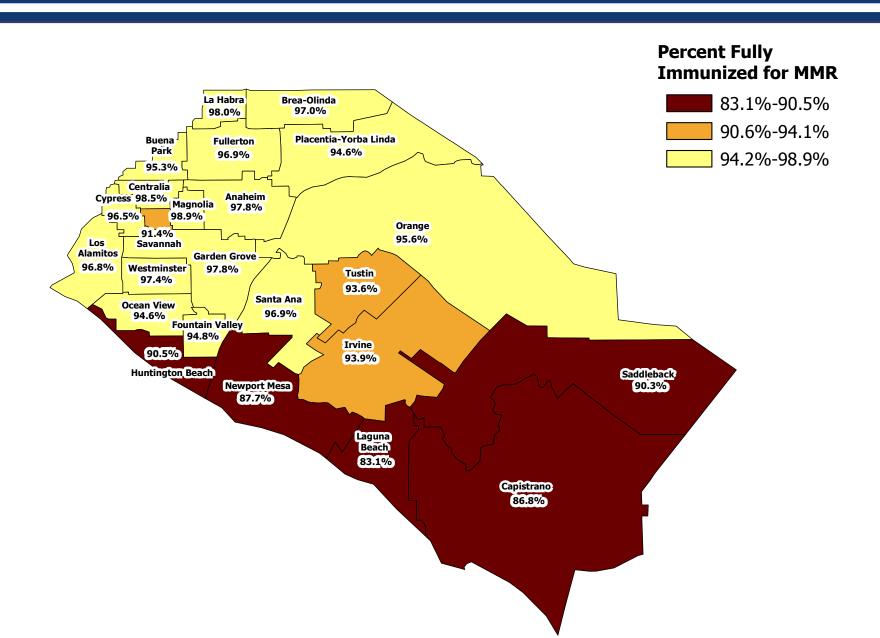


Figure 10. Kindergarten Students with 2 or More Doses of MMR Vaccine, by County, 2015-2016 and 2016-2017 School Years.

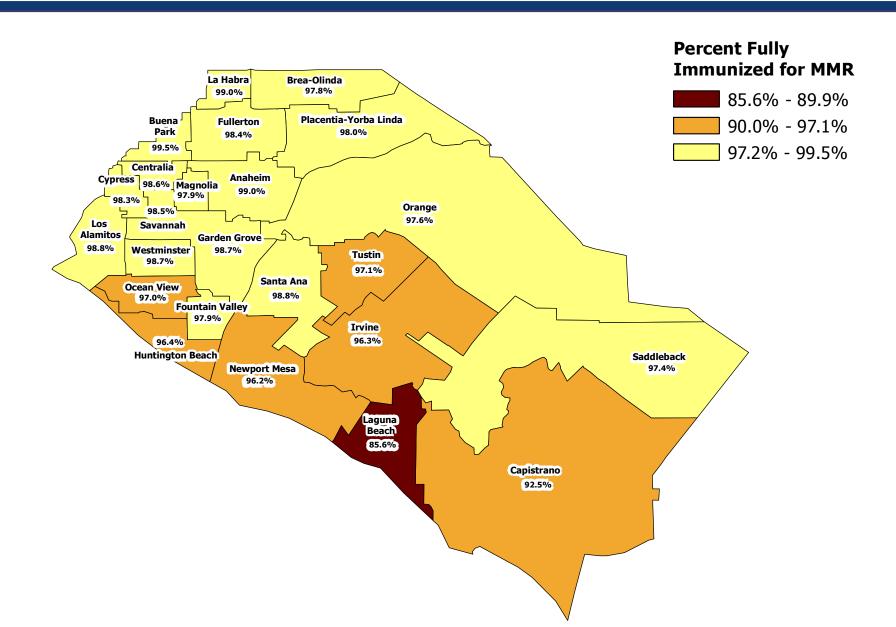
Percent of Kindergartners Enrolled Who Had Received the MMR Vaccine at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2013-14



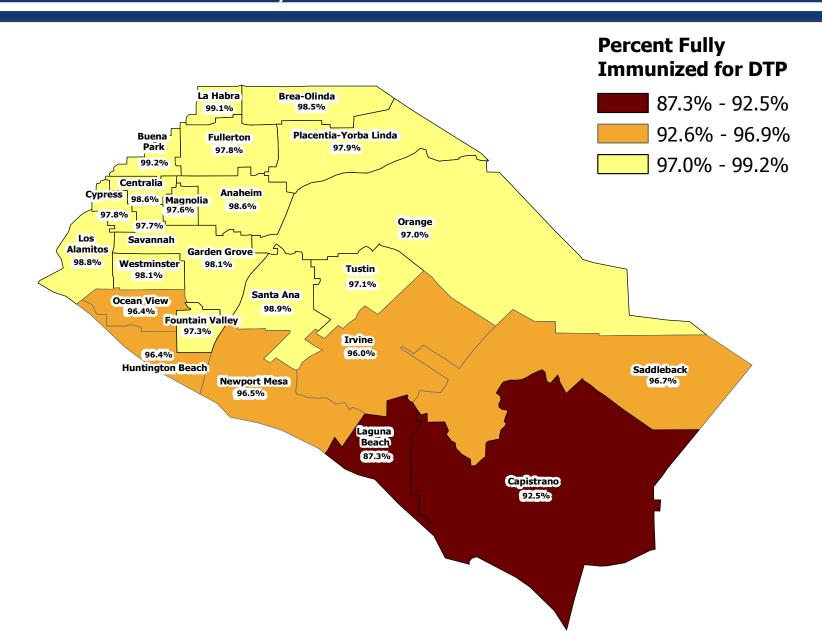
Percent of Kindergartners Enrolled Who Had Received the MMR Vaccine at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2015-16



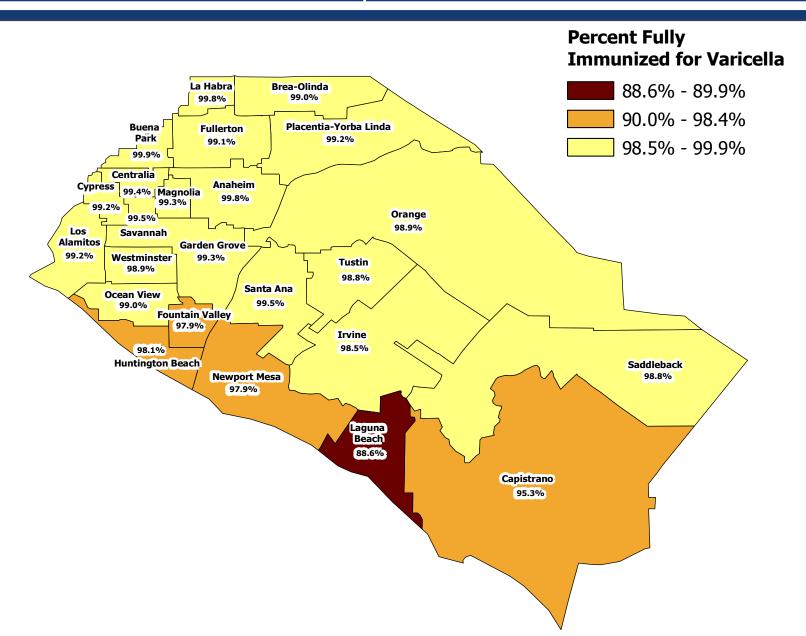
MMR Immunization at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



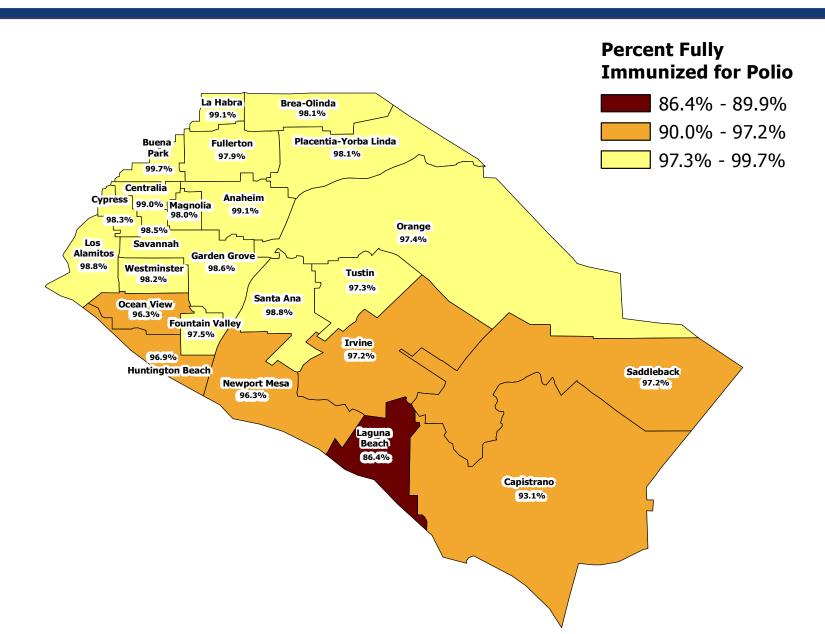
DTP Immunization at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



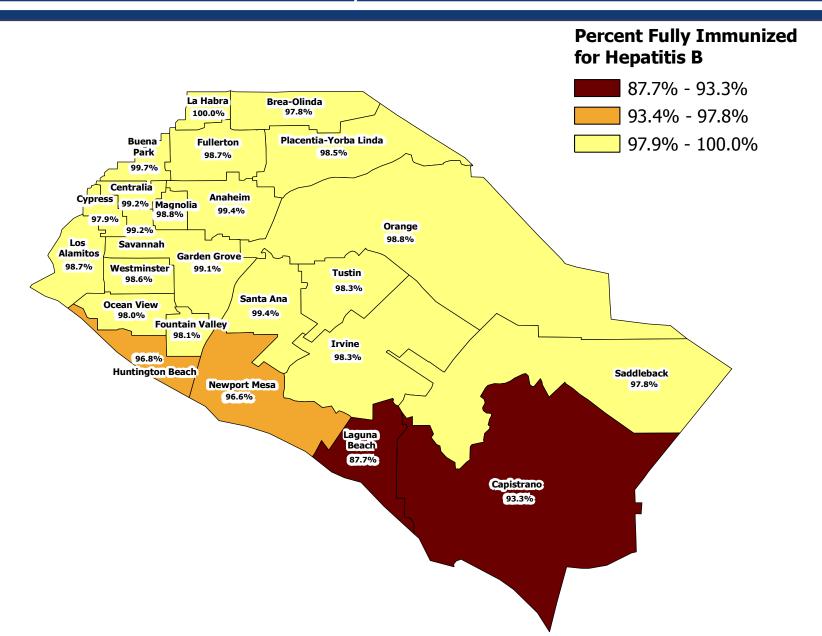
Varicella Immunization at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



Polio Immunization at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



Hepatitis B Immunization at Kindergarten Enrollment, Private and Public Schools Within Each School District, 2016-17.



Orange County School Nurse Experiences with SB277

Kathy Tedone – Buena Park School District (K-8) and Sommer Pedroza – Santa Ana School District (K-12)

Discussion Topics:

- Unusual medical exemptions
 - Examples
 - How handled
- Parent interactions
- Managing conditional enrollments—students needing vaccines to become up-to-date
- Managing students with IEPs



Thank you! Questions?

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