

# Oppose CA SB277- An Unneeded Solution to a Non-Existent Problem

**California Vaccination Rates are on the Rise, Exemptions are Down, Vaccination Tracking is Inaccurate, “Pockets of High Exemptions” are Percentage Distortions, and CA is Safe from Measles.**

**Misrepresentation:** “Personal Belief Exemptions are rising, and are driving down vaccination rates and putting CA Citizens at risk”.

**False:** The **Kindergarten PBE rate DROPPED 19%** throughout 2013/14 to 2014/15, from 3.15% to 2.54%. **Subtracting the 2.54% PBE from an ideal 100% rate equals 97.46%.** Any rates below 97.46% are UNRELATED to the PBE. Vaccination rates WENT UP during 2013/14 to 2014/15, .1% to .4%.

Year	PBE	Cond. Entry	4+ DTaP	3+ Polio	2+ MMR	3+ Hep B	1+ Chic Pox
2014/15	2.54%	6.9%	92.4%	93.0%	92.6%	94.9%	95.4%
2013/14	3.15%	6.6%	92.2%	92.6%	92.3%	94.8%	95.3%

Source: <http://www.cdph.ca.gov/programs/immunize/pages/immunizationlevels.aspx>

Vaccination levels below 97.46% are caused by the 6.9% “Conditional Entrants” rate. The CDPH has a special category called “Conditional Entrant” that includes any California child who has never been in a State Licensed Day Care or Preschool and therefore has never had to provide vaccination records. These are often new parents learning the system, or the highly mobile, transient, or migrant populations unable to easily access records. “Conditional Entry” is allowed for children who do not have proper documentation at the beginning of the school year, or are still in the process of getting final injections in series. CDPH follows up and as the documentation and injections are received these CE children move into the completed columns. Rates continue to increase from Kindergarten forward.

See attached CDPH 2014/15 Kindergarten and Child Care Immunization Assessment Tables, and United Health Foundation / American Public Health Association Annual State Rankings Data.

**Misrepresentation:** “Every PBE is a completely unvaccinated child”.

**False:** All California required vaccines are administered in a 2 to 6 dose series with a potential total of 21 injections. The requirement for Kindergarten enrollment is 15 injections. A child missing a single injection of any series needs an exemption for that injection to enroll in school. Less than 1% of all children have never had a single vaccine. Most children with exemptions are using it for “selective” vaccination. The CDPH report states,

*“\*Individual antigen [by vaccine] status is unavailable for students with PBEs. Therefore, individual antigen [by vaccine] immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of students may have some but not all required immunizations.”<sup>1</sup>*

Except this is not anecdotal- the CDC states, “More than 99% of the 2008–2009 birth cohorts who became kindergartners in 2013–14 received at least one vaccine in early childhood.”<sup>2</sup> Very few children are completely unvaccinated.

<sup>1</sup> [http://www.cdph.ca.gov/programs/immunize/Documents/2013\\_14\\_KindergartenAssessmentSummary.pdf](http://www.cdph.ca.gov/programs/immunize/Documents/2013_14_KindergartenAssessmentSummary.pdf)

<sup>2</sup> <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a1.htm>

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CDPH handles PBE tracking in an unusual manner. If a PBE is used for any 1 of the 15 required injections, CDPH ignores the entire record and the child is measured as completely unvaccinated for tracking purposes. Neither the child, class, school, district, county nor state get any credit for the completed vaccine series that child does have. This misleading, exclusionary tracking is suppressing rates unnecessarily. Therefore **all vaccination rates are under reported**, perhaps up to 2%.

**Misrepresentation:** “SB277 will only exclude completely unvaccinated children from school”.

**False:** SB277 will exclude children missing as little as 1 of 15 injections.

**Misrepresentation:** “Parents can just tick a box and use a Personal Belief Exemption”

**False:** To use a Personal Belief Exemption a parent must schedule, attend, and pay for a Vaccination Risk / Benefit appointment with a CA State Authorized Health Care Provider. There is no casual or unconsidered use of Personal Belief Exemptions in California.

See attached California State Immunization Record, California State Personal Beliefs Exemption Form, and CDC MMWR statement “Exemption does not mean unvaccinated”.

**Misrepresentation-** “Even though the overall rates might be OK, there are ‘pockets’ of unacceptably high exemption use”.

**False-** The reports for “high exemption” populations are being slanted by 2 factors - the CDPH practice of measuring any child with a PB exemption as completely unvaccinated, and the distortion that comes from using percentage statistics to measure small populations.

The highest population county in CA is Los Angeles, which has 130,146 Kindergartners. A single child with a PBE in LA County has a .0076% effect on LA County’s PBE rate. The lowest population county is Sierra, with 28 Kindergartners. A single child with a PBE in Sierra County has a 3.85% effect on Sierra County’s PBE rate.

Only 4 of California’s 60 counties measure with an “over 10% PBE exemption rate”- Humboldt, Mariposa, Mono and Nevada. These counties average only 695 Kindergartners each, (148 to 1613), with a total of 2,783 children, which is less than 1% (0.52%) of California’s 535,234 Kindergartners.

There are 18 counties in the “3.5% to 9.99% PBE” range. They average only 2,864 Kindergartners each, for a total of 51,459 children- only 9.61% of the 535,234 California’s Kindergartners.

89.85% of CA Kindergartners are in counties with 12,655 students per county, which measure at 3.49% and less personal belief exemption rate. More children in the sample size, (County, District, School), equals a lower effect per child with a PBE. Small sample sizes distort percentage measurement.

K Students w/Personal Exemptions as “%” of County K Enrollment	Number of Counties in the “PBE %” Range	Total Number of Children in Those Counties	Average number of Kindergarten Children per County	Total County Children as “%” of Total CA Children Surveyed	“%” Impact of single exemption in average K county population
10% Plus	4	2,783	695	.52%	.14%
3.5% -10%	18	51,549	2,864	9.61%	.03%
0% - 3.49%	38	480,902	12,655	89.85%	.01%

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## Measles in California

The recent media hyped Disney outbreak is not in any way connected to the use of Personal Belief Exemptions in California Schools.

California children have excellent, above the national average coverage for Measles.

**Measles vaccination increased** from 2013/14 to 2014/15 in California Child Care to 96.1% for 1 dose and in Kindergarten to 92.6% for 2 doses. **PBE use dropped** 19% in the same time period.

**Rising vaccination coverage and dropping PBE use cannot trigger, or result in an outbreak.**

The outbreak started in Disneyland- an amusement park, not a California Public or Private School.

The CDC reports the source of the infection was almost certainly from overseas, either a foreign national on vacation here at the amusement park, or carried back to the US from a US resident travelling abroad. If it was a foreign national it is not likely they travelled to California to visit a California Public or Private School.

A significant proportion of the infected people were adults, who are unaffected by California Public and Private School vaccination laws.

Many of the “unvaccinated” in the outbreak were not and could not be PBE holders because they were adults and not requiring an exemption.<sup>3</sup> Furthermore, often misrepresented as unvaccinated are the 39% of cases with unknown vaccination status. These individuals with unknown status are often lumped together with the portion of cases in the unvaccinated. Unknown vaccination status is thereby determined “unvaccinated” by their inability to produce documentation of vaccination, not their PBE status.

The outbreak was very small in number, and never gained traction in the greater community, which is a testament to California’s excellent vaccination coverage.

This outbreak was not unusual in number or scope when viewed in context. When Measles was declared “eradicated”, that designation did not mean that there ceased to be Measles cases in the US, but that the Measles cases were not domestic in origin. “Eradicated” means that the circulation of the wild North American strain has been interrupted. There have typically been dozens to hundreds of imported Measles cases in the US every year since Measles was “eradicated”. The real unique feature of this particular outbreak is that it occurred in “The Happiest Place on Earth”, in a 24/7 news cycle.

See Attached : Measles Cases vs Measles Coverage US / CA 2000 to 2015

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<sup>3</sup> [http://www.cdph.ca.gov/HealthInfo/discond/Documents/Measles\\_update\\_3-27-2015\\_public.pdf](http://www.cdph.ca.gov/HealthInfo/discond/Documents/Measles_update_3-27-2015_public.pdf)

# **Oppose CA SB277- An Unneeded Solution to a Non-Existent Problem**

## **Summary**

SB277 is being touted as the solution to a non-existent problem. California has excellent vaccination rates, which are on the rise, and low Personal Belief Exemption use, which is falling. Rates below 97.46% are not related to the personal belief exemptions, but due to how and when vaccination is measured. If CDPH wants to have “better” rates, some suggestions include:

- Measure 1<sup>st</sup> grade, after students are acclimated, records are located and final series injections are administered, instead of at the time of Kindergarten enrollment.
- Create a system whereby a student who is missing only 1 of 15 injections is not considered, “unvaccinated”, but given credit for shots received, and included in overall rates.
- Use a “weighting” system instead of percentages in small populations where the data skews
- Take Chicken Pox back off the required schedule, like most of the industrialized world.
- Take Hepatitis B off the required schedule, this blood borne infection cannot be transmitted at school.

100% Ideal Vaccination Rate  
 - 2.54% PBE = 97.46%  
 Any rates below 97.46% are  
 unrelated to PBE- mostly due to  
 "Conditional Entrants" who have  
 incomplete vaccine series  
 or lack records

## 2014- 2015 KINDERGARTEN IMMUNIZATION ASSESSMENT RESULTS CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, IMMUNIZATION BRANCH

PBE Use is Falling!  
 Vaccination Rates  
 are Rising!  
 What is the Emergency?

Table 1: Kindergarten Immunization Assessment, 2013-2014 and 2014-2015 School Years\*

	2013-14			2014-15		
	All	Public	Private	All	Public	Private
Number of Schools	7,684	5,852	1,832	7,738	5,895	1,843
Number of Students	533,680	491,905	41,775	535,234	494,636	40,598
All Required Immunizations	90.2%	90.6%	85.4%	90.4%	90.7%	86.6%
Conditional Entrants	6.5%	6.3%	8.5%	6.9%	6.8%	7.8%
Permanent Medical Exemptions	0.19%	0.18%	0.29%	0.19%	0.19%	0.29%
Personal Belief Exemptions	3.15%	2.92%	5.88%	2.54%	2.31%	5.33%
Pre-January 2014				0.38%	0.27%	1.67%
Health Care Practitioner Counseled				1.64%	1.54%	2.85%
Religious				0.52%	0.49%	0.80%
4+ DTP	92.2%	92.5%	88.6%	92.4%	92.6%	89.2%
3+ Polio	92.6%	93.0%	88.5%	93.0%	93.3%	89.5%
2+ MMR	92.3%	92.7%	87.6%	92.6%	92.9%	88.8%
3+ Hep B	94.8%	95.0%	91.8%	94.9%	95.1%	92.0%
1+ Vari (or physician-documented disease)	95.3%	95.5%	92.1%	95.4%	95.7%	92.5%

\*Individual antigen status is unavailable for students with PBEs. Therefore, individual antigen immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of students may have some but not all required immunizations.

<http://www.cdph.ca.gov/programs/immunize/pages/immunizationlevels.aspx>

Vaccination Rates are Rising!  
 2014 /15 rates UP .1% to .4% for  
 All Vaccines over 2013/14

Exemptions are filed when a child is missing one or more doses of any mandated vaccine. Exemptions do not mean a person is completely unvaccinated.

CDC Statement, "...a child with an exemption is not necessarily Unvaccinated". <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a1.htm>

100% Ideal Vaccination Rate  
 -2.67% PBE = 97.33%  
 Any rates below 97.33% are  
unrelated to PBE- mostly due to  
 "Conditional Entrants" who have  
 incomplete series or lack records

# 2014-2015 CHILD CARE IMMUNIZATION ASSESSMENT RESULTS CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, IMMUNIZATION BRANCH

PBE Use is Falling  
 Vaccination Rates  
 are Rising  
 What is the  
 Emergency!

Table 1: Child Care Immunization Assessment, 2013-14 to 2014-15 School Year\*

	2013-14				2014-15			
	All	Public	Private	Head Start	All	Public	Private	Head Start
Number of Facilities	9,498	2,209	5,866	1,423	9,271	2,585	5,348	1,338
Number of Children	486,526	110,924	299,773	75,829	486,634	129,636	283,310	73,688
All Required Immunizations	89.3%	90.7%	86.9%	96.3%	89.4%	90.4%	87.3%	95.7%
Conditional Entrants**	7.5%	7.7%	8.6%	2.9%	7.4%	7.4%	8.4%	3.6%
Permanent Medical Exemptions	0.29%	0.24%	0.34%	0.15%	0.56%	0.56%	0.67%	0.62%
Personal Belief Exemptions	2.94%	1.37%	4.11%	0.63%	2.67%	1.62%	3.68%	0.15%
Pre-January 2014					1.21%	0.66%	1.74%	0.38%
Health Care Practitioner Counseled					1.11%	0.71%	1.47%	0.09%
Religious					0.35%	0.25%	0.47%	0.13%
4+ DTP	93.8%	94.2%	92.6%	97.8%	94.1%	94.3%	93.3%	97.2%
3+ Polio	95.7%	96.5%	94.6%	98.9%	95.9%	96.4%	95.1%	98.2%
1+ MMR	95.7%	96.3%	94.7%	99.0%	96.1%	96.5%	95.4%	98.4%
1+ Hib	96.7%	96.3%	96.4%	98.6%	97.1%	96.7%	96.9%	98.3%
3+ Hep B	93.9%	95.4%	92.2%	98.6%	94.3%	95.3%	92.9%	98.0%
1+ Vari (or physician-documented disease)	95.1%	96.1%	93.8%	98.9%	95.6%	96.3%	94.6%	98.4%

\*Individual antigen status is unavailable for children with Personal Beliefs Exemptions. Therefore, individual antigen immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of children may have some but not all required immunizations.

\*\*Conditional Entrant is a student who does not meet all requirements. This student must be followed up because he/she: lacks (i.e., is not yet due for) at least one dose and does not have a personal beliefs or permanent medical exemption; or has a physician affidavit of Temporary Medical Exemption for one or more doses; or is a transfer student who has no record available yet.

CA Exemption rules track incomplete series, not never vaccinated children.

CDC Statement, "...a child with an exemption is not necessarily Unvaccinated". <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a1.htm>

Vaccination Rates Rising!  
 2014/15 rates UP .3 to .5  
 over 2013/14 for  
 All Vaccines

Individual antigen status is unavailable for children with Personal Beliefs Exemptions. Therefore, individual antigen immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of children may have some but not all required immunizations



Immunization - Adolescents  
California  
Rank: 10

Immunization - Children  
California  
Rank: 28

CA is only 5.6 pts  
out of Top Ten

Immunization Dtap  
California  
Rank: 8

Immunization MCV4  
California  
Rank: 16

<http://www.americashealthrankings.org/CA>

## California has Excellent Vaccination Rates

The United Health Foundation ranks  
the 50 states every year using CDC  
NIS (National Immunization Survey) Data.  
Note CA's High Rankings.

2 states offer ONLY Medical  
Exemptions- Mississippi and West  
Virginia. CA exceeds vaccination  
rates for both MS and WV in all but  
one category, even though CA's  
population (37 Mil) is over 7 times  
larger than MS (>3 mil) & WV (>2  
mil) combined. More importantly  
CA outcomes are drastically  
superior, eclipsing both states.

## Overall Health Ratings

California is 17<sup>th</sup>  
West Virginia is 44<sup>th</sup>  
Mississippi is 50<sup>th</sup>

## UNITED HEALTH FOUNDATION®



## CA vs. MS & CA vs. WV

Measures	CA Rank	MS Rank	CA Value	MS Value
Immunization - Adolescents	10	50	72.6	45.2
Immunization - Children	28	11	69.3	74.6
Infant Mortality	4	50	4.6	9.1
Measures	CA Rank	WV Rank	CA Value	WV Value
Immunization - Adolescents	10	29	72.6	64.1
Immunization - Children	28	43	69.3	65.5
Infant Mortality	4	38	4.6	7

**CA Rules require multiple injections of 5 or 6 vaccine series for Child Care or K-12 enrollment. If any SINGLE injection is missing or not properly documented an Exemption is required for the student to attend.**

## CALIFORNIA SCHOOL IMMUNIZATION RECORD

This record is part of the student's permanent record (cumulative folder) as defined in Section 49068 of the Education Code. Local health departments shall have access to this record in schools, child care facilities, and family child care homes.

This record must be completed by school and child care personnel from an immunization record provided by parent or guardian. See reverse side for instructions.

Sex: M ☐ F ☐

Birthdate \_\_\_\_\_

Race/Ethnicity:

☐ White, not Hispanic

☐ Hispanic

☐ Black

☐ Other: \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

ZIP \_\_\_\_\_

Telephone \_\_\_\_\_

Daytime \_\_\_\_\_

Nighttime \_\_\_\_\_

VACCINE	DATE EACH DOSE WAS GIVEN					
	1st	2nd	3rd	4th	5th	Booster
<b>POLIO (OPV or IPV)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
<b>DTP/DTaP/DT/Td</b> (Diphtheria, tetanus and [acellular] pertussis OR tetanus and diphtheria only)	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>22</b>
<b>MMR</b> (Measles, mumps, and rubella)	<b>11</b>	<b>12</b>				
<b>HIB</b> (Required only for child care and preschool)	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>		
<b>HEPATITIS B</b>	<b>13</b>	<b>14</b>	<b>15</b>			
<b>VARICELLA</b> (Chickenpox)	<b>16</b>	<b>17</b>				
<b>HEPATITIS A</b> (Not required)						

**7th Grade**

### I. DOCUMENTATION

I certify that I reviewed a record of this child's immunizations and transcribed it accurately:

Date \_\_\_\_\_

Staff \_\_\_\_\_  
Signature \_\_\_\_\_

Record Presented was:

- ☐ Yellow California Immunization Record  
☐ Out-of-state school record  
☐ Other immunization record

Specify: \_\_\_\_\_

### II. STATUS OF REQUIREMENTS

- ☐ A. All Requirements are met.  
Date \_\_\_\_\_  
☐ B. Currently up-to-date, but more doses are due later. Needs follow-up.

Exemption was granted for:

- ☐ C. Medical Reasons—Permanent  
☐ D. Medical Reasons—Temporary  
☐ E. Personal Beliefs

### III. 7th GRADE ENTRY

- ☐ A. All Requirements are met.  
Name \_\_\_\_\_ Date \_\_\_\_\_  
☐ B. Currently up-to-date, but more doses are due later. Needs follow-up.

Name \_\_\_\_\_ Date \_\_\_\_\_

**If the "Personal Beliefs" box is checked the CDPH IGNORES the ENTIRE RECORD—the Child, School, District, County and State get no credit for any completed vaccine series.**

TB SKIN TESTS	Type*	Date given	Date read	mm indur	Impression	CH
	<input type="checkbox"/> PPD-Mantoux <input type="checkbox"/> Other				<input type="checkbox"/> Pos <input type="checkbox"/> Neg	Film date
	<input type="checkbox"/> PPD-Mantoux <input type="checkbox"/> Other				<input type="checkbox"/> Pos <input type="checkbox"/> Neg	Person is

\*If required for school entry, must be Mantoux unless exception granted by local health department.



## PERSONAL BELIEFS EXEMPTION TO REQUIRED IMMUNIZATIONS

STUDENT NAME (LAST, FIRST, MIDDLE)	GENDER <input type="checkbox"/> M <input type="checkbox"/> F	BIRTHDATE   MONTH   DAY   YEAR ____ / ____ / ____	TELEPHONE NUMBER
PARENT/GUARDIAN – NAME	ADDRESS		

**A. AUTHORIZED HEALTH CARE PRACTITIONER LICENSED IN CALIFORNIA – FILL OUT THIS SECTION**

I am a (check one): ☐ M.D./D.O. ☐ Nurse Practitioner ☐ Physician Assistant ☐ Naturopathic Doctor ☐ Credentialed School Nurse

**Provision of information:** I have provided the parent or guardian of the student named above, the adult who has assumed responsibility for the care and custody of the student, or the student if an emancipated minor, with information regarding 1) the benefits and risks of immunization and 2) the health risks to the student and to the community of the communicable diseases for which immunization is required in California (immunizations listed in Table below).

Signature of authorized health care practitioner

**Date - within 6 months before entry to child care or school**

Practitioner name, address, telephone number:

## B. PARENT OR GUARDIAN – FILL OUT THESE SECTIONS

**I. Check one of the boxes below:**

- ☐ **Receipt of information:** I have received information about 1) the benefits and risks of immunization and 2) the health risks of not immunizing my child. (Signature of a health care practitioner)
- ☐ **Religious beliefs:** I am a member of a religion that opposes the use of health care practitioners. (Signature of a health care practitioner)

**Signature of parent or guardian**

## II. AFFIDAVIT

**Immunizations already received:** I have provided immunizations that are required for admission (California)

**Immunizations for which exemption is requested:** An unimmunized student and the student's contacts at school and home are at greater risk of becoming ill with a vaccine-preventable disease. I understand that an unimmunized student may be excluded from attending school or child care during an outbreak of, or after exposure to, any of these diseases for the protection of the student and others (17 CCR §6060). I hereby request exemption of the student named above from the required immunizations checked below because such immunization is contrary to my beliefs.

School Category	Table of Required Immunizations – Check box(es) to request exemption.
Child Care Only	<input type="checkbox"/> <b><i>Haemophilus influenzae</i> type b</b> (Hib meningitis)
Child Care and K-12 <sup>th</sup> Grade	<input type="checkbox"/> <b>DTaP</b> (Diphtheria, Tetanus, Pertussis [whooping cough]) <input type="checkbox"/> <b>Hepatitis B</b> <input type="checkbox"/> <b>MMR</b> (Measles, Mumps, Rubella) <input type="checkbox"/> <b>Polio</b> <input type="checkbox"/> <b>Varicella</b> (Chickenpox)
7 <sup>th</sup> Grade Advancement (or admission at 7-12 <sup>th</sup> Grade)	<input type="checkbox"/> <b>Tdap</b> (Tetanus, reduced Diphtheria, Pertussis [whooping cough])

Signature of parent or guardian

Date \_\_\_\_\_

The California Department of Public Health places strict controls on the gathering and use of personally identifiable data. Personal information is not disclosed, made available, or otherwise used for purposes other than those specified at the time of collection, except with consent or as authorized by law or regulation. The Department's information management practices are consistent with the Information Practices Act (Civil Code Section 1798 et seq.), the Public Records Act (Government Code Section 6250 et seq.), Government Code Sections 11015.5 and 11019.9, and with other applicable laws pertaining to information privacy.

# **CDC: EXEMPTION DOES NOT MEAN UNVACCINATED**

CDC Home



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives. Protecting People.™

SEARCH

SEARCH

A-Z Index **A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #**

Morbidity and Mortality Weekly Report (MMWR)

## **...a child with an exemption is not necessarily Unvaccinated.**

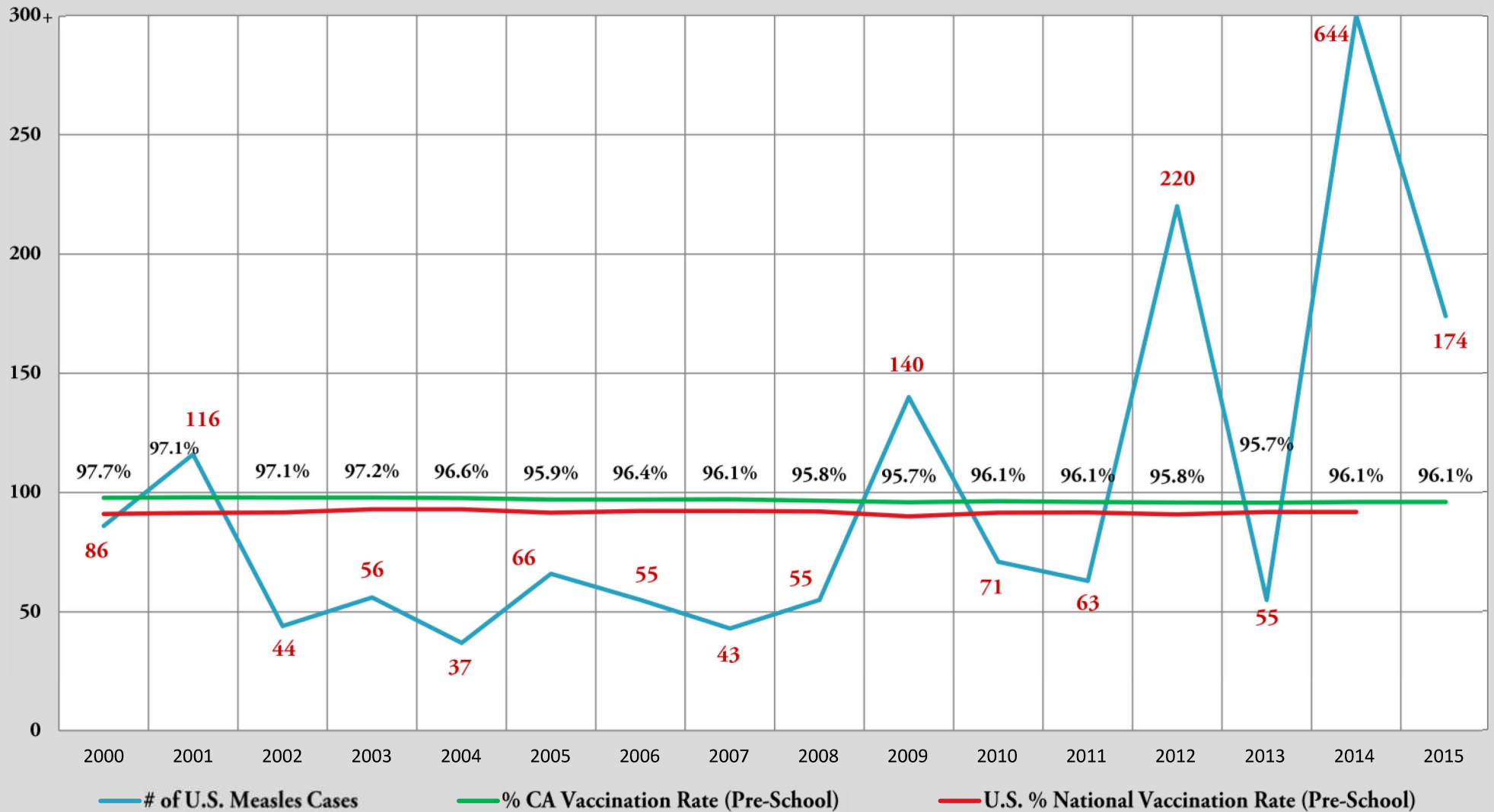
**More than 99% of the 2008–2009 birth cohorts who became kindergartners in 2013–14 received at least one vaccine in early childhood.**

**An exemption might be provided for all vaccines even if a child missed a single vaccine dose or vaccine, or different exemptions might be provided for different vaccinations.**

**A parent or guardian might choose to complete the required exemption paperwork if that is more convenient than having a child vaccinated or documenting a kindergartner's vaccination history at school enrollment, which might be the reason for up to 25% of nonmedical exemptions (7–9).**

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a1.htm>

**# of Measles Cases and U.S./CA MMR Vaccination Rates (2000-2015)**



<http://www.cdph.ca.gov/programs/immunize/pages/immunizationlevels.aspx>  
<http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/>  
<http://www.cdc.gov/measles/cases-outbreaks.html>

The graph clearly shows **NO CORRELATION** between vaccination rate (shown as a percent) and number of measles cases in the U.S. over a 15 year period. CA has also remained **HIGHER** in MMR coverage than the U.S. national average for ALL 15 years.

**There was never a "Golden Age", in the past when Vaccine Acceptance and Vaccination rates were higher than they are today. The truth is there are more US children getting more vaccines for more infections at younger ages than ever in history!**

### Vaccine Coverage Levels – United States, 1962-2009

Year	DTP 3+	DTP4+	Polio 3+	MMR*	Hib3+	Var	PCV3+	HepB3+	Combined 4-3-1	Combined 4-3-1-3
1962	67.3									
1963	71.4									
1964	74.6									
1965	72.7									
1966	74.0									
1967	77.9			60.0						
1968	76.8			61.5						
1969	77.4			61.4						
1970	76.4			58.4						
1971	77.8			62.2						
1972	74.1			62.8						
1973	71.7		59.5	61.0						
1974	72.4		60.0	63.4						
1975	73.2		63.6	65.5						
1976	72.7		61.3	66.3						
1977	69.6		62.6	65.0						
1978	66.6		59.5	63.6						
1979	64.4		59.7	66.5						
1980	66.0		58.9	66.6						
1981	68.1		59.2	66.8						
1982	67.1		57.0	67.6						
1983	65.4		56.9	66.3						
1984	65.0		53.2	65.8						
1985	63.6		53.6	61.2						
1986†										
1987†										
1988†										
1989†										
1990†										
1991	68.8		53.2	82.0						
1992	83.0	59.0	72.4	82.5	28.2			8.0	68.7	55.3
1993	88.2	72.1	78.9	84.1	55.0			16.3	67.1	
1994	93.0	77.7	83.0	89.0	86.0			37.0	75.0	
1995	94.7	78.5	87.9	87.6	91.7			68.0	76.2	74.2
1996	95.0	81.1	91.1	90.7	91.7	16.0		81.8	78.4	76.5
1997	95.5	81.5	90.8	90.5	92.7	25.9		83.7	77.9	76.2
1998	95.6	83.9	90.8	92.0	93.4	43.2		87.0	80.6	79.2
1999	95.9	83.3	89.6	91.5	93.5	57.5		88.1	79.9	78.4
2000	94.1	81.7	89.5	90.5	93.4	67.8		90.3	77.6	76.2
2001	94.3	82.1	89.4	91.4	93.0	76.3		88.9	78.6	77.2
2002	94.9	81.6	90.2	91.6	93.1	80.6	40.8	88.9	78.5	77.5
2003	96.0	84.8	91.6	93.0	93.9	84.8	68.1	92.4	82.2	81.3
2004	95.9	85.5	91.6	93.0	93.5	87.5	73.2	92.4	83.5	82.5
2005	96.1	85.7	91.7	91.5	93.9	87.9	82.8	92.9	83.1	82.4
2006	95.8	85.2	92.9	92.4	93.4	89.3	87.0	93.4	83.2	82.3
2007	95.5	84.5	92.6	92.3	92.6	90.0	90.0	92.7	82.8	81.1
2008		84.6	93.6	92.1	90.9	90.7	80.1§	93.5		
2009	94.0	83.9	92.8	90.0	92.1	89.6	92.6	92.4	81.5	

Decades of 30% - 40% unvaccinated population with no epidemics

**The 90% plus coverage rates we see today were first achieved in the late 90's, and are the result of the convergence of 3 programs-**

**1) School attendance requirements, which began in the late 70's & early 80's;**

**2) The near complete indemnification for liability of vaccine manufacturers and administrators by the NVICP, The National Vaccine Injury Compensation program in 1988; and**

**3) VFC- Vaccines For Children, a funding scheme whereby the government buys and provides all "required" vaccines, 1993.**

**Required vaccines are now legislated purchases.**

\*Previously reported as measles-containing vaccine (MCV)

†No national coverage data were collected from 1986 through 1990.

§In 2008, data are for PCV4+.

**Combined 4-3-1:** Four or more doses of DTP/DTaP/DT, three or more doses of poliovirus vaccine, and one or more doses of any measles-containing vaccine.

**Combined 4-3-1-3:** Four or more doses of DTP/DTaP/DT, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of *Haemophilus influenzae* type b vaccine.

Data prior to 1993 were collected by the National Health Interview Survey and represent 2-year-old children. Data from 1993 forward are from the National Immunization Survey and represent 19-35 month-old children. Different methods were used for the two surveys.

Data are available for combinations of vaccines not reflected on this table. For more information about annual coverage figures from 1994 to the present, see <http://www.cdc.gov/vaccines/stats-sur/nis/default.htm>.

This document can be found on the CDC website at:

<http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/G/coverage.pdf>

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