

# COLORADO NONMEDICAL EXEMPTIONS WENT DOWN FROM 2011 to 2012

TABLE 1. Estimated vaccination coverage among children enrolled in kindergarten, by state/area, type of survey conducted, and selected vaccines — United States, 2012-13 school year

State/Area	State/Area Estimated kindergarten population	Total	Proportion surveyed (%)	Type of survey conducted	of MMR <sup>(</sup>	DTaP/DT <sup>,</sup> (%)	Varicella
Colorado	70,657	350	(0.5)	Simple random	(85.7)	(82.9)	(84.6)

exemption to vaccination, by state/area and type of exemption — United States, 2012-13 school year TABLE 2. Weighted number and percentage of children enrolled in kindergarten with a reported

State/Area Medical exempti	Medical exemptions	OINS	Nonmedic	Nonmedical exemptions	***		Total e	Total exemptions	nS.	
	No.	8	(%) Religious no.	Philosophic no.	Total no.	(%)	Total no.	2012- 13 (%) 12 (%	2011– 12 (%)	Philosophic Total (%) Total 2012– 2011– Percentage point no. 13 (%) 12 difference (%)
Colorado	191	(0.3)	0	2,678	2,678	(4.0)	2,869	<b>2,678</b> (4.0) <b>2,869</b> (4.3) (5.6)		-1.3

Colorado was one of four states that reported decreases of >1.0 percentage points in nonmedical exemptions from 2011 to 2012 (range: -1.3 in Colorado to -1.6 in New Mexico). http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6230a3.htm



# 2012 Colorado and US Immunization Coverage Levels for children 19 – 35 months old.

		8		S						
	±3.6	94.2	±0.7	94.3	o			0	TaP	3+D
	±6.7	82.8	±1.2	82.5		- Name	-		Tap	4+D
4	±4.1	92.2	±0.7	92.8					olio	3+P
	±4.5	91.5	8.0±	90.8					<b>M</b> R	1+M
	±3.9	93.1	±0.7	93.3					36	Hib-
	±5.6	86.7	±1.2	80.9					FS	Hib-
	1+4.5	90.5	±0.9	89.7	3,5-37	7	Ti-		ерВ	3+H
	±8.4	64.0	±1.4	71.6		A	7	Bit	O	Hep
	1+4.8	89.6	±0.8			i.			힉	1+1
	±4.6	92.3	±0.8	92.3				Į.	2	3+P
	±6.2		±1.1	81.9			9		2	4+P
	±5.7	85.3	±1.1	81.5			- Silve **	D	Hep	1+
	±8.6	56.2	±1.5	53.0				^	epA	2+H
	±7.7	73.5	±1.4	68.6					virus	Rota
	±7.0	80.2	±1.2	80.5					Ь	4:3:
	±/.5			/6.0					1:3	4:3:
	±7.5 ±7.5 7.8	75.9	1+1.3	/3.2				W	13	4:3:
	/.00	73.8±	1.4	/1.9±	1				3:3:1	4:3:1:
		76.5   75.9   73.8±   71.7±7.9		68.4±1.4						4:3:1: 4:3:1:3:3:1:4

4:3:1 - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, and 1 or more doses of any MINIK vaccine.

4:3:1:3 - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine plus the full series Hib.

or more doses of HepB vaccine. 4:3:1:3:3 - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine, full series of Hib vaccine and 3

more doses of HepB vaccine, and 1 or more doses of varicella vaccine. 4:3:1:3:3:1 - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine, full series of Hib vaccine, 3 or

more doses of HepB, 1 or more doses of varicella vaccine, and 4 or more doses of PCV. 4:3:1:3:3:1:4 - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine, full series Hib vaccine, 3 or

Source - http://www.cdc.gov/vaccines/stats-surv/nis/tables/12/tab03\_antigen\_state\_2012.pdf - Estimated Vaccination Coverage with Q1/2012-Q4/2012 Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State US, National Immunization Survey

Difference in Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age - National Immunization Survey over a one year time period from Q1/2011-Q4/2011 to Q1/2012-Q4/2012.

Individual Vaccine or	National	Colorado	Washington State
Series			3507
3 DTaP	-1.2±0.9	3.0±6.2	0.6±6.4
4 DTaP	-2.1±1.6	1.8±10.2	-1.5±7.6
3 Polio	-1.1±0.9	2.4±6.6	-0.8±6.7
1 MMR	-0.8±1.1	3.1±7.0	-4.5±7.3
Hib, Full Series	-0.9±0.9	10.2±10.0	3.5±8.7
3 Hepatitis B	-1.4±1.1	2.5±6.9	0.2±7.4
1 Varicella (Chickenpox)	-0.6±1.1	1.0±7.2	-3.3±7.5
3 pneumococcal	-1.3±1.0	5.0±8.1	0.2±6.6
conjugate vaccine (PCV)			
4 pneumococcal	-2.5±1.5	6.2±9.9	-5.3±8.2
conjugate vaccine (PCV)	10		
4:3:1	-2.1±1.6	1.5±10.4	-2.9±9.7
4:3:1:3	0.6±1.8	4.0±11.2	0.6±9.6
4:3:1:3:3	0.6±1.8	4.6±11.2	-0.8±9.5
4:3:1:3:3:1	0.9±1.8	3.0±11.4	0.2±9.3
4:3:1:3:3:1:4	-0.1±1.9	6.0±11.8	-3.6±8.4

DTaP - diphtheria, tetanus and acellular pertussis vaccine.

MMR – Measles, Mumps and Rubella.

4:3:1 Series - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, and 1 or more doses of any MMR vaccine.

4:3:1:3 Series - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, and 1 or more doses of any MMR vaccine and the full series Hib.

4:3:1:3:3 Series - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, and 1 or more doses of any MMR vaccine, full series Hib and 3 hepatitis B.

4:3:1:3:3:1 Series - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine, full series Hib, 3 hepatitis B and 1 varicella.

4:3:1:3:3:1:4 Series - 4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR vaccine, full series Hib, 3 hepatitis B, 1 varicella and 4 or more does of PCV.

http://www.cdc.gov/vaccines/stats-surv/nis/tables/12/diff 2012 2011.pdf

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The aggregate kindergarten data were summed in Microsoft® Excel<sup>6</sup> and compared to the results obtained from the audit of the school records.

RESULTS

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### Documentation of vaccination status

The majority of the kindergarteners in the sample (62.7%, or 1,531) had approved certificates of immunization in their school records; 35.0% (713) had an unapproved document on file, and a small percentage had no immunization document in their school record (2.3%, or 42). Although an approved document of immunization is required according to the Rules of the Colorado Board of Health, the percentage of children with an approved document on file varied across regions from a low of 36.6% in the Northeast region to 98.7% in the Western Slope region.

### Coverage

Vaccination coverage estimates are shown in Table 1. About 76.3% (n=1,776; 95% confidence interval [CI] 73.8, 78.8) of Colorado's kindergarteners received the required vaccines as indicated by school records. In contrast, the series coverage estimated from school self-reports for the same time frame was 89.4% (n=46,559). The series coverage based on school self-reports of 89.4% is 10 percentage points higher than the upper 95% CI based on the audits. The audit found that coverage on the individual vaccines ranged from 85.1% for MMR to 92.2% for varicella. No significant difference was observed in UTD status by month of data collection (p>0.05).



Table 1

Vaccination coverage in Colorado kindergarteners for the 2004-2005 school year

### Reasons for non-UTD status

Overall, 6.1% of the kindergarteners took some kind of exemption. A small percentage (2.8%) took exemptions for all vaccines (0.2% medical, 0.2% religious, and 2.4% personal) (Table 2). An additional 3.3% of kindergarteners took exemptions for at least one vaccine in the series but not all vaccines. Kindergarteners who were in the process of becoming UTD accounted for another 0.2%. For 17.4% of kindergarteners, there was no recorded reason for being not UTD. Of these, about 1.3% of kindergarteners were categorized as not UTD because there were no records in the school file. For the remaining children who were not UTD (16.1%) and did have records in their school file, no explanation for their status was apparent. Those children had not taken an exemption nor were they in the process of becoming UTD.



Table 2

UTD status and reasons not UTD

### Factors associated with vaccination status

No association was detected between UTD status and a child's gender, race, or ethnicity. However, there was an association between country of birth and vaccination status in two of the five regions. In the Northeast, 77.5% (334 of 431) of the children born in the U.S. were UTD, compared to 59.6% (31 of 52) who were born out of the country ( $\chi^2$ =8.03, p<0.01). In the Western Slope region, 82.2% (194 of 236) of children born in the U.S. were UTD, while only 72% (121 of 168) of the non-U.S.-born children were UTD ( $\chi^2$ =5.92, p=0.02).

The composition of the school personnel who monitor immunization records was also significantly related to UTD status for the same two regions. Children in these regions were more likely to be UTD if they attended a

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	ian				EBTIFICAT	E OF IMMIII	NIZATION
OLORAD	O DEPARTMENT OF PUBLIC			200 Water 10 Water 10			NIZATION
	Vaccine	En	iter the month	i, day and year	each immunizat	tion was given	
Нер В	Hepatitis B						
DTaP	Diphtheria, Tetanus, Pertussis (pediatric)						
DT	Diphtheria, Tetanus (pediatric)						
Tdap	Tetanus, Diphtheria, Pertussis			The second second			
Td	Tetanus, Diphtheria						
Hib	Haemophilus influenzae type b						
IPV/OPV	Polio						
PCV	Pneumococcal Conjugate						
MMR	Measles, Mumps, Rubella		5				
Measles	Measles						
Mumps	Mumps						
Rubella	Rubella						S
Varicella	Chickenpox			Healthcare Provider	Documentation Date	Lab Verification Date	
	Vaccines recorded below	w this line are rec	ommended. Re	ecording of dates	s is encouraged.		N.
HPV	Human Papillomavirus						
Rota	Rotavirus						
//CV4/MPSV4	1 Meningococcal						
Нер А	Hepatitis A						
TIV/LAIV	Influenza						
Other							
	THIS SECTION CAN BE COMF	PLETED BY C	HILD CARE	/SCHOOL/H	EALTH CARE	E PROVIDER	
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☐ C) Child Up to date for	Care/Pre-school/Pre-K* or Child Care/Pre-School/Pre-K for Colorado School Immu	ınization Requirements	Update Signatur	e		Date	
Up to date for	lete for K-5th Grade or K-5th Grade for Colorado School Immunization Requir		Update Signatur	е		Date	*
* If age 4 years	and fulfills Requirements for Pre-School & Kindergarten,	check BOTH Boxes C a	nd D.		- Allerton		
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Signed	(Physician, nurse, or school health authority)	Title			Dat	e	and the second second



### MEMO

To: Lydia McCoy, Colorado Children's Immunization Coalition

From: Aponte & Busam Public Affairs

Date: June 3, 2010

Re: Summary of 2010 Legislative Session

Lydia,

Once again it was our pleasure to represent the Colorado Children's Immunization Coalition at the State Capitol during the 2010 legislative session. 2010 was a unique year as we played defense on several bills that could have had potentially harmful effects on the progress we have made in recent years. However, we were able to stave off any threatening language, and have an additional opportunity for parental education regarding the importance of vaccinations. All in all, 2010 was a successful year as the state Immunization programs avoided substantial budget cuts, in light of the nearly \$2B deficit that lawmakers worked to fill.

Below, you'll find a recap of the Coalition's legislation of interest as well as a general overview of Colorado's political climate and a look forward to the November election and the 2011 session. We'll look forward to working with you over the interim to put together a long term strategic plan for the Coalition's public policy goals.

## 2010 Issues of Importance: Legislative Highlights

# SB 56: Immunization Information for School Children

Brought forth by the Sanofi Pasteur, the manufacturer of the meningitis vaccine, SB 56 was a relatively simple bill that requires the Department of Public Health and Environment to add recommended vaccines to a letter furnished to the Department of Education and distributed to parents at the beginning of the school year. CCIC was actively engaged in the pre-session negotiation with the sponsor (Sen. Betty Boyd) and other stakeholders, and given the introduced language took a passive support position, as it was deemed that bill would eventually increase education about the importance of immunizations. However, during the process the bill was amended with language which requires the letter to cite the statutory reference allowing parents to opt-out of vaccinations. While the Coalition was opposed to any language that may promote a parent's ability to opt-out, we supported the addition of recommended vaccines to the letter and increasing parents awareness of their options. The bill ultimately passed both chambers and was signed into law by the Governor on March 29, 2010. Moving forward, the Coalition will have the opportunity to work with CDPHE to craft the specific wording of the letter prior to its distribution to CDE.



### Child Care Immunization Chart - 2013-14 SY

# Immunization Chart for Required vaccines (Child Care, Preschool & K-Entry)

- 1. This chart is a guide for childcare providers or parents to determine which vaccines children are required to have in order to be in compliance with state immunization requirements. This also insures that children are protected against vaccine preventable diseases. Select the appropriate age range for the child from the left hand column. The number of required doses are located in each of the columns and vaccines are listed across the top of the page. Review the child's immunization record with this chart to make sure they have at least the number of doses required. (Please keep in mind that this document provides the dosing schedule for "required" vaccines. Most health care providers will start the "recommended" schedule at 2 months of age).
- 2. If the child does not have the minimum number of doses, the parent is to be directly notified (in person, by phone, or by mail) that their child does not have the required minimum number of vaccine doses. Within 14 days of direct notification, the parent is to obtain the required vaccine(s) or makes a plan to do so providing written documentation of that plan. (Colorado law has allowances for medical exemption (to be signed by a health care provider), as well as religious or personal exemption (to be signed by parent or guardian). These signed exemptions are to be kept in the child's file.

Age of Child	# of required doses DT, DTP, or DTaP Diphtheria, Tetanus Pertussis	# of required doses Polio Polio	# of required doses MMR Measles Mumps Rubella	# of required doses Hib Haemophilus influenzae type b	# of required doses  Hep B  Hepatitis B	# of required doses Varicella Chickenpox	# of required doses PCV7 or PCV13 Pneumococcal Disease
< 4 mos.							
by 4 mos.	1	1		1	1		1
by 6 mos.	2	2		2	2/		2~
by 8 mos.	2	2		2	20		3/2~
by 12 mos.	3	2		4/3/2♥	20		3/2~
by 15 mos.	3	2	1+	4/3/2/1♥	20	1*	4/3/2~
by 19 mos.	4	3	1	4/3/2/1♥	3 🖊	I	4/3/2~
by 2 years	4	3	1	4/3/2/1.♥	30	1	4/3/2/1~
by 3 years	4	3	1	4/3/2/1♥	3@	1 .	4/3/2/1~
by 4 years	4	3	1	4/3/2/1♥	3/	1	4/3/2/1~
K-Entry	5/4♦	4/3 *	2		3/	2	

- The number of Hib doses required depends on the child's current age and the age when the Hib vaccine was administered. If any dose is given at or over, 15 months, the Hib requirement is met. For children who begin the series before 12 months, 3 doses are required, of which at least 1 dose must be administered at, or over, 12 months. If the 1st dose was given at 12 to 14 months, 2 doses are required. If the current age is 5 years or older, no new or additional doses are required.
- The number of doses of pneumococcal conjugate vaccine (PCV7 or PCV13) depends on the student's current age and the age when the 1st dose was administered. If the 1st dose was administered between 2 to 6 months of age, the child will receive 3 doses two months apart, and an additional dose between 12 to 15 months of age. If started between 7 to 11 months of age, the child will receive 2 doses, two months apart, and an additional dose between 12 to 15 months of age. If the 1st dose was given between 12 to 23 months of age, 2 doses, 2 months apart, are required. Any dose given at 24 months through 4 years of age, the PCV vaccine requirement is met. No doses required once the child turns 5 years of age.
- + MMR given more than 4 days before the 1st birthday is not a valid dose. That dose must be repeated. Documentation of 1 dose of rubella vaccine and 2 doses of measles and 2 doses of mumps vaccines on or after the first birthday meets the school requirement for Kindergarten entry.
- Five doses of pertussis, tetanus, and diphtheria vaccines are required at school entry in Colorado unless the 4th dose was given at 48 months of age or older (i.e., on or after the 4th birthday) in which case only 4 doses are required. There must be at least 4 weeks between dose 1 and dose 2, at least 4 weeks between dose 2 and dose 3, at least 4 months between dose 3 and dose 4, and at least 6 months between dose 4 and dose 5. The final dose must be given no sooner than 4 years of age (dose 4 may be given at 12 months of age provided there is at least 4 months between dose 3 and dose 4).
- Four doses of polio vaccine are required at school entry in Colorado. There must be at least 4 weeks between dose 1 and dose 2, at least 4 weeks between dose 2 and dose 3, and at least 6 months between dose 3 and dose 4. The final dose must be given no sooner than 4 years of age. A fourth dose is not required if the 3<sup>nt</sup> dose was administered at age 4 years or older and at least 6 months after the 2<sup>nd</sup> dose. Minimum age/interval does not apply if the 4<sup>th</sup> dose (3<sup>nd</sup> if given on or after 4<sup>th</sup> birthday) was administered prior to July 1, 2009.
- If a child has had chickenpox disease and it is documented by a health care provider, that child has met the varicella requirement. Varicella given more than 4 days before the 1st birthday is not a valid dose. That dose must be repeated.
- The 2<sup>nd</sup> dose of Hep B is to be given at least 4 weeks after the 1<sup>st</sup> dose; 3<sup>rd</sup> dose to be given at least 16 weeks (4 months) after 1<sup>st</sup> dose; and last dose to be given at least 8 weeks after 2<sup>nd</sup> dose and at 6 months of age or older. (For those kids who have 3 doses prior to 7/1/09, they do not need to follow the above stated intervals.)