



To achieve its goal of preventing disease, disability and death from vaccine-preventable diseases the **Immunization Program:**

- ◆ Provides vaccine to immunization providers throughout the State;
- ◆ Provides education for medical personnel and the general public;
- ◆ Works with providers using the immunization registry to assure that all children in their practices are fully immunized;
- ◆ Assures that children who are in day care, Head Start, and school are adequately immunized;
- ◆ Conducts surveillance to evaluate the impact of vaccination efforts and to identify groups that are at risk of vaccine-preventable diseases.



**Influenza Prevention and Control: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010**

Fall 2010

The ACIP published the 2010-2011 influenza vaccine recommendations in the Morbidity and Mortality Weekly Report (MMWR) on August 10, 2010. Below is a summary of the five principle changes or updates to the recommendations.

1. Routine influenza vaccination is recommended for all persons aged  $\geq 6$  months. This represents an expansion of the previous recommendations for annual vaccination of all adults aged 19-49 years and is supported by evidence that annual influenza vaccination is a safe and effective preventive health action with potential benefit in all age groups. Further support for expansion of annual vaccination recommendations to include all adults is based on concerns that 2009 pandemic influenza A (H1N1)-like viruses will continue to circulate during the 2010-11 influenza season and that a substantial proportion of young adults might remain susceptible to infection with this virus. Data from epidemiologic studies conducted during the 2009 pandemic indicate that the risk for influenza complications among adults aged 19-49 years is greater than is seen typically for seasonal influenza.
2. As in previous recommendations, all children aged 6 months-8 years who receive a seasonal influenza vaccine for the first time should receive 2 doses. Children who received only 1 dose of a seasonal influenza vaccine in the first influenza season that they received vaccine should receive 2 doses, rather than 1, in the following influenza season. In addition, there are some special considerations for children aged 6 months through 8 years for 2010-2011. A table of how many doses to administer to children in this age group can be found on page 2 of this issue.
3. The 2010-11 trivalent vaccines contain A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like, and B/Brisbane/60/2008-like antigens. The influenza A (H1N1) vaccine virus is derived from a 2009 pandemic influenza A (H1N1) virus.
4. A newly approved inactivated trivalent vaccine containing 60 mcg of hemagglutinin antigen per influenza vaccine virus strain (Fluzone High-Dose (Sanofi Pasteur)) is an alternative inactivated vaccine for persons aged  $\geq 65$  years. Persons aged  $\geq 65$  years can be administered any of the standard-dose TIV preparations or Fluzone High-Dose. Persons aged  $< 65$  years who receive inactivated influenza vaccine should be administered a standard-dose TIV preparation.
5. Previously approved inactivated influenza vaccines that were approved for expanded age indications in 2009 include Fluarix (GlaxoSmithKline), which is now approved for use in persons aged  $\geq 3$  years, and Afluria (CSL Biotherapies), which is now approved for use in persons aged  $\geq 6$  months. A new inactivated influenza vaccine, Agriflu (Novartis), has been approved for persons aged  $\geq 18$  years.

For the complete recommendations go to: <http://www.cdc.gov/mmwr/pdf/rr/rr5908.pdf>

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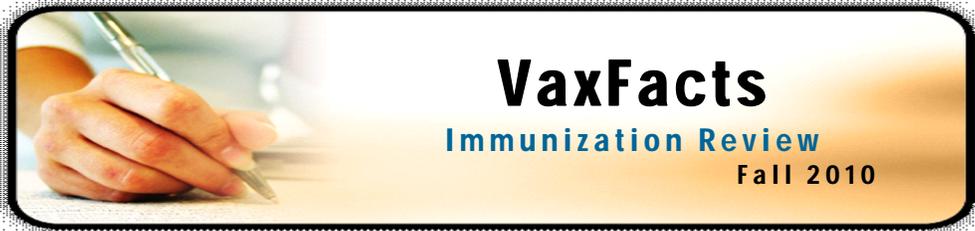
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*Q. What does it mean when it is said that for VFC vaccine, you cannot charge more than \$21 administration fee for state-supplied vaccine?*

*A. This charge refers to what would come out-of-pocket from the patient. You may not “collect” more than \$21.00 for an administration fee.*

*Q. I understand that the daycare immunization requirements have changed. Do all children attending licensed daycares now need hepatitis A vaccinations?*

*A. No, only children born **after January 1, 2009** are required to be vaccinated against hepatitis A. Children born prior to January 1, 2009 are not affected by this hepatitis A vaccine requirement, though it is still a recommended vaccine by the ACIP*

*Q. What are the new influenza vaccine requirements for children in licensed daycare?*

*A. Beginning January 1, 2011 all children between 6 months and 59 months of age are required to have received **at least one influenza vaccination every year by January 1st**. For January 1, 2011, that means the children in that age group will have to have received **at least one** influenza vaccination of 2010-2011 influenza vaccine preparation. See this page for a guide for determining the **total** number of doses recommended for this season.*

**Guide for determining the number of doses of influenza vaccine to give to children ages 6 months through 8 years during the 2010–11 influenza season**

Did the child receive influenza vaccine prior to the 2009–10 season?	How many doses did the child receive in the 2009–10 season?		Number of doses recommended for the 2010–11 season
	H1N1 <sup>1</sup>	Seasonal	
No, yes, or unknown	0 or unknown	0, 1, 2, or unknown	2 <sup>2</sup>
No or unknown	1 or 2	0, 1, or unknown	
No or unknown	1 or 2	2	1
Yes	1 or 2	0, 1, or 2	1

- Children who had a lab-confirmed 2009 H1N1 virus infection (e.g., reverse transcription-polymerase chain reaction or virus culture specific for H1N1 virus) are likely to be immune to this virus and can be considered to have a “1” in this column.
- Give dose #2 a minimum of 4 weeks after dose #1. Children age 2 years or older can receive 2 injectable doses, 2 nasal-spray doses, or 1 of each.

**Hospital Tdap Cooching Project**



Pertussis (whooping cough) is very contagious and can cause serious illness -- especially in infants who are too young to be fully vaccinated. Infants too young to have completed their primary diphtheria-tetanus-acellular pertussis (DTaP) vaccine series account for the majority of pertussis-related complications, hospitalizations and deaths. Studies have shown that infants often become infected with pertussis from close contact with infected adults, particularly mothers, fathers, and household contacts whose immunity from the childhood DTaP vaccine series has waned. In 2006, the Advisory Committee on Immunization Practices recommended routine administration of tetanus-diphtheria-acellular pertussis (Tdap) vaccine for postpartum women who were not vaccinated previously with Tdap to provide personal protection and reduce the risk for transmitting pertussis to their infants. (Click on this link to view the full recommendations <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5704a1.htm>)

During 2008 the Connecticut Department of Public Health Immunization Program initiated a pilot project working with hospitals to provide free Tdap vaccine to postpartum mothers and families, including infant caregivers. The project has expanded from five hospitals participating in 2008 to fifteen hospitals to date. Additionally four health departments and two community health centers are participating in the initiative by vaccinating fathers and other close contacts. The table below shows the amount of Tdap vaccine distributed and administered thus far.

2008		2009		2010 (as of Sept)	
distr	admin	distr	admin	distr	admin
1,160	230	3,125	2,747	4,855	3,230

If your hospital or health department is interested in participating in the Tdap Cooching Project, please contact Kathy Kudish or Mick Bolduc at 860-509-7929.



# VaxFacts

Immunization Review

Fall 2010

**TABLE 2. Influenza vaccines for different age groups --- United States, 2010--11 season\***

Vaccine	Trade name	Manufacturer	Presentation	Mercury content (mcg Hg/0.5 mL dose)	Age group	No. of doses	Route
TIV†	Fluzone	sanofi pasteur	0.25 mL prefilled syringe	0.0	6--35 mos	1 or 2§	Intramuscular¶
			0.5 mL prefilled syringe	0.0	≥36 mos	1 or 2§	Intramuscular
			0.5 mL vial	0.0	≥36 mos	1 or 2§	Intramuscular
			5.0 mL multidose vial	25.0	≥6 mos	1 or 2§	Intramuscular
TIV	Fluvirin	Novartis Vaccine	5.0 mL multidose vial	24.5	≥4 yts	1 or 2§	Intramuscular
			0.5 mL prefilled syringe	<1.0			
TIV	Fluarix	Glaxo SmithKline	0.5 mL prefilled syringe	0.0	≥3 yts	1	Intramuscular
TIV	FluLaval	Glaxo SmithKline	5.0 mL multidose vial	25.0	≥18 yts	1	Intramuscular

TIV	Afluria	CSL Biotherapies	0.5 mL prefilled syringe	0.0	>9 yts***	1	Intramuscular
			5.0 mL multidose vial	25.0			
TIV High Dose**	Fluzone High-Dose	sanofi pasteur	0.5 mL prefilled syringe	0.0	≥65 yts	1	Intramuscular
LAIV††	FluMist§§	MedImmune	0.2 mL sprayer, divided dose	0.0	2--49 yts	1 or 2§	Intranasal

\* Immunization providers should check Food and Drug Administration--approved prescribing information for 2010--11 influenza vaccines for the most updated information.

† Trivalent inactivated vaccine.

§ Children aged 6 months--8 years who have never received a seasonal TIV before or who did not receive at least 1 dose of an influenza A (H1N1) 2009 monovalent vaccine should receive 2 doses, spaced ≥4 weeks apart. Those children aged 6 months--8 years who were vaccinated for the first time in the 2009--10 season with the seasonal 2009--10 seasonal vaccine but who received only 1 dose should receive 2 doses of the 2010--11 influenza vaccine formula, spaced ≥4 weeks apart.

¶ For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.

\*\* Trivalent inactivated vaccine high dose. A 0.5-mL dose contains 60 mcg each of A/California/7/2009 (H1N1)-like, A/Perth/16/2009 (H3N2)-like, and B/Brisbane/60/2008-like antigens.

†† Live attenuated influenza vaccine.

§§ FluMist is shipped refrigerated and stored in the refrigerator at 36°F--46°F (2°C--8°C) after arrival in the vaccination clinic. The dose is 0.2 mL divided equally between each nostril. Health-care providers should consult the medical record, when available, to identify children aged 2--4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2--4 years should be asked: "In the past 12 months, has a health-care provider ever told you that your child had wheezing or asthma?" Children whose parents or caregivers answer "yes" to this question and children who have asthma or who had a wheezing episode noted in the medical record within the past 12 months should not receive FluMist.

\*\*\* ACIP age indication



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**2009 National Immunization Survey (NIS) Results**

Since 1994, the National Immunization Survey (NIS) has been collecting data to monitor childhood immunization coverage. National data for children aged 19-35 months and born during January 2006-July 2008 indicate that vaccination coverage increased in 2009 compared with 2008 for HepB birth dose (from 55.3% to 60.8%) and HepA (from 40.4% to 46.6%), but coverage for PCV (≥4 doses) remained stable (80.4%). Full coverage for rotavirus vaccine was 43.9% among children born within 2 years of licensure. Coverage for poliovirus (92.8%), measles, mumps, and rubella (MMR) (90.0%), hepatitis B (HepB) (92.4%), and varicella (VAR) (89.6%) vaccines continued to be at or near the national health objective of 90%, although coverage for MMR and HepB vaccines decreased slightly in 2009. The percentage of children who have not received any vaccines remained low (<1%). Parents and primary-care providers continued to ensure that children were vaccinated, in spite of interim recommendations to suspend the booster dose of *Haemophilus influenzae* type b vaccine (Hib) because of a national shortage, and heightened public awareness of controversies in vaccine safety.

As for Connecticut, the State ranked sixth in the nation for the modified vaccine series of 4 DTaP-3 Polio-1 MMR-0 Hib (due to the Hib vaccine shortage)-3 Hep B-1 VAR with 76.0% coverage. The national average for the modified vaccine series was 70.5%; the highest coverage being achieved by Iowa (78.1%) and the lowest coverage by Missouri (56.2%). Connecticut's PCV coverage was highest in the nation at 90.7% compared to the national average of 80.4%. However, Connecticut's HepB birth dose coverage of 46.8% was lower than the national average of 60.8%.

For more information see the MMWR article at: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5936a2.htm?s\\_cid=mm5936a2\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5936a2.htm?s_cid=mm5936a2_w)

**Damaged Vials of Diluent**

**All Users of State Supplied Vaccines** – There have been some recent reports of damaged vials of diluent, where the bottom of the vial was cut although the carton did not show signs of immediate leakage. When your vaccine order arrives, it's important to immediately check that you received the correct number of doses of diluent and that you inspect each vial carefully for any damage. If you have damaged or missing diluent, please call the Immunization Program at (860) 509-7929 so replacement vials can be ordered for you. Failure to immediately call and report missing or damaged vials may result in your practice being responsible for the replacement of those vials.

## IMMUNIZATION RESOURCES

### •CDC Public Health Training Network (PHTN)

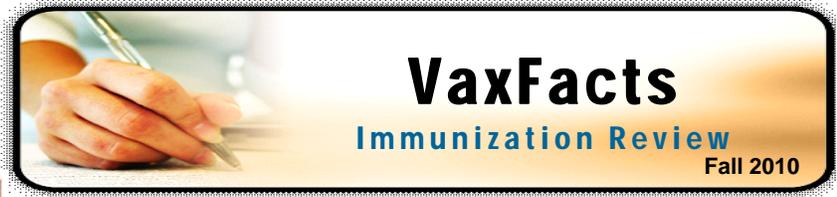
Listing of satellite broadcasts, net conferences and immunization updates  
<http://www2.cdc.gov/phtn/>

### •Immunize.org

Resources for health professionals providing immunization information on childhood, adolescent and adult immunizations. VIS statements in multiple languages  
[www.immunize.org](http://www.immunize.org)

•CDC free influenza resources, posters, pamphlets, widgets  
[www.cdc.gov/flu/freeresources](http://www.cdc.gov/flu/freeresources)

•Flu locator.  
Find a location for influenza immunizations. Sites are organized by zip code. Funded by Google. The site is available now.  
<http://www.lungusa.org/lung-disease/influenza/flu-vaccine-finder/>



## Immunizations Communications

An excellent source of the latest information is the Immunization Program's website at [www.ct.gov/dph/immunizations](http://www.ct.gov/dph/immunizations).

We are always updating our website with the latest memos and news regarding immunizations. If you scroll down to the bottom of our website page you will find many forms and documents in PDF format that can be easily opened and printed. It's a good idea to get in the habit of logging on at least once a week to ensure that you're updated on all the latest immunization news and memos.

Please take a look at and download some recently updated forms including the Vaccine Order Form (VOF), Transfer Form, Return Form, and "Answers to Commonly Asked Questions". We encourage you to download and use these updated forms and memos and discard old versions.

Our traditional form of communicating any new, critical or time-sensitive information to enrolled VFC providers is through our blast fax system. When you receive these documents please immediately take the time to read through the documents, take the appropriate actions, and communicate and post the information to your staff. For those providers who have given us their email addresses we are backing up these communication notices with email as well. Please check your email frequently. Also notify us with any new or revised email addresses so we may add or update our email list.

As always if you have questions, concerns or comments please contact us at 860-509-7929.



## Teen Immunization Rates on the Rise — Especially in Connecticut

National Immunization Survey-Teen (NIS-Teen)\* results released by the Centers for Disease Control and Prevention (CDC) in August show that teen vaccination rates are increasing nationwide. The survey of more than 20,000 teens aged 13–17 found that in 2009 there were increases in the percentage of teens in this age group who had received vaccines routinely recommended for 11- and 12-year-olds.

- For one dose of the tetanus-diphtheria-acellular pertussis vaccine (Tdap), coverage went up about 15 points to 56 percent;
- For one dose of meningococcal conjugate vaccine, coverage went up about 12 points to 54 percent;
- For girls who received at least one dose of human papillomavirus (HPV) vaccine, coverage increased 7 points to 44 percent. However, for girls who received the recommended three doses of HPV vaccine, coverage was only about 27 percent (a 9 percent increase).

The table below shows how Connecticut’s teen immunization coverage rates compare with national averages. For each coverage measure, Connecticut exceeded the national average.

Estimated vaccination coverage among adolescents aged 13-17 years, NIS-Teen, 2009								
	Vaccine doses recommended during childhood				Vaccine doses recommended for adolescents			
	≥ 2 MMR	≥ 3 hep B	≥ 1 varicella	≥ 2 varicella	≥ 1 Td or Tdap	≥ 1 Tdap	≥ 1 meningococcal	≥ 1 HPV
US	89.1%	89.9%	87.0%	48.6%	76.2%	55.6%	53.6%	44.3%
CT	94.4%	96.3%	94.0%	62.6%	88.9%	68.3%	68.1%	61.2%

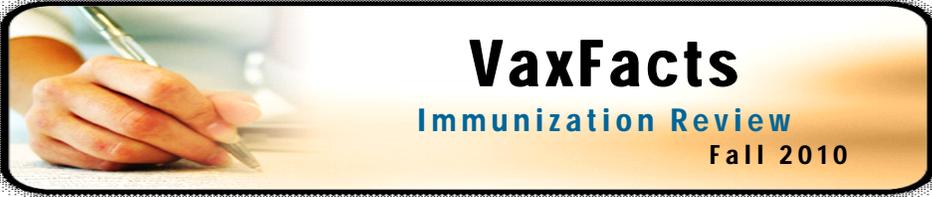
*\* The NIS-Teen is a random telephone survey of parents or care-givers, followed by verification of immunization records with health care providers. The survey estimates the proportion of teens aged 13 through 17 years who have received the three recommended pre-teen vaccines, as well as three of the recommended childhood vaccines, by the time they are surveyed.*

### CIRTS Coverage Rates for 2007 Birth Cohort

Each year CIRTS (CT Immunization Registry and Tracking System) runs immunization coverage rates for providers throughout the State for their patients in the birth cohort that has turned two years old. This year CIRTS generated coverage rates for children in the registry born between January 1 and December 31, 2007 (85% of children born in CT in 2007 are in the registry). CIRTS also generates statewide rates by various vaccine series, by community health centers, by ambulatory care centers, by IAP areas, as well as rates for Medicaid patients and public versus private providers.

The OK-4,3,1,2,3,1,2-4 (4 DTaP, 3 IPV, 1 MMR given on or after first birthday, 2 or more Hib, 3 hepatitis B with one given on or after 24 weeks of age, 1 varicella given on or after first birthday or varicella disease, 2 to 4 PCV given age appropriately with one given on or after first birthday) coverage was 80% for the 2007 birth cohort.

For more information, see page 7 of this newsletter.



# VaxFacts

Immunization Review  
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## Connecticut Immunization Registry and Tracking System (CIRTS)

Connecticut Department of Public Health Immunization Program  
410 Capitol Avenue MS #11 MUN, Hartford, CT 06134 Tel: (860) 509-7929 Fax: (860) 509-8370

### Immunization Status on 2<sup>nd</sup> Birthday of Children Enrolled in CIRTS

Date of Birth: January 1, 2007 – December 31, 2007

#### Connecticut - Statewide Rates

Schedule Used – By Age 2	Not up-to-date in CIRTS	Up-to-date in CIRTS		Total Number in CIRTS Registry
		#	%	
HEDIS – Medicaid	2157	8016	79%	10,173
Doses Only – 4:3:1:3:3:1:4	13,089	22,220	63%	35,309
Doses Only – 4:3:1:2:3:1:4	6021	29,288	83%	35,309
OK – 4:3:1:2:3:1	6366	28,943	82%	35,309
OK – 4:3:1:2:3:1:2-4	<b>7204</b>	<b>28,105</b>	<b>80%</b>	<b>35,309</b>

#### 2007 Birth Cohort in CIRTS:

- The 35,309 children represent 85% of the 41,413 births recorded in Connecticut for 2007
- 17,829 children or 43% of the 41,413 births are also enrolled in Medicaid
- 3,924 children or 9% of the 41,413 births refused registry enrollment

#### SCHEDULES USED – BY AGE TWO:

**HEDIS – Medicaid** (Specifications Combo 3.0) = 4 DTaP - any shot prior to 42 days after birth not counted, 3 Polio - any shot prior to 42 days after birth not counted, 1 MMR, \*2 Hib - any shot prior to 42 days after birth not counted, 3 Hep B, 1 Varicella given on or after first birthday or Varicella disease, and 4 PCV. Children must have been enrolled continuously in the same Medicaid Plan for twelve months prior to their second birthday.

*This is the standard used by commercial and Medicaid Managed Care insurance plans.*

**Doses Only – 4:3:1:3:3:1:4** = 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hep B, 1 Varicella, 4 PCV (*Doses Only = intervals and validity not counted*)

**Doses Only – 4:3:1:2:3:1:4** = 4 DTaP, 3 Polio, 1 MMR, \*2 Hib, 3 Hep B, 1 Varicella, 4 PCV (*Doses Only = intervals and validity not counted*)

**OK – 4:3:1:2:3:1** = 4 DTaP, 3 Polio, 1 MMR given on or after first birthday, \*2 or more Hib, 3 Hep B with one given on after 24 weeks of age, 1 Varicella given on or after first birthday or Varicella disease

**OK – 4: 3:1:2:3:1:2-4** = 4 DTaP, 3 Polio, 1 MMR given on or after first birthday, \*2 or more Hib, 3 Hep B with one given on or after 24 weeks of age, 1 Varicella given on or after first birthday or Varicella disease, 2 to 4 PCV age appropriately given with one given on or after first birthday

*\*Please note the 2-dose Hib schedules reflect the Hib supply shortage and the February 2008 to July 2009 deferment of the Hib booster dose.*