



# IMMUNIZATION TIME

## AVAILABILITY OF THIMEROSAL-FREE DTaP, Hib

In the wake of the controversy surrounding the potential risk of thimerosal as a preservative in childhood vaccines, both the American Academy of Pediatrics and the Advisory Committee on Immunization Practices have made statements that we should gradually move toward elimination of use of thimerosal as a preservative in vaccines while maintaining the high early childhood immunization levels we have achieved against diseases of certain clinical significance including mortality. From a practical perspective, this has meant moving toward use of T-free Hib and T-free DTaP vaccines as they become available, the two vaccines other than hepatitis B to have used thimerosal as a preservative.

The formulation of DTaP which the State Immunization Program has been supplying for the past 4 years (Tripedia) contains thimerosal. Because DTaP vaccines from different manufacturers contain different combinations of different pertussis antigens, it is recommended that **whenever possible, the same brand of DTaP vaccine be used for all doses of the vaccination series.** A T-free version of Tripedia is expected to be approved by the FDA in early 2001. Although most formulations of DTaP still contain thimerosal, there is one T-free formulation available (Infanrix). **Infanrix** contains the same pertussis antigens (pertussis toxin and filamentous hemagglutinin) that are in Tripedia and there is no difference in cost. **Infanrix** also contains pertactin, an additional antigen that could hypothetically, on one hand, provide additional protection, but also cause more reactions.

Given requests from some physicians that the state carry T-free DTaP to help them address either their own or their patient's concerns about thimerosal and the similarity between **Infanrix** and Tripedia, the state has decided to carry both vaccines until T-free Tripedia becomes available. At that time, if there are no other issues to consider the state will switch back to carrying only the Tripedia formulation to avoid any potential for under-immunization that mixing DTaP vaccines

could produce. Beginning on September 1st, providers will have the option of ordering Tripedia or **Infanrix** – or some of each. **Infanrix** comes packaged in ten single dose vials per box.

In the next 1-2 months, once the State Immunization Program depletes their current inventory, it will be supplying only T-free Hib vaccine (**Hib**titer) packaged in a box of four single dose vials. By doing this, independent of any decision about T-free DTaP, the state will have decreased the amount of thimerosal to which infants vaccinated with state-supplied vaccines are exposed by over 60%.

## NEW SCHOOL IMMUNIZATION REQUIREMENTS- STATEWIDE

On Tuesday, February 22, 2000, the Regulations Review Committee passed proposed new immunization requirements for school entry. The following new requirements are effective August 2000: (1) all 7th grade enterers will have to show proof of immunity to chicken pox; (2) all 7th grade enterers will have to have at least one dose of hepatitis B vaccine and series completion by 8th grade entry, (3) all kindergarten enterers will need to have had two rather than one dose of measles containing vaccine, (4) all kindergarten enterers who are 48-71 months of age must show proof of having received at least 4 doses of DTP/DTaP vaccine and 3 doses of polio vaccine (IPV/OPV) with at least one dose given on or after the fourth birthday AND before school entry. Formerly the last dose only had to be given by age 5 years, not by school entry; (5) all children born January 1, 1997 or more recently will need to show proof of immunity to varicella to enter preschool or kindergarten. Earlier this year, chickenpox immunity became required for children of the same age group in licensed day care.

The state Immunization Program sent letters to all pediatricians and family practitioners in Connecticut notifying them of the newly passed school immunization entry requirements, which go into effect this August. A separate letter from the Department of Education was sent to School Medical Advisors, School Nursing

Supervisors, and Superintendents. These new requirements bring the state into agreement with national recommendations.

## NEW CHILDHOOD VACCINE RECOMMENDED

On February 17, 2000, the Food and Drug Administration (FDA) approved the first vaccine to prevent invasive pneumococcal disease in infants and toddlers. The vaccine, Pneumococcal 7-valent Conjugate Vaccine, will be marketed as **Prevnar** by Wyeth-Ayerst laboratories. Infants can receive the vaccine starting at 2 months of age. **Prevnar** prevents invasive diseases caused by the organism *Streptococcus pneumoniae* including bacteremia and meningitis. It is estimated that each year in the U.S. there are about 16,000 cases of pneumococcal bacteremia and 1,400 cases of pneumococcal meningitis among children under five.

On June 21, the Advisory Committee on Immunization Practices (ACIP) finalized the recommendations for pneumococcal conjugate vaccine. The vaccine is recommended for all children <24 months old. The vaccine should be considered for all other children through 59 months of age with priority for those at higher risk which includes children of African American, American Indian, and Alaskan Native descent, and those who attend out of home child care for more than 4 hours per week. The vaccination schedule for infants is 2, 4, and 6 months, with a booster at 12-15 months. Catch up requires 3 doses for children who start vaccination between 7 and

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11 months: 2 doses for those who start between 12 and 23 months; and 1 dose for healthy children who start after 24 months.

Pre-licensure studies show pneumococcal conjugate vaccine more than 90% effective in preventing invasive pneumococcal infections (meningitis and bacteremia). Vaccination was also highly effective against non-bacteremic pneumonia thought to be pneumococcal; and ~6% of all cases of ear infections were prevented with the proportion increasing to ~20 % among children who had frequent episodes or needed ear tubes.

On June 29, 2000 the Centers for Disease Control and Prevention (CDC) signed a contract for the purchase of Prevnar. The contract will be in effect until 3/31/2001. **Beginning September 1, 2000, all users of State Supplied vaccine can begin to order pneumococcal conjugate vaccine (PCV) for all their VFC-eligible children (children on Medicaid or who have no health insurance) 6 weeks through 59 months of age.** Due to the cost of the vaccine (\$44.25 per dose), the Immunization Program is not able to provide PCV for non VFC-eligible children at this time (*see table, p.3*). An interim Vaccine Information Statement for PCV is available on the CDC website ([www.cdc.gov/nip](http://www.cdc.gov/nip)) and must be given to the parent or legal guardian of the patient each time a dose of the vaccine is administered.

### VACCINE UPDATE

#### Hepatitis A

Hepatitis A vaccine now appears on the year 2000 Recommended Childhood Immunization Schedule. It is recommended for routine use in children who live in certain areas of the country. Connecticut is not one of those areas. Hepatitis A is one of the most reported vaccine preventable disease in the country with the highest incidence occurring in children.

#### Hepatitis B

The FDA has licensed one hepatitis B product (Recombivax) for a 2 dose schedule. The criteria for a 2 dose schedule of this product are:

- Only for children 11-15 years of age
- Must be adult formulations (10 mcg dose)
- 2 doses separated by 4-6 months
- Only the Merck product can be used

The cost of this hepatitis B series is substantially higher than that of the routine 3 dose series.

Since December 1999, the state Immunization Program has been providing thimerosal-free hepatitis B vaccine (Recombivax HB manufactured by Merck) for patients six months of age and younger. Recently, the FDA licensed a second single antigen thimerosal-free hepatitis B vaccine (Engerix B manufactured by SmithKline Beecham). The state Immunization Program no longer has any thimerosal containing hepatitis B vaccine and is now supplying only thimerosal-free Engerix B which can be used for all patients birth through 18 years of age. Although the antigen content of the vaccines differ, vaccines made by different manufacturers are interchangeable.

#### Polio

As of June 2000, OPV is no longer recommended for routine use in the U.S., although it is permissible to keep the vaccine in storage through the expiration date.

#### Influenza

The fall 2000-2001 flu season is projected to have a substantial delay and shortage of flu vaccine, due to lower than anticipated production yield for the A (H3N2) strain and other manufacturing problems. A more accurate estimate of availability will become known by September. The CDC has published a notice titled "Delayed Supply of Influenza Vaccine and Adjunct ACIP Influenza Vaccine Recommendations for the 200-2001 Influenza Season" in the July 14, 2000 issue of the MMWR.

Essentially ACIP recommends the following:

1. Delay organized influenza vaccination campaigns (clinics) until early to mid-November. Vaccine should be procured before setting up clinics. To minimize waste, avoid over-ordering.
2. Routine influenza vaccination of persons at high risk for complications from influenza and their close contacts should proceed routinely during regular health care visits.
3. Provider-specific contingency plans for an influenza vaccine shortage should be developed. For example, high risk individuals should be targeted first.

To obtain the full text version (HTML format) of this notice, go to: [www.cdc.gov/epo/mmwr/preview/mmwrhtml/mm4927a4.htm](http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/mm4927a4.htm)

### REGISTRY UPDATE

Connecticut State Regulations regarding reporting information to and releasing information from the Connecticut Immunization Registry and Tracking System (CIRTS) were passed on April 25, 2000 by the Regulations Review Committee. The regulations had been in development and modification for the past four years.

System testing for CIRTS is in progress and will be complete by July 31, 2000. A final report will be prepared and submitted to CDC by mid August. Providers using the old CIRTS software will have the ability to print out immunization histories for day care, school, and camp sometime in September.

### CDC'S IMMUNIZATION UPDATE

WILL BE ON  
SEPTEMBER 14, 2000  
FROM 9-11:30 AM AND  
12-2:30 PM

*Call the State Immunization Program for the location nearest you*

## Connecticut Eligibility Criteria for Publicly Purchased Vaccines, as of July 2000

Vaccine <sup>1</sup>	Age Group	VFC Status of Children	
		VFC-Eligible <sup>2</sup>	Other Children
Varicella	12-18 months (routine)	yes	yes
	11-12 yrs. <sup>3</sup> (routine)	yes	yes
	2-14 yrs. <sup>3</sup> (catch-up)	yes	yes
Hepatitis B	Newborns in hospital (routine)	yes	yes
	all children 0-18 yrs. (routine)	yes	yes
Td booster	Adolescents 11-18 yrs. <sup>4</sup>	yes	yes
MMR(2nd-dose)	4-6 years old (routine)	yes	yes
	6th-7th grade entry (routine)	yes	yes
	college entry (routine)	yes	yes
Pneumococcal Conjugate vaccine	2-59 months (routine)	yes	No

### For Your Information....

#### Vaccine Adverse Event Reporting System (VAERS)

The national Childhood Vaccine Injury Compensation Act of 1986 mandated that health care workers who administer vaccines and licensed vaccine manufacturers report certain adverse health events following vaccination. VAERS, jointly administered by the FDA and CDC, was created in 1990 to provide a unified national effort for the collection of all reports of clinically significant possibly adverse events. **Any individual, including patients, their parents, and health professionals can report adverse events to VAERS. There is no restriction with respect to timing or onset of suspected adverse event and administration of the vaccine nor a requirement for medical care.** General information and the VAERS form itself are available on the VAERS website: [www.fda.gov/cber/vaers.html](http://www.fda.gov/cber/vaers.html). The form should be mailed or faxed (860) 509-7945 to the Immunization Program anytime a clinically significant adverse event is suspected.

- All vaccines not listed on this table to support routine vaccination of children as recommended by the ACIP and AAP are supplied for vaccination of all children, regardless of VFC status (DTaP, Hib, OPV/IPV, MMR-1).
- VFC eligibility criteria is defined as follows: (a) Medicaid enrolled; (b) no health insurance; or (c) American Indian or Alaskan native. In addition, those individuals who are underinsured (have health insurance that does not fully cover immunizations) can be referred to a Federally Qualified Health Center (FQHC) to be immunized with VFC-supplied vaccine.
- Susceptible children who do not have a clinical history of chicken pox.
- Routine Td booster dose can be given to adolescents at either 11-12 or 14-16 years of age if primary series is complete and no boosters have been given for the previous 5 years.

## Notable Achievements



### We're in the Top Five!

Based on the most recent results of the CDC's National Immunization Survey of immunization levels of 2 year olds, Connecticut has the 5th highest age-appropriate completion rate in the country with 87.1% of 2 year olds having completed their basic series of 4 DTP, 3 Polio, and 1 MMR. The overall national rate is 80%. Congratulations to all vaccine providers for sustaining high early childhood vaccination levels despite the increased challenges we've faced!

#### West Haven

Betty Murphy, IAP Coordinator for West Haven has extended her educational outreach to family day cares in the West Haven area. Family day cares are approached by Head Start to offer support services and free First Aid and CPR classes. If they chose to come on board with Head Start, Betty visits the home, and distributes immunization education materials, reviews the most current state regulations with the home day care provider, and checks all the children's immunization histories to ensure they are up to date. This is a great intervention for those little ones who are not yet of school age.

#### Northeast District

Day Kimball Hospital's Pediatric Center, as part of their Reach Out and Read Program, recently presented a special "Reading Time" event to over 400 children throughout Northeast Connecticut. Several local celebrities were on hand to read to children from local schools



and childcare centers. Each child who attended also received a gift bag containing immunization and other health information, books and other items donated by several organizations within the community.

(See photo)  
*Michael Tommasi, State Immunization Action Plan Coordinator, reads to children at "Reading Time".*

## IOM REPORTS ON IMMUNIZATION FINANCE POLICIES AND PRACTICES

On June 15, 2000, the Institute of Medicine (IOM) released a report raising a public health warning about the weakening U.S. immunization system. The report titled "Calling the Shots" recommends federal and state partnerships to provide increased investment and long-term strategies for funding the nation's immunization infrastructure. It also calls for better integration between public and private vaccination efforts to reduce disparities in immunization coverage. The IOM recommends an overhaul of the way the system is financed, including an investment of more than \$1.5 billion over five years by federal and state governments, an annual increase of \$175 million over current spending. The report is based on an 18-month, 50-state study sponsored by the Center's for Disease Control and Prevention to look at the nation's immunization system. The entire IOM report is available at [www.national-academies.org/includes/shots.htm](http://www.national-academies.org/includes/shots.htm)

## DPH DIVISION DIRECTOR CO-INVESTIGATES CONNECTICUT VARICELLA-RELATED HOSPITALIZATIONS

Dr. James Hadler, MD, Director of Infectious Diseases Division of the Connecticut Department of Public Health, co-investigated a statewide study that was recently published in the Journal of Infectious Diseases. The study, "Epidemiology of Primary Varicella and Herpes Zoster Hospitalizations: The Pre-Varicella Vaccine Era" looked at the epidemiology and costs of hospitalization with primary varicella (chicken pox) and herpes zoster (shingles) before the vaccine was licensed in the U.S. in 1995, and the usefulness of hospital discharge data to determine the impact of vaccination on these conditions. Discharge data from Connecticut hospitals were analyzed from 1986-1995. The results from the study showed annual hospitalizations for shingles were 4 times

higher than for chicken pox. The majority of the two groups had no underlying immunosuppressive conditions. Of those with chickenpox, 53% were <15 years of age, with a marked winter-spring seasonality. Hospitalization rates for Hispanics and African-Americans were significantly higher than those for whites: 4 times as high for Hispanics and twice as high for African Americans. Regarding shingles, most patients were >64 years of age, with no seasonality. In 1995, the cost associated with a single hospitalization for these diseases were \$12,819 for chicken pox and \$15,583 for shingles. The study concluded that the analysis of population-based hospital discharge data is a feasible means of monitoring the impact of varicella immunization on severe morbidity due to chicken pox and shingles. The varicella vaccine was licensed in the U.S. in 1995.

The full study can be found in the Journal of Infectious Diseases, 2000;181;1897-905.

### DEPARTMENT OF PUBLIC HEALTH IMMUNIZATION PROGRAM MORBIDITY REPORT

Disease	1/1/00-8/1/2000	Total 1999
Measles	0	2
Mumps	1	0
Rubella	1	0
Congenital Rubella Syndrome	0	0
Diphtheria	0	0
Tetanus	0	0
Pertussis	33	35
Hib	0	0



Keeping Connecticut Healthy

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