SUMMER '99 VOLUME 2.4

IMMUNIZATION ACTION PLAN

CT DPH IMMUNIZATION PROGRAM

IAP ON TIME

HEPTAVALENT PNEUMOCOCCAL VACCINE FOUND TO BE EFFECTIVE AGAINST OTITIS MEDIA

A new vaccine is expected to be approved later this year for serious childhood infections such as meningitis, but which has the added benefit of reducing some cases of ear infections.

During a 3-year study, an investigational seven-valent pneumococcal conjugate vaccine, was found to cause:

- 7% fewer new episodes of otitis media
- A 20% reduction in surgical insertion ear tubes
- A 23% reduction of the frequency of episodes of otitis media (5 episodes in 6 months or 6 episodes in 12 months)

A review of medical records of the children who participated in the study showed that of 47,000 physician visits due to otitis media recorded during the 3-year trial, about 9% fewer visits occurred in the pneumococcal conjugate vaccine group versus the comparison group, according to investigators Steven Black, MD and Henry Shinefield, MD, co-directors of the Kaiser Permanente Vaccine Study Center, Oakland, CA. Results of the study were presented at the Pediatric Academic Societies' 1999 Annual Meeting, held May 1-4, 1999 in San Francisco, CA.

Up to 95% of children experience at least one bout of otitis media by age 6, and several million each year battle chronic infections that can lead to aggressive antibiotic regimens, surgery and great distress to families.

We're talking about a major disease that causes a great deal of distress in children, said Dr. Shinefield.

Even curbing ear infections by that margin could create an additional benefit in cutting the use of antibiotics, according to Cynthia Whitney, an epidemiologist at the Centers for Disease Control and Prevention. Health officials say that pneumococcus and other bacteria are becoming increasingly resistant to existing antibiotics due to overuse and misuse.

"Otitis Media is probably the most common reason kids get antibiotics. If we can reduce antibiotic use in that group, we can maybe reduce the amount of antibiotic resistance we see now," she said.

Research released last fall showed the vaccine is 100% effective in preventing meningitis and bacteremia, both serious bloodstream infections that in rare instances can cause death. The three year study followed 38,000 children treated at Kaiser clinics in Northern California.

The Food and Drug Administration (FDA) has designated Wyeth Lederle Vaccines' heptavalent pnemococcal conjugate vaccine for a "fast– track" development program. Essentially this will allow the company to file a rolling product license application, which permits the FDA to evaluate individual components of the licensure application for approval before the entire application has been submitted. ■

CUMULATIVE LEVELS THIMEROSAL FOUND TOO HIGH IN VACCINES

On July 7, 1999, the PHS and the AAP announced new recommendations regarding the reduction and/or removal of thimerosal, an organic mercury-based preservative, from vaccines. These new recommendations are the result of a recent review conducted by the Food and Drug Administration (FDA) of thimerosal, an additive that has been used to prevent and/or kill bacteria/virus contamination and maintain potency in vaccines since the 1930's. Thimerosal was found to introduce a slight level of mercury for smaller-weight children during the first six months of life that exceeds a measure for mercury established by the Environmental Protection Agency (EPA). These levels have not been shown to cause toxicity. The large risks of not vaccinating children far outweigh the unknown and probably much smaller risk, if any, of cumulative exposure to thimerosal-containing vaccines over the first six months of life. Nevertheless, steps are now being taken to remove as much thimerosal as possible from vaccines in order to increase the margin of safety that already exists. There has been no data or evidence of any harm caused by the level of exposure some children may have encountered with the existing immunization schedule. Since hepatitis B vaccine is routinely given at birth and contains a small amount of thimerosal, both the AAP and PHS have recommended that this vaccine be delayed until the infant is older.

DPH recommends that providers conform to the AAP recommendation for hepatitis B vaccination of newborns and infants. These recommendations include the following:

1. **Infants of mothers known to be HBsAg-negative should begin the hepatitis B vaccine series at six months of age.**
2. **Infants whose mothers are HBsAg-positive or who have unknown HBsAg status at the time of delivery should receive the first dose of vaccine within 12 hours of birth.**
3. **Infants of mothers belonging to groups at high risk for hepatitis B infection should receive the first dose within 12 hours of birth. These high-risk groups include, but are not limited to, Asian Pacific Islanders, immigrant populations from countries in which HBV is of high or intermediate endemicity, women with risk behavior during pregnancy and households with persons with chronic HBV.**

Once adequate supplies of thimerosal-free vaccines are made available, health care providers can resume the current immunization schedule and administer the hepatitis B vaccine to all infants during the newborn period.

ANNOUNCEMENT!!!

CDC's SATELLITE BROADCAST:

IMMUNIZATION UPDATE

WILL BE ON SEPTEMBER 16, 1999

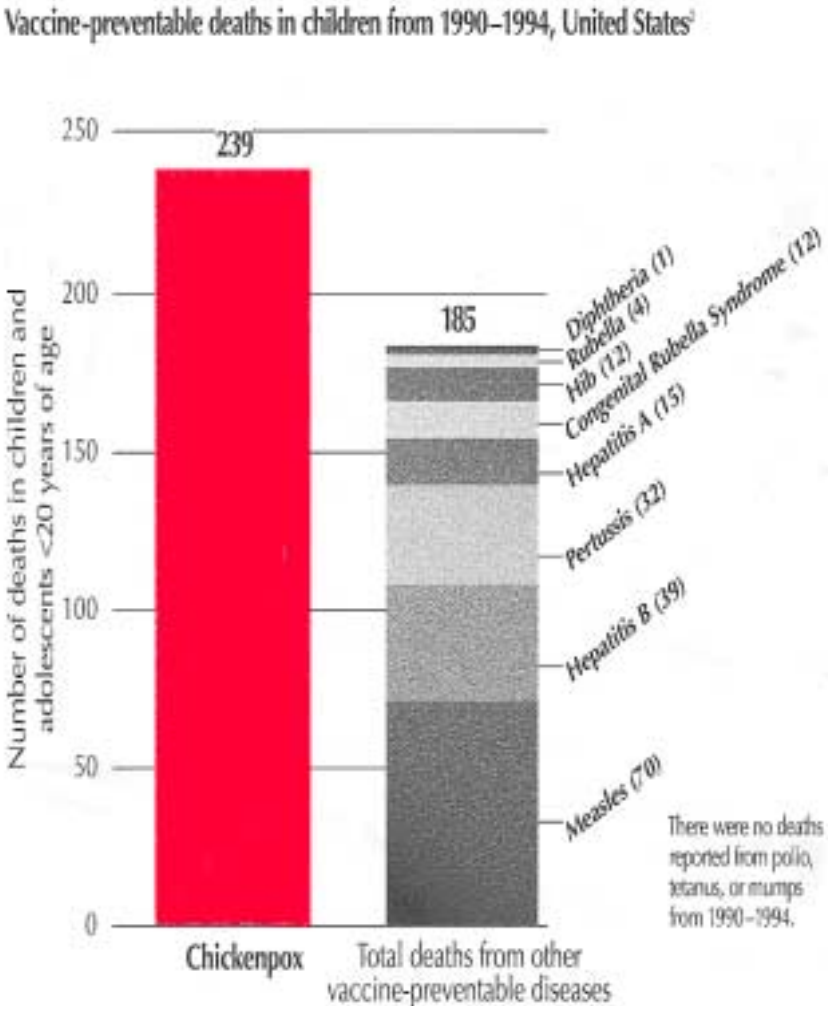
9:00 AM TO 11:30 AM &
12:00 PM TO 2:30 PM

Call the State Immunization Program at (860) 509-7929 for the location nearest you

INSIDE:

CHICKENPOX VACCINE RECOMMENDED FOR STATE MANDATE

The Centers for Disease Control and Prevention recommended on May 28, 1999 that all states mandate chickenpox shots for children starting day care or elementary school. The CDC noted that the disease is most common among one to six year olds. While approximately 4 million Americans contract the disease each year, the CDC estimates that 100 people died between 1990 and 1994 from related complications, including pneumonia and blood infections. Ten states and the District of Columbia currently require varicella vaccinations for children. Connecticut is in the process of revising school and day care regulations to include chickenpox vaccine. The proposed regulations would require all children born 1/1/97 or later to show proof of immunity to varicella (chickenpox) for entry in to school or day care. The target implementation date is August 2000. The State Immunization Program has published guidelines for evaluating chickenpox like rash in recipients of varicella vaccine in day care or school settings. The diagram shown *(see p. 3)* can be used to assist in determining the nature of a post-varicella vaccination rash and in making decisions regarding exclusion of students from the day care or school setting. Any additional questions should be directed to the Connecticut Immunization Program.



CDC: Varicella-related deaths among children-United States, 1997, MMWR 47 (18): 365-368

CT RESPONDS TO CDC'S RECOMMENDATION TO POSTPONE ROTAVIRUS VACCINE

On July 15, 1999, the United States Public Health Service (PHS) recommended that health care providers and parents postpone the use of the rotavirus vaccine for infants, at least until November 1999, based on early surveillance reports of intussusception (a type of bowel obstruction that occurs when the bowel fold in on itself) among some infants who received rotavirus vaccine. As of July 7, 1999, the Vaccine Adverse Event Reporting System (VAERS) has received 15 reports of intussusception that occurred within three weeks following rotavirus vaccination. Although intussusceptions occur among infants who have not received rotavirus vaccine, CDC will be collecting additional data in the next several months that may indicate more clearly whether the rotavirus vaccine increases the risk of intussusception. The recommendation is being made with the consideration that rotavirus season is still 4-6 months away in most parts of the United States. The department recently surveyed the three major pediatric centers in Connecticut. Since November 1, 1998 when the rotavirus became available, three infants with intussusception were treated at these three hospitals. None had received the rotavirus vaccine and all recovered.

Rotavirus vaccine has not been supplied by the Connecticut Immunization Program. However, many practices in our state have been purchasing the vaccine privately. Until more data is available, we recommend the following:

1. **Health care providers should temporarily suspend administration of rotavirus to unimmunized and partially immunized children.**
2. **Parents or guardians of children who have received rotavirus vaccine within a period of approximately three weeks should be advised to promptly contact their physician if signs or symptoms indicative of intussusception develop.**
3. **All cases of intussusception which occur following administration of rotavirus vaccine should be reported to VAERS (800-822-7967).**

Additional information about thimerosal and rotavirus can be found on the AAP and National Immunization Program (NIP) websites: http://www.aap.org and http://www.cdc.org/nip.
If you have any questions about any of information in this communication or would like additional information, please call the Immunization Program at (860) 509-7929.

JUNE 1ST IS A VERY IMPORTANT DATE FOR VIS's

June 1, 1999 is the date by which health professionals must be using the most current Vaccine Information Statements (VIS's). Federal law states that you must give parents, guardians, and/or your adult patients the appropriate VIS before you administer any of the following vaccines:

- Hepatitis B 12-16-98
- DTP/DTaP/DT 8-15-97
- HiB 12-16-98
- Polio 2-1-99
- MMR 12-16-98
- Varicella 12-16-98
- Td 6-10-94

While it is not federal law that you hand out the aforementioned VIS's, CDC recommends that you also use the following VIS's:

- Pneumococcal 7-29-97
- Rotavirus 3-23-99
- Hepatitis A 8-25-98
- Influenza 6-1-99

(Continued on page 4)

GUIDELINES FOR EVALUATING CHICKENPOX-LIKE RASH IN RECIPIENTS OF VARICELLA VACCINE IN DAY CARE AND SCHOOL SETTINGS

The two most important features to consider in making these determinations are
1. The time interval since receipt of vaccine
2. The severity of the chickenpox-like illness, as outlined below

	If rash occurs at	If rash occurs at	If rash occurs at	
Timing Post Vaccination	< 1 week	1-3 weeks (typically) but can occur up to 6 weeks	> 6 weeks	
	⇓ and	⇓ and	⇓ and	⇓ and
Symptoms	• Generalized rash (typically 200-400 lesions with many vesicles) • Fever • Cough (if "partial" immunity has developed, symptoms may be attenuated)	• Generalized rash, more maculopapular than vesicular (usually <20 but can be up to 50 lesions [median=5] • Some localized vesicles at the site of injection (median=2) • Afebrile • Asymptomatic	• Generalized rash, more maculopapular than vesicular (usually<50 lesions) • Often afebrile • Minimally symptomatic	• Generalized rash (typically 200-400 lesions with many vesicles) • Fever • Cough
	⇓	⇓	⇓	⇓
Type of Disease	Wild-type chickenpox	Vaccine-related chickenpox; Side effect of vaccine (occurs in 1-5% of vaccinees)	"Breakthrough" chickenpox with wild-type chickenpox virus (also known as "vaccine modified varicella syndrome") (occurs in as many as 20% and 27% of vaccinated children and adults, respectively, with household exposure to wild-type varicella)	Wild-type chickenpox (vaccine failure) *complete vaccine failures are very unusual*
	⇓	⇓	⇓	⇓
Infectious?	Highly infectious	• Rarely infectious than wild-type disease • If transmission occurs, infection may be asymptomatic or very mild	• Infectious • Usually much less infectious than wild-type disease	Highly infectious
	⇓	⇓	⇓	⇓
Exclude?	Exclude from school until all lesions have dried and crusted over, or until no new lesions appear, usually by the 5th day after rash onset	No need to exclude from school or day care. The child may attend school or day care if local policy permits.	Exclude as for wild-type chickenpox: with fewer lesions and more rapid clearing, usually only 1-4 days.	Exclude as for wild-type chickenpox

Notable Achievements

Stamford

A kids health fair took place a the Stamford School Readiness program on April 24th. "Chicken Pox", the school nurse dressed as a chicken, went from class to class passing out red stickers to the children, asking them to place them anywhere on the face, hands, etc. where chickenpox may show up. The health fair focused on health education and promotion and accident prevention as well as the importance of immunization. There were 60 attendees. Mary Alice Flynn, IAP Coordinator offered chickenpox vaccine to all eligible children. Children in the school also participated in an immunization coloring contest. 360 participating children were given a "Meanie Baby" named "Chicken Pox" with spots all over him and blood shot eyes. *(See photo p. 4)*

Meriden

Volunteers from the health department displayed immunization information and promoted immunization awareness at a Daffodil Festival at Hubbard Park on April 24th & 25th. Several health and safety advocacy groups sponsored the event which consisted of many activities including health promotion, crafts, a food tent, a carnival of rides, music and a parade. Over 300 people attended each day of the fair.

New Britain

Ramona Anderson hosted an "Immunization Day" on the opening weekend for the New Britain Rock Cats baseball team on April 18th. All parents who brought their child's immunization record card received a free ticket for their child with a paid adult ticket. What an innovative way to spread the immunization word!

Torrington

Sue Sawula sponsored the fourth annual "Be Wise, Immunize" children's immunization fair on April 23rd, at Brooker Memorial Health Center. Free shots were offered and entertainment was provided including pony rides, clowns, and face painting. An immunization booth was displayed and refreshments were served. Approximately 250 people attended and 15-20 children and adolescents were immunized.

The day care and school immunization regulations are currently being revised to be consistent with some changes in the national immunization recommendations. Once regulations are finalized, providers and school officials will receive notification of the changes. The following is a a summary of what to expect for the new Connecticut requirements:

PROPOSED REQUIREMENTS FOR SCHOOL ENTRY

VACCINE	NEW REQUIREMENT	PROPOSED DATE OF IMPLEMENTATION
Polio and DTaP	Dose between 4th birthday and school entry	August 2000
Measles– 2nd dose	Kindergarten	August 2000
Varicella	7th grade entry	August 2000
Hepatitis B	7th grade entry – 1 dose	August 2000
Hepatitis B	8th grade entry– 3 doses	August 2001
Varicella	School entry: DOB 1/1/97 or after	August 2000– HeadStart/ Day Care August 2002– Kndrgrtn.

"Chicken Pox" the School Nurse interacting with the children at the Stamford School Readiness Program.

(Continued from page 2)

The date is printed at the bottom of the VIS. Check to see if you have the most current ones. VIS's are available in an abundance of different languages. Call the State Immunization Program to receive the ones you need. ■

MEASLES CASES REPORTED IN CT

A confirmed case of measles was reported to the State Immunization Program in May. The patient, a 12-year-old resident of East Hartford, had recently returned from a five week stay in India where measles cases continue to occur. The child is home schooled and is therefore not legally required to be vaccinated. The East Hartford Health Department continued surveillance and notified the state of a second measles case in the 7 year old brother of the index case. These represent the first confirmed cases of measles in CT since 1997.

DEPARTMENT OF PUBLIC HEALTH IMMUNIZATION PROGRAM MORBIDITY REPORT

Disease	1/1/99-7/21/99	Total 1998
Measles	2	0
Mumps	0	3
Rubella	0	29
CRS (Congenital Rubella Syndrome)	0	0
Diphtheria	0	0
Tetanus	0	0
Pertussis	9	49
Hib	0	2

IAP ON TIME **SUMMER '99**

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410 Capitol Avenue, MS # 11 MUN
P.O. Box 340308
Hartford, CT 06134-0308
Phone: (860) 509-7929

Co-Editors: Carolann M. Kapur, MPA
Vincent Sacco, MS, Program Manager

TO:

Place Address Label Here