

The newsletter of the Immunization Technical Assistance Team (ITAT), a partnership of leaders from various organizations who are dedicated to improving and maintaining maximum immunization rates utilizing practice-based interventions

New Vaccines on the Horizon

by Joni Reynolds, RN/CNS, MSN Colorado Immunization Program

ew vaccine research and licensure is a complex issue. During 2005 a few new vaccines were introduced into the routine childhood vaccination schedule. These new vaccines include:

Vaccine Type	Vaccine Name	Manufacturer	
Meningococcal conjugate vaccine MCV4	Menactra™	Aventis	
Tetanus, diphtheria, accellular pertussis	ADACEL™	Sanofi Pasteur	
Tdap	B00STRIX®	GlaxoSmithKline	
Measles, Mumps, Rubella, Varicella MMRV	ProQuad [®]	Merck	

In addition, the licensure changed for **Hepatitis A vaccine** (HAVRIX® from GlaxoSmithKline and VAQTA® from Merck) to allow for vaccine administration **starting at age 12 months**. More changes and new vaccines licensures are expected in 2006, this article will summarize what's on the horizon for vaccines.

The first vaccine was already licensed in 2006 on February 3rd for a new Rotavirus vaccine (ROTATEQ® from Merck). This Rotavirus vaccine is a live oral pentavalent formulation. The vaccine is licensed for administration in infants between 6–32 weeks of age. The ACIP recommendations are expected in February 2006 for this vaccine.

Several other vaccines are currently under review by FDA such as **Human Papillomavirus Vaccines (HPV)** (GAR-DASIL® from Merck and CervarixTM from GlaxoSmithK-line), **a new combination vaccine** that includes **Hib, DTaP and IPV** (PENTACELTM from sanofi pasteur) and **Herpes Zoster Vaccine** (ZOSTAVAXTM from Merck). In addition,

another vaccine is being reviewed for administration changes including CAIV-T (Cold Adapted Influenza Vaccine-Trivalent) as a refrigerator stable vaccine to replace FluMist® (a frozen vaccine).

Several steps are involved between vaccine development and the new vaccine being shipped to the provider's office. One step after development is the FDA licensure process. Vaccine manufacturers may sell new vaccine to private providers anytime after FDA approval is final. Typically, vaccine manufacturers await federal recommendations before distributing their vaccine to private providers. The Advisory Committee for Immunization Practices (ACIP) makes federal recommendations for new vaccines to be

included in the routine childhood and adult immunization schedule.

ACIP reviews information regarding vaccines in the process of FDA approval. ACIP commonly forms specific committees to review and analyze pending vaccines. ACIP then makes final review and recommendations upon the FDA approval and licensure of a vaccine. At the February 2006 meeting, ACIP reviewed the HPV, Rotavirus, Influenza, Tdap and Herpes Zoster vaccines.

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After the ACIP makes recommendations for a new vaccine, vaccines are often marketed and readily available for private providers directly from the manufacturer. Additional steps are necessary before the new vaccine can be provided through a state Vaccine for Children Program (VFC). Upon ACIP approval, a VFC resolution must be passed. Next, a federal contract must be negotiated with the vaccine manufacturer for purchase in the VFC program. Finally, specific ordering requirements are provided by the Centers for Disease Control & Prevention (CDC) to each State VFC project. Although these steps are necessary for each new vaccine prior to distribution in a State VFC project, they continue to be cumbersome and time consuming.

Future vaccines may include: Conjugate Anthrax, Norwalk Virus, *Clostridium difficile* Colitis, West Nile Virus, Attenuated Malaria, Hepatitis C Virus, Alzheimer's, Diabetes and HIV. Johnston and Flores (2001) discussed the plethora of HIV vaccines in development with 19 vaccines in preclinical stages and nine vaccine candidates in clinical trials.

At the upcoming Ninth Annual Conference on Vaccine research discussion will be held regarding future vaccine development and clinical trials. The agenda for the conference scheduled May 8–10, 2006 in Baltimore, MD includes discussion of TB vaccine and HIV vaccine. Conference attendees will also discuss the many challenges in vaccinations related to: the elderly, developing countries, adolescents and real and alleged adverse events following vaccination. ❖

Documenting Combination Vaccines

by Lynn Trefren, RN, MSN Tri-County Health Department

ue to the increasing number of immunizations needed in the first two years of life, combination vaccines are popular as a way to decrease the number of actual injections that a child receives. However, they have also added complexity to the documentation of immunizations on the parent record and confusion for providers trying to interpret that documentation.

The use of creative initials, and the documentation of combination vaccines on only one line of the record to save time can lead to duplicate immunizations. Providers need to ensure that the way the immunization is documented will be clear to other providers the child may see in the future.

In our agency, we have seen records of children who received COMVAX (HIB & Hepatitis B, Merck) but their record shows COM only in the HIB section or only in the Hepatitis B section of the record. If the person reading that record is in a hurry, and looks mainly at sections and dates, the result is an unnecessary immunization. For some of those children, one provider gave the COMVAX and then a subsequent provider gave additional Hepatitis B vaccines. For PEDIARIX (Dtap, IPV, & Hep B, GlaxoSmithKline) we have seen a variety of



different ways to document this vaccine, including PED, PDX, and DIH. In some cases this vaccine also is only documented in one section of the record. In addition to difficulty for future providers, these unusual initials create problems for school personnel trying to determine a child's immunization status.

One additional problem with the documentation of COMVAX—the routine schedule is 2 months, 4 months, and 12–15 months. For children who received a birth dose of Hepatitis B, the COMVAX is sometimes recorded in the spaces for the 2nd and 3rd dose. The dose given at 4 months is too early for the third Hepatitis B, but if the record reviewer takes a brief glance, the child appears to have 3 doses of Hepatitis B and be UTD. It would be more helpful to leave the space for the third Hepatitis B open on the child's record.

Combinations from Mexico

One combination vaccine that contributes to confusion is the combination Pentavalente. The current original records from Mexico say Pentavalente and then underneath say DPT+HB+Hib. If these immunizations are transcribed onto a yellow card or other immunization record form, we have seen children with new records that document this immunization only as a DPT. In those cases, the child then receives additional doses of HIB & Hepatitis B that are unnecessary.

Some records have Antisarampion (measles only) printed, but then stamped or hand written is TV (triple viral) or SRP (sarampión, rubéola, parotiditis). Current records say Triple Viral and then SRP. That means that an MMR was actually given. If the record just says antisarampion (measles only), then it should **NOT** be counted as an MMR, but occasionally is.

New combinations are coming our way. The better we document those combinations on the child's immunization record, the better we all will be. •

Documenting Combination Vaccines in the Colorado Immunization Information System

by Kellyn A. Pearson, MSN, PNP

he Colorado Immunization Information System (CIIS) that is being used in public and private offices across Colorado encourages offices to accurately record immunizations given in their office and historical immunizations that may have been given elsewhere. To meet that goal all combination vaccines available in the US are included in the drop down menus as choices when doing data entry. To prevent over vaccination the dates for combination vaccines are displayed for each series that is included in the combination. An example is that if a user entered the combo of DTaP/IPV/HepB, Pediarix, the date of the immu-

nization would display under the following series, DTaP, Polio and Hepatitis B on the Client Information Screen. The user can then click on the date to see details for that shot and would see that the immunization given was a combination vaccine, DTaP/IPV/HepB, Pediarix.

When a combination vaccine is given it is included for each series contained in the vaccine when a child's record is evaluated for Up to Date status and recommendations are made for needed vaccines.

If you need more information about the Colorado Immunization Information System, please contact Kelly Pearson 303-724-1075 or kellyn.pearson@uchsc.edu. •

Recording Vaccine Names

Compiled by Lillian Spreng, Colorado Immunization Program

Pollowing is a list of vaccine names—including combination vaccines. The middle column has the name of the manufacturer, and the last column has the more common names or initials of the diseases against which the

vaccines offer protection. This is not a complete listing and is to be used as a guideline only. Some of these may not be licensed currently in the United States; however, you may see these names when reviewing older records or records from other countries. If you have any questions, please call the Colorado Immunization Program at 303-692-2650.

Vaccine Names	Manufactured by	Entered on These Lines of the Immunization Record		
ACEL-IMUNE®	Lederle Laboratories/Wyeth	DTaP		
AC Vax®	GlaxoSmithKline Biologicals	Meningococcal Polysaccharide		
ActHIB®	sanofi pasteur	Hib		
ACWY Vax®	GlaxoSmithKline Biologicals	Meningococcal Polysaccharide		
ADACEL™	sanofi pasteur	Tdap		
ATTENUVAX®	Merck and Company	Measles		
BIAVAX® II	Merck and Company	Mumps <i>and</i> Rubella		
AVAXIM®	sanofi pasteur	Нер А		
B00STRIX®	GlaxoSmithKline Biologicals	Tdap		
CAIV-T (cold adapted influenza vaccine)	MedImmune Vaccines	Influenza		
Certiva™	North American Vaccine	DTaP		
COMVAX®	Merck and Company	Hep B <i>and</i> Hib		
DAPTACEL®	sanofi pasteur	DTaP		

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Vaccine Names	Manufactured by	Entered on These Lines of the Immunization Record		
DECAVAC™	sanofi pasteur	Td		
EIPV (enhanced potency inactivated polio vaccine)	various	Polio (IPV/OPV)		
ENGERIX-B®	GlaxoSmithKline Biologicals	Нер В		
Ervevax [®]	GlaxoSmithKline Biologicals	Rubella		
FLUARIX™	GlaxoSmithKline Biologicals	Influenza		
FluMist [®]	MedImmune Vaccines	Influenza		
Fluvirin®	Evans Vaccines/Chiron	Influenza		
Fluzone®	sanofi pasteur	Influenza		
HAVRIX®	GlaxoSmithKline Biologicals	Нер А		
HbOC (Haemophilus b conjugate vaccine)	various	Hib		
Hiberix®	GlaxoSmithKline Biologicals	Hib		
HibTITER®	Lederle Laboratories/Wyeth	Hib		
Infanrix®	GlaxoSmithKline Biologicals	DTaP		
IPOL®	sanofi pasteur	Polio (IPV/OPV)		
LAIV (live attenuated influenza vaccine)	see FluMist®	Influenza		
MCV4 (meningococcal groups A, C, Y and W-135 conjugate vaccine)	see Menactra™	Meningococcal Conjugate		
Menactra™	sanofi pasteur	Meningococcal Conjugate		
Menomune®	sanofi pasteur	Meningococcal Polysaccharide		
MERUVAX® II	Merck and Company	Rubella		
M-M-R [®] II	Merck and Company	Measles <i>and</i> Mumps <i>and</i> Rubella		
Monodose [®]	GlaxoSmithKline Biologicals	Polio (IPV/OPV)		
MPSV4 (meningococcal groups A, C, Y and W-135 polysaccharide vaccine)	see Menomune®	Meningococcal Polysaccharide		
MUMPSVAX®	Merck and Company	Mumps		
N-IPV (enhanced potency inactivated polio vaccine)	various	Polio (IPV/OPV)		
OmniHIB®	sanofi pasteur	Hib		
Orimune®	Lederle Laboratories/Wyeth	Polio (IPV/OPV)		
PEDIARIX®	GlaxoSmithKline Biologicals	DTaP <i>and</i> Hep B <i>and</i> Polio (IPV/OPV)		

continued on the next page

Vaccine Names	Manufactured by	Entered on These Lines of the Immunization Record		
Pedvax HIB®	Merck and Company	Hib		
PENTACEL™	sanofi pasteur	DTaP and Hib and Polio (IPV/OPV)		
PNEUMOVAX® 23	Merck and Company	Pneumococcal Polysaccharide		
Pnu-Imune® 23	Lederle Laboratories/Wyeth	Pneumococcal Polysaccharide		
Prevnar®	Lederle Laboratories/Wyeth	Pneumococcal Conjugate		
Priorix®	GlaxoSmithKline Biologicals	Measles <i>and</i> Mumps <i>and</i> Rubella		
ProHIBit®	sanofi pasteur	Hib		
ProQuad®	Merck and Company	Measles <i>and</i> Mumps <i>and</i> Rubella <i>and</i> Varicella		
PRP-D (diphtheria CRM 197 protein- conjugated Hib vaccine)	various	Hib		
PRP-OMP (meningococcal protein- conjugated Hib vaccine)	various	Hib		
PRP-T (tetanus conjugated Hib vaccine)	sanofi pasteur	Hib		
PUROGENATED®	Lederle Laboratories/Wyeth	DT		
QUADRACEL™	sanofi pasteur	DTaP <i>and</i> Polio (IPV/OPV)		
RECOMBIVAX HB®	Merck and Company	Нер В		
TETRAMUNE®	Lederle Laboratories/Wyeth	DTP <i>and</i> Hib		
TIV (trivalent inactivated influenza vaccine)	various	Influenza		
TOPV (trivalent oral polio vaccine)	various	Polio (IPV/OPV)		
TriHIBit®	sanofi pasteur	DTaP <i>and</i> Hib		
Tripedia®	sanofi pasteur	DTaP		
TWINRIX®	GlaxoSmithKline Biologicals	Hep B <i>and</i> Hep A		
VAQTA®	Merck and Company	Нер А		
Varilrix®	GlaxoSmithKline Biologicals	Varicella		
VARIVAX®	Merck and Company	Varicella		
Vaxem-Hib™	Amson Farmaco Biologic/Chiron	Hib		

"To overcome recording errors and ambiguities in the names of vaccine combinations, improved systems are needed to enhance the convenience and accuracy of transferring vaccineidentifying information into medical records and immunization registries."

—American Family Physician, 5/1/99 👁

Colorado Immunization Program Training

¶he Colorado Immunization Program offers training for your staff at no cost. Presentations are available in various topic areas as listed below:

Assessment/Screening

Vaccine: • Storage and Handling

- Patient: VFC Eligibility
 - Record Review/Doses Due
 - —Understanding the schedule
 - —Following minimum intervals
 - Valid Contraindications

Educate/Inform Patient/Parent

- Patient/parent teaching
- VIS: required use; accessing current versions
- Q&A; Common side effects; post-vaccination care
- Next doses due

Immunize and Document

- Comfort restraint
- Injection (sites, route, needle length)
- Needle safety
- Documentation (NVICA requirements)

Observation

- Anaphylaxis
- Common side effects
- VAERS (where, what and how to report)

During 2006, Immunization staff will be presenting trainings throughout Colorado. Watch for more information in future Sharpshooter newsletters. If you want to schedule a presentation in your community or are would like information on the dates and locations of presentations, please contact Joni Reynolds at joni.reynolds@state.co.us. •



by Teri Lindsey

s part of the Immunization Outreach Clinic Project for 2005-06, the Alamosa County Nursing Service (ACNS) in Alamosa, Colorado held a very successful three-day "Back to School" Immunization clinic at their county offices. The clinics were held Tuesday through Thursday from 7:30 am to 4:30 pm and immunizations were offered free of charge to VFC-qualified children.

Tablets of tear-off sheets with the slogan "We'll help you get ready for school" printed on them were provided by the ACNS to the school nurse and persons reviewing immunization records during school registration. The sheets had information about the location and hours of the clinics and were given to families when a child was found to need immunizations.

In addition to the tear-off sheets, a community-wide publicity campaign was held to inform parents/families of the clinics. Two local radio stations aired public service announcements before and during the three-day event. The local newspaper provided advertising and covered the event with an article in the local news. The ACNS adopted three fire hydrants in town and painted them to look like nurses and added the words "Get Your Shots".

Community business participation with this project was high. Businesses provided donations such as toothbrushes, pencils, sippy cups, bibs, (bibs and sippy cups were purchased with outreach clinic funds and "personalized" with ACNS logo and name) and free-food coupons at Wendy's and McDonald's that were used as incentives offered to families. Children that were immunized had their name entered into a drawing that was conducted at the end of the week. The first place prize for the drawing was a \$100.00 gift certificate provided by the San Luis Valley Federal Bank to open a savings account at their bank, 2nd prize was five tickets to Elitch's Six Flags Amusement Park, and 3rd prize(s—there were six backpacks total) was a backpack donated by Wal-Mart.

The expanded schedule and incentives drew in many school-aged children and their siblings. This outreach clinic was very successful—70 children received vaccines and 11 4th DtaP shots were given! Great job Alamosa County!

For more information about this great project, please contact Della Vieira at the Alamosa County Nursing Service at 719-589-6639. **♦**

ASK the EXPERTS

The column in The ITAT Sharpshooter newsletter that allows you to get your questions answered by the professionals. We hope it's content will be both informative and helpful.



When should the Certificate of Immunization be signed by the physician, nurse or school health authority?

The Certificate of Immunization (CI) should be signed only when all the required vaccines are completed. These vaccines include 5 DTaP (or 4 DTaP if the 4th vaccine is given on or after the 4th birthday), 4 Polio (or 3 polio if the 4th vaccine is given on or after the 4th birthday), 3 Hepatitis B, 2 MMR, 1 Varicella (or child has had chickenpox disease) and 1 to 4 Hib (depending on when the child started the series).

Answered by Jamie Damico, RN, MSN, CNS, Colorado Department of Health and Environment

What is the required schedule for the polio vaccine in Colorado?

A child is required to have 4 polio vaccinations unless the 3rd vaccine was administered on or after the 4th birthday, then only 3 polio vaccines are required to complete the series. This means that if a child has had 4 appropriately spaced polio vaccines (a minimum of 4 weeks apart), then the child has met the requirement, even if the child is under 4 years of age. The exception to the 3 doses rule is for children who receive both OPV and IPV—those children need four total doses no matter how old they are when they receive dose #3.

Answered by Jamie Damico, RN, MSN, CNS, Colorado Department of Health and Environment

Should adolescents be given Tdap if the client has received Td within the last 5 years?

A The package insert for Tdap states no. The VIS sheet for Tdap states it can be given. CDPHE immunization department and the CDC site also state that the benefits of protecting the adolescent from pertussis out weighs the possible side effect of local or systemic reactions to Tdap if Td was given within the last 5 years to the individual. They recommend that all adolescents between the ages of 11–18 years be given one booster dose of Tdap.

Answered by Sharon Donnelly, RN, Clear Creek County Nursing Service

A 7-year-old came to our office with only 3 DTaP doses, #1 at 2 mos, #2 at 5 years of age, and #3 given 2 mos after #2. How many more doses are needed?

A If the first dose of tetanus and diphtheria toxoid was administered prior to the first birthday, a total of four doses constitutes a complete primary series. The child needs one additional dose of Td (adult formulation). This dose should be given 6–12 months after the third dose.

Answered by Immunize.org

Can TriHIBit (combination DTaP and Hib used only for dose #4) be given as early as 12 months of age?

A TriHIBit may be given as the fourth dose of the DTaP and Hib series at 12 months of age or older, as long as it has been at least 6 months since the third DTaP and 2 months since the previous Hib dose.

Answered by Immunize.org

Are college students at increased risk for meningo-coccal disease?

A recent study in Maryland (JAMA 1999;281:1906-10) found that the risk of meningococcal disease in college students was similar to that for persons of the same age in the general population (1.4–1.7 cases per 100,000 population). However, in that study, the risk among students who lived in on-campus housing was about 3 times higher (about 3 per 100,000 population) than students who lived off campus (about 1 per 100,000 population), and about twice as high as the general population of the same age.

Answered by William L. Atkinson, MD, MPH, CDC 3

Feature Articles

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This Spring edition of *The ITAT Sharp Shooter* also includes important phone numbers and websites listed throughout.



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