The ITAT sharp shooter

VOLUME 9, ISSUE 1, SPRING 2008

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

Vaccine Advisory Committee for Colorado (VACC)

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

The Ritter administration, along with the Colorado Department of Public Health and Environment, has identified increasing childhood immunization rates as an important policy goal. Though rates in Colorado have improved over the last several years, there is a need to continue to improve rates so that fewer children are put at risk from vaccine-preventable diseases.

Gov. Bill Ritter and Lt. Gov. Barbara O'Brien have provided support to convene a Vaccine Advisory Committee for Colorado (VACC) with broad representation from key stakeholders from the fields of public health, school health, medicine, child advocacy, health care, philanthropy and academia. The committee's role is to make recommendations to the administration regarding overcoming impediments and maximizing existing opportunities to immunize Colorado's children during the next three years.

VACC Goals

1. To fully review current immunization activities and strategies operating in communities throughout Colorado and to provide an inventory of best and promising practices.
2. To review and produce a white paper summarizing current epidemiological data related to vaccine-preventable disease in Colorado.
3. To provide recommendations for implementing immunization best practices throughout Colorado, incorporating innovative approaches for increasing the capacity of successful service delivery models.

During the initial meeting on November 29, 2007, Lt. Gov. O'Brien shared her vision and passion for VACC. Lt. Gov. O'Brien will serve as co-chair for VACC. An additional co-chair will be announced shortly.

Next, Dr. Ned Calonge, chief medical officer at the Colorado Department of Public Health and Environment, provided a great road map for VACC to consider. He reiterated his intention that VACC be inclusive, involving a large membership that is representative and diverse.

Dr. Calonge acknowledged the trade-off for inclusiveness was that the large group would not be as flexible. To address this challenge, a steering committee will be established that can meet monthly and guide VACC projects and subcommittees. The steering committee will meet monthly, while the larger VACC group will gather four to six times each year (dates to be determined).

Dr. Calonge also reviewed some critical areas, projects that need work and the way subcommittees will be established. Initially the subcommittees will focus on five areas:

1. Colorado Immunization Information System (CIIS): best practices, approaches for recruitment and utilization and strategic investment
2. Immunization Best Practices Support: strategically reviewing the funding investments in Colorado and the best approaches to distribute the funding. This includes recommending strategic investments for the recently allocated funds from the Colorado Legislature for about $600,000/annually for immunizations.
3. Innovative Health Programs: considering the best approaches to integrate immunizations and other child health services routinely

*See **VACC** on page 2*

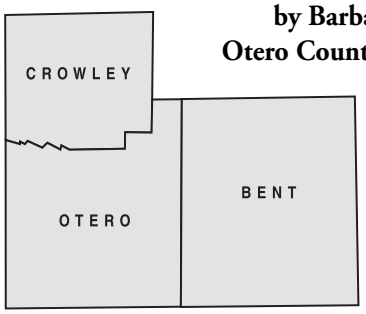
***VACC** from page 1*

4. Public Awareness, Education and Communications for the public regarding vaccines, vaccine-preventable disease and vaccine safety
5. Special Projects, including the exploration of universal vaccine purchase

Two presentations were made at this meeting including one from Lane Wake, MS, an epidemiologist with the department's Immunization Program, regarding immunization assessment. In addition, Pam Hanes, PhD, with the Colorado Health Institute (CHI) reviewed the CHI white paper on immunizations.

Dr. Hanes provided facilitation for VACC and plans to continue in this role for future meetings. The VACC steering committee will meet monthly, while the larger VACC will meet on a quarterly basis. The meeting schedule for the subcommittees will vary. It's exciting to have such great energy, expertise and enthusiasm involved in developing vaccination plans for Colorado! ✪

Colorado Immunization Coalitions



by Barbara Thimgan, RN
Otero County Health Department

Otero, Crowley and Bent counties started the OCB Immunization Coalition at the encouragement of the Colorado Children's Immunization Coalition. At first, I wondered why I needed to start a local coalition and why I needed someone else to tell me what to do regarding immunizations in our health department. I discovered I had the wrong idea of what the coalition could do for me and the children of our counties.

The first thing I noticed was the great support each person on the coalition was able to give to the other members. The coalition allowed time together to talk and ask those questions that you never get around to asking an expert. It was a time to let us know we weren't alone with whatever immunization challenges we might be facing. Another advantage to having all of us get together was to explain the need for immunizations to the public. We were able to brainstorm to solve the identified challenges.

The members of the coalition have been able to keep connected and have become friends. We know we can count on each other to give us the correct information about vaccines. Our consistent contacts also keep everyone on the same page when giving and talking about immunizations. We learn what's new, and everyone gets written information to refer to.

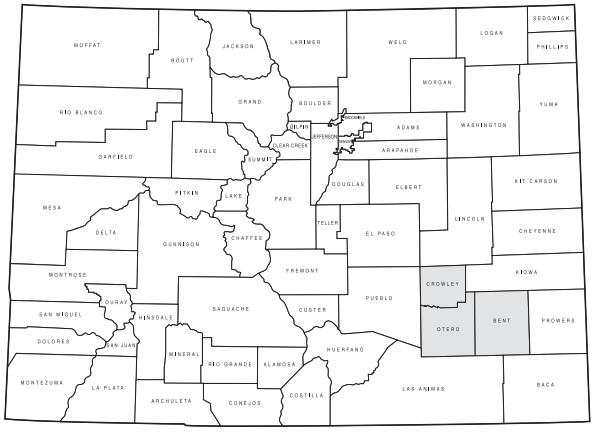
The OCB Immunization Coalition started out in 1999 with only three or four people coming regularly. Through constant contacts and continually giving information, our coalition has grown and has added service groups such as Rotary and Kiwanis clubs, representatives from all the private providers' offices as well as school nurses. Through these years, we have raised our attendance to 25 representatives. The OCB Immunization Coalition meets three to four times per year from 12 to 1 pm in varying locations in the county. As an incentive to members, the coalition provides lunch to the attendees.

What this means to us is that through the help of the coalition, the providers and community as a whole, are more aware of immunization requirements. To respond to this, Otero County Health Department has added an additional half-day clinic.

Service groups have provided money to cover vaccine administration costs to ensure that greater numbers of low-income children will be served. In addition, certain schools have dedicated a portion of their Medicaid money to increase vaccination rates among their students. The coalition continues to promote the consistent use of the Colorado Immunization Information System among all providers.

This has been a fun and worthwhile venture. If you don't have an immunization coalition in your county I would certainly recommend starting one. You won't regret it.

For more information on the OCB Immunization Coalition, contact Barbara Thimgan, RN at Otero County Health Department by phone at (719) 383-3048 or by email at bthimgan@oterogov.org. ✪



Old Diseases/New Challenges: Pertussis

by Christine Schmidt, RN, MS
Jefferson County Department of Health and Environment

Pertussis has been the major vaccine-preventable disease that continues to cycle back in recent years with high rates of infection. Until 2005, there was no vaccine for those more than 6 years of age to prevent the disease, and immunity from the vaccine appeared to wane by middle school age. It may take a number of years to see a significant drop in this disease that can be credited to implementation of the tetanus, diphtheria, acellular pertussis (Tdap) vaccine for people ages 10 through 64 years.

Incidence rates for pertussis disease in Colorado compared with the nation from 1990 through 2005 are shown in the graph (at right) from the Colorado Department of Public Health and Environment Disease Control and Epidemiology Division. There was a dramatic 222 percent increase in cases from 2003 to 2004, making Colorado's pertussis rate the fourth highest among the states in the nation that year. Pertussis showed a significant rise nationally that year as well.

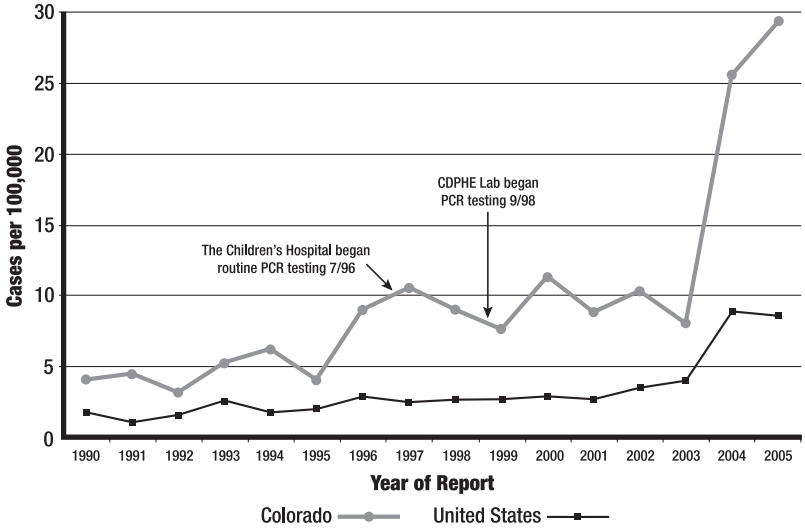
According to the department's surveillance report, Colorado's higher reported incidence rate was likely due to an actual higher disease incidence, as well as the result of increased detection and surveillance through more thorough case investigations and more widespread use of polymerase chain reaction testing, the gold standard for testing for pertussis disease.

Immunization coverage was a factor investigated for child cases of pertussis in this period. Only children 7 months through 9 years of age were included, due to their eligibility for at least three doses of DTP/DTaP vaccine, the minimum needed to provide protection from pertussis. According to the Advisory Committee on Immunization Practices, appropriate immunization in this age range means a minimum of three pertussis vaccinations by age 7 months, four vaccinations by age 19 months, and five vaccinations by age 7 years or four vaccinations by age 7 years if the fourth dose was administered at age 4 or older. Among the cases in children ages 7 months to 9 years, 30.2 percent were not appropriately immunized for age.

In a January 20, 2007 commentary published in the *Wall Street Journal*, Dr. Paul Offit, director of Vaccine Education and division chief of Infectious Diseases at Children's Hospital of Philadelphia, discussed immunization mandates and immunization exemptions in the context of morbidity and mortality from vaccine-preventable disease. He pointed out that in the early 1970s states with vaccine mandates had 50 percent lower measles rates, which resulted in all states working toward requiring childhood vaccination. Since then, there has been great variation among the states regarding what categories of exemptions are allowed, including medical, religious, and philosophical.

Dr. Offit summarized the results of a study published in the October 2006 issue of the *Journal of the American Medical Association* that examined the relationship between vaccine exemptions and rates of disease. The authors found that from 1991 to 2004 the percentage of children whose parents chose to exempt them from vaccine increased by 6 percent per year, which resulted in a 2.5-fold increase in the disease rate. The increase occurred almost solely in states where philosophical exemptions were easily obtained. These states also experienced twice as many children suffering from pertussis than states with harder-to-obtain philosophical exemptions.

Figure 4. Reported Pertussis Rates, Colorado and United States, 1990–2005



Colorado Department of Public Health and Environment, Vaccine Preventable Diseases in Colorado Surveillance Report 2005

Dr. Offit reviewed evidence that lower immunization rates cause higher rates of disease. In the late 1990s, severe outbreaks of pertussis occurred in Colorado (see the graph above) and Washington among children whose parents feared pertussis vaccine. Pertussis, which causes inflammation of the airways, pneumonia and death, is a highly contagious disease for which herd immunity often does not guarantee protection. About 20 children die each year from pertussis. Dr. Offit concluded with the fact that we do not diminish our laws to restrain young children in car seats, therefore, should we choose the right of easy-to-obtain philosophical exemption over saving lives with childhood vaccination?

*See **Pertussis** on page 4*

Pertussis *from page 3*

Pertussis cases in Colorado recently have decreased, with 710 reported cases in 2006 and 235 cases at the end of third quarter 2007 compared to 1,383 reported cases in 2005. Despite lower disease levels, we cannot become complacent about vaccination. Pertussis bacteria continue to circulate causing serious disease and the potential for resurgence is real. The health-care provider's recommendation is a powerful motivator for parents to comply with immunizing their children. Keep your guard up and capture all opportunities to protect children with age-appropriate immunizations. ✪

References

(1) Colorado Department of Public Health and Environment, *Vaccine Preventable Diseases in Colorado Surveillance Report 2005* http://www.cdphe.state.co.us/dc/Epidemiology/VPDreportabletable1997-2007.pdf

(2) Centers for Disease Control and Prevention, **Immunization Strategies for Health Care Practices and Providers,** *Epidemiology and Prevention of Vaccine-Preventable Diseases*, 10th Edition, January, 2007, pages 31–39.

(3) Offit, Paul: Commentary, *The Wall Street Journal*, January 20, 2007.

Tdap Review

Two brands

- Boostrix (Glaxo Smith Kline): approved for individuals 10–18 years old
- Adacel (Sanofi Pasteur): approved for individuals 11–64 years old

Adolescents 11–12 years should receive a single dose of Tdap instead of Td.

- Adolescents ages 13–18 who have not received Tdap should receive a single dose of Tdap as their catch-up booster instead of Td.

Adults 19–64 years old: single dose of Tdap to replace single dose of Td

- may be given at an interval less than 10 years since receipt of last tetanus toxoid-containing vaccine
- special emphasis on adults with close contact to infants (childcare, parents, healthcare personnel)

A five-year interval since last Td dose is encouraged to reduce chance of local reaction.

- ACIP did not define **absolute** minimum interval.
- Interval may be shorter if protection from pertussis is needed.
- Decision to administer at a shorter interval should be based on benefit of pertussis immunity that outweighs risk of local adverse reaction.

Because of the high incidence of pertussis in Colorado, it is required that students entering 6th, 7th, 10th, and 11th grades in the 2008–09 school year receive one dose of Tdap. If a student has received a Td in recent years, it is required that the student receive Tdap two years after the administration of Td. ✪

Top Ways to Avoid "Missed Opportunities"

Submitted by Sarah Ruybalid, RN
Pueblo City-County Health Department

1 Know what a "missed opportunity" to vaccinate is. (A "missed opportunity" is a healthcare encounter in which a person is eligible to receive a vaccination but is not vaccinated completely).

2 Acknowledge that even the best providers have missed opportunities in their practice.

3 Recognize that any interaction with a parent is an opportunity to discuss needed vaccines and to vaccinate. Even a sick child visit can be an opportunity to vaccinate if the child is not febrile.

4 Quickly incorporate administration of new vaccines such as Rotavirus and Human Papillomavirus (HPV) into your office routine.

5 Review "Recommended Immunization Schedule for Children" on an annual basis and read every line in the footnotes and compare the recommendations in your own practice. (Available on the Web at http://www.cdc.gov/nip/recs/child-schedule.htm).

6 Be open to making necessary changes in your practice to avoid missed opportunities.

7 Utilize standing orders which are protocols that non-physician immunization personnel can use to vaccinate clients without a direct physician order each time.

8 Remember to give young children the second half of their influenza shots to be fully vaccinated, even if it is late in the flu season. Flu vaccine usually does not expire until June.

9 Utilize CIIS, the Colorado Immunization Information System, to enter the child's immunization history and

continued on the next page

identify which vaccines the child is eligible for or add a system to identify children in your practice who are missing needed immunizations.

10 Realize that not vaccinating siblings at a visit is a missed opportunity. So is not administering all shots a child is eligible for, even if it means six injections!

11 Post a sign in the exam room that says "ask about your child's vaccinations" to remind parents and providers to vaccinate.

12 Remember that vaccinating children saves lives—it is worth the effort!

Additional information is available from *Epidemiology and Prevention of Vaccine-Preventable Diseases*, 10th Edition, January 2007, Department of Health and Human Services, Centers for Disease Control and Prevention or by contacting Sarah Ruybalid at (719) 583-4351. ✪

Sharp Shooter Marksman Corner

Highlighting Outstanding Work

by Megan Wilson, Executive Director
Reach Out and Read Colorado

Recently at the Metro Community Provider Network Parker Place Clinic in Aurora, a mother shared a poignant story with her pediatric healthcare provider. The provider gave a new book to the 6-month-old, and the mother said that her husband had pulled five books out of a dumpster and cleaned them up and those were the only books the baby owned. The mother was so grateful to have a *new* book for her child. This is what Reach Out and Read is all about, giving new, high-quality and age-appropriate books to children and investing in their future.

Having books in the exam room changes the way a pediatric primary care provider does business. Call it stealth marketing to remind parents of the importance of reading and of having books at home. Using a book during well-child exams provides a whole range of information: an assessment of each child's gross and fine motor development, speech and language, and letter and color recognition. Parents get tips on how to incorporate reading into their families' daily routines and children get a book to take home.

More and more health departments are incorporating Reach Out and Read into their immunization clinics, using a slight alteration to the proven program model. The healthcare provider gives a new book to each child, but during an immunization visit versus a well-child exam. Advocacy still happens and parents still learn and are supported as their child's first teacher.

This is how books become part of well-child care and part of the lives of young children. From the age of 6 months through 5 years, children receive a book at every well-child checkup. That's ten books in five years: a small home library! At Reach Out and Read, we know that children who learn to love books at an early age are more likely to start school ready to read and succeed, stay in school and break away from the cycle of poverty.

Children receiving the Reach Out and Read intervention have significantly higher scores on standardized vocabulary tests than those not receiving the intervention: 8.6 points higher for receptive language (understanding words) and 4.3 points higher for expressive (picture naming) (Mendelsohn, 2001). By integrating books into standard well-child pediatric visits, primary care providers promote the acquisition of spoken and written language skills in young children, thereby increasing the likelihood of school readiness. This focus on books and language also brings pediatric attention to bear on several serious problems children may face if they do not master early developmental tasks on schedule and if they therefore lag in school readiness. Ultimately, participation in Reach Out and Read programs affects important health indicators, such as responsible sexual behavior, mental health, and absence of substance abuse. Reach Out and Read is an effective intervention with non-English speaking children and families. For example, Spanish-speaking, immigrant families exposed to the program in a clinic in Palo Alto, California doubled the number of times per week they read aloud to their children (Sanders 2000).

This year, Reach Out and Read Colorado is distributing more than 90,000 books to 60,000 children at or near the poverty level at more than 100 clinics statewide. Going forward, our goals are even more ambitious: to open new sites over the next year to provide even more children with the chance to fall in love with books.

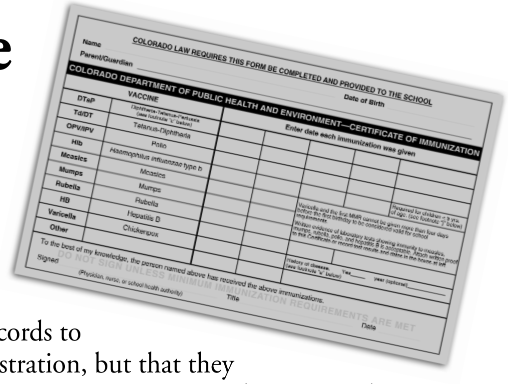
If this sounds like a program you want to learn more about, or even start in your department, contact Megan Wilson at megan@reachoutandreadco.org or (303) 623-3800. Visit www.reachoutandreadco.org to learn more about the program. Funding to buy the books is almost completely paid for: all you need to do is want to promote literacy and give books to the children needing them the most! ✪

School Nurses and the Challenge of Immunization Compliance

Jamie Damico, RN, MSN, CNS
Colorado Immunization Program

The challenge of immunization compliance in schools has become the primary responsibility of school nurses and school health paraprofessionals. It can be a tedious, time-consuming and frustrating task, as school nurses have so many other student health care responsibilities.

In order for children to be able to attend school, they are required by statute to either have all required vaccines or parent-signed exemptions on file. What could be easier than collecting completed immunization records from parents? It seems that the challenges are more complex than one would imagine.


Name
COLORADO LAW REQUIRES THIS FORM BE COMPLETED AND PROVIDED TO THE SCHOOL
Parent/Guardian
Date of Birth
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT—CERTIFICATE OF IMMUNIZATION

VACCINE		Enter date each immunization was given
DTaP	Diphtheria-Tetanus-Pertussis (see footnote "c" below)	
Td/DT	Tetanus-Diphtheria	
OPV/IPV	Polio	
Hib	Haemophilus influenzae type b	
Measles	Measles	
Mumps	Mumps	
Rubella	Rubella	
HB	Hepatitis B	
Varicella	Chickenpox	
Other		

Required for children < 5 yrs. of age. (see footnote "f" below)
Varicella and the first MMR cannot be given more than four days before the first birthday to be considered valid for school requirements.
Written evidence of laboratory tests showing immunity to measles, mumps, rubella, polio, and hepatitis B is acceptable. Attach written proof to this Certificate or record test results and dates in the boxes at left.
History of disease. (see footnote "e" below) Yes ___ year (optional) ___
To the best of my knowledge, the person named above has received the above immunizations.
Signed (Physician, nurse, or school health authority) Title Date
DO NOT SIGN UNLESS MINIMUM IMMUNIZATION REQUIREMENTS ARE MET

It is critical that parents not only bring their child's immunization records to the school at registration, but that they additionally make sure vaccinations are kept up to date throughout the school year. If parents have young children, keeping up with the numerous required immunizations can be overwhelming. All too often, parents do not deliver these records to the schools in a timely manner. The school nurse, or the nurse's designee, is then charged with contacting the parent, sometimes on numerous occasions, in an attempt to obtain these records.

Most physicians and immunization clinics are aware of the immunization schedule as determined by the Advisory Committee on Immunization Practices (ACIP) and vaccinate children according to this schedule. There are, however, instances where practices are not following the current recommendations established by the ACIP and children are sent back to school not adequately immunized against vaccine-preventable diseases.

Although schools are required to suspend or expel children who are not in compliance with the school immunization laws, many school administrators are hesitant to follow through with this mandate. Schools receive funding based on the numbers of students in attendance and, for many administrators, making sure kids stay in school ensures a better opportunity for learning. There is a potential risk of disease outbreak when students are not properly immunized and it could be that until this kind of outbreak event occurs, enforcing the immunization rules in the schools will not happen.

It is apparent that there is a need for partnership in enforcing the immunization laws, and it is the responsibility of parents, health care providers and school administrators to work with school nurses to ensure children are protected against vaccine-preventable diseases. It is clear that immunizations prevent disease, and it is easy to forget that immunization programs have been a key factor in keeping our children healthy. We don't see many vaccine-preventable diseases because of the success of immunization programs throughout the state and on the national level.

The burden of ensuring that children are in compliance with the school immunization law falls on the school nurse. When immunization partners are committed to vaccinating children in schools, we all benefit as healthy and productive members in our communities. ✪

Resources for Best Immunization Practices

Find links here to some of the most promising best immunization practices that may include assessment of vaccine status, effective communication about vaccine benefits and risks, proper storage/administration of vaccine, updated guidelines, proper documentation, and promising strategies to improve vaccine coverage.

Administering Vaccines: Dose, Route, Site, and Needle Size
http://www.immunize.org/catg.d/p3085.pdf

Guide to Contraindications and Precautions to Commonly Used Vaccines in Adults
http://www.immunize.org/catg.d/p3072.pdf

Standing Orders for Administering Influenza Vaccines to Children & Adolescents
http://www.immunize.org/catg.d/p3074a.pdf

Summary of Recommendations for Childhood and Adolescent Immunization
http://www.immunize.org/catg.d/p2010.pdf

Vaccine Information Statements
http://www.cdc.gov/vaccines/pubs/vis/default.htm ✪

ASK the EXPERTS

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

Q ***We have a patient who was given varicella vaccine at age 8 months, according to her shot record. We can not reach her previous provider. Should we still give her a varicella vaccine at 1 year?***

A Any dose of varicella vaccine given by mistake before 1 year of age does not count and should be repeated. It will need to be provided at least four weeks after the incorrect dose and after 1 year of age.

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

Q ***A child in our practice is going to be a freshman in college next year and living in the dorm. We want to give him the Menactra (MCV4), but he got Menomune (MPSV4) when he was about 11 years old because he was traveling. Does he still need Menactra?***

A ACIP recommends revaccination with MCV4 if it has been at least five years since the MPSV4 and the patient is in a high-risk category, such as a college freshman living in a dorm. New Meningococcal VIS dated 1/28/08.

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

Q ***We gave a vaccine to a patient and later realized it was expired. What should we do?***

A The dose does not count and will need to be repeated. If the vaccine was a live vaccine, wait four weeks from the expired dose before you repeat it. For other vaccines, the dose can be repeated any time.

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

Q ***We have a child who came to us behind on shots. She got one dose of HIB at 3 months of age and a second at age 16 months. Does she need another dose?***

A One dose of HIB vaccine given at age 15 months or older is adequate, so this child does not need additional doses of HIB vaccine.

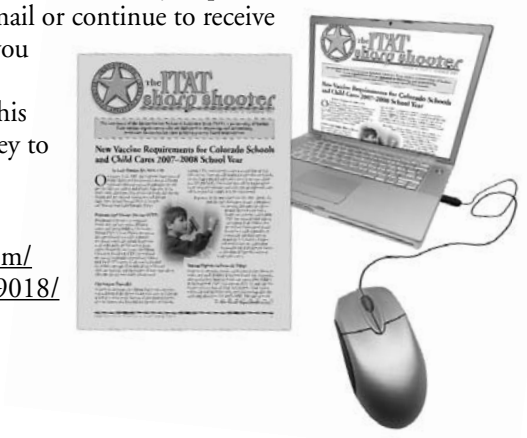
Answered by Lynn Trefren, RN, MSN,
Tri-County Health Department ✪

Tell Us What You Think…

We are looking at ways to improve the delivery method of the *Sharp Shooter* newsletter. Would you prefer to receive this newsletter via e-mail or continue to receive it as a paper copy as you do now? Please take a minute to complete this very brief online survey to let us know what you think:

http://fs8.formsite.com/cohealth/form674259018/index.html

Thank you! ✪



SAVE THE DATE

Epidemiology and Prevention of Vaccine-Preventable Diseases Course Presented by CDC Staff in Person!

Mark your Calendars for July 8th and 9th, 2008

This live 2 day course provides a comprehensive review of immunization, vaccine-preventable diseases and their respective vaccines.

TARGET AUDIENCE: Physicians, nurses, nursing students, medical assistants, pharmacists, and other health professionals who provide immunizations. The target audience also includes health educators, immunization program managers and Department of Defense paraprofessionals. CEUs will be provided.

Additional information will be available at:
www.cdphe.state.co.us/dc/immunization
by March 15, 2008

Feature Articles

- Vaccine Advisory Committee for Colorado (VACC)
- Colorado Immunization Coalitions
- Old Diseases/New Challenges: Pertussis
- Tdap Review
- Top Ways to Avoid "Missed Opportunities"
- Sharp Shooter Marksman Corner
- School Nurses and the Challenge of Immunization Compliance
- Resources for Best Immunization Practices
- Ask the Experts

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

For questions or information about this *Sharp Shooter* Newsletter and/or the ITAT workgroup, please contact Teri Lindsey, Colorado Department of Public Health and Environment Immunization Program at (303) 692-2732 or Teri.Lindsey@state.co.us.

The ITAT sharp shooter

Special thanks to The ITAT Sharp Shooter editorial board

Donald Cook, MD
Past President
American Academy of Pediatrics
Greeley, CO

Kate Lujan, RN, MPH
Field Epidemiologist
Colorado Department of Public Health and Environment
Western Slope

Kellyn Pearson, MSN, PNP
University of Colorado Health Sciences Center
Aurora, CO

Mark Salley
Colorado Department of Public Health and Environment
Denver, CO

Opal Stalker, RN
Montezuma County Health Department
Cortez, CO

Jan Stapleman
Colorado Department of Public Health and Environment
Denver, CO

Lynn Trefren, MS, RN
Nurse Manager
Tri-County Health Department.
Northglenn, CO

This newsletter should be directed to all staff involved in immunizations, including: ___clerical and billing staff; ___RNs; ___LPNs; ___MAs; ___MDs; ___PAs; ___NPs; ___DOs; ___Clinical Director or Clinical Manager

Colorado Department of Public Health and Environment

Immunization Program/IMM-A3-3620
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