



PHYSICIANS' BULLETIN

National Infant Immunization Week Celebrated

National Infant Immunization Week Observed April 13-19

Last year, there were more than 200 cases of pertussis reported in the County. That's the highest yearly total in more than two decades. Getting immunizations as they become due is the best prevention tool available for young children.

Making sure children get all their shots on time was the theme of National Infant Immunization Week/Toddler Immunization Month, events held annually to promote infant and toddler immunization. This year, the Week was April 13-19. In San Diego the Week included the Stop the Cough media event and a proclamation issued by the County Board of Supervisors.

The Stop the Cough media event was held on April 16 at the Neighborhood House Joan Kroc Head Start Center in San Diego. Preschoolers, some dressed in costumes, sang a song and played games designed to teach them the importance of healthy lungs and how immunizations can help protect their lungs. Local officials talked to the media about the importance of timely childhood immunizations. This event was one of a number of events held throughout the state as part of a collaboration between local organizations and the California Coalition for Childhood Immunization (C3I).

To help physicians immunize their patients on time, the County's

Immunization Program (619- 692-8661) has materials such as reminder postcards, counter cards, fliers and patient chart inserts available for providers (see illustrations on p. 3 of this Bulletin). Also, the Program has loaner copies of CDC's recent video on Vaccines and Autism.

To be sure children are fully protected, parents are being asked to call their child's health care provider and request to have their child's immunization record checked for missing shots. They can also call the Baby Shots Line at (619) 692-6600 during business hours to review the child's record with a nurse.

Pertussis Outbreak in a Middle School in San Diego County, 2002-2003

On November 20, 2002, the County Health and Human Services Agency (HHSA) Immunization Program received a report from a pediatrician of a case of pertussis in a 12 yr. old female student attending a local middle school. The PCR test for pertussis was positive. The patient had had paroxysmal coughing for 2 weeks with post-tussive vomiting. Inquiries at the school uncovered other 7th grade students with cough. The school was advised to send a letter to classmates of the patient to watch for symptoms and to seek medical care if symptoms occurred. The following week, a second case was reported from the school involving a student in 6th grade in a shared class. This prompted another

letter. Further investigation revealed that an 8th grade student also in a shared class had symptoms although the diagnosis was not yet confirmed.

The letters prompted more calls from parents in the following days and weeks. The health attendant at the school assessed cough illnesses in students and reported to the Immunization Program. The health attendant sent students with suspicious symptoms home, and the parents were called by the Immunization Program staff. Parents of children whose symptoms met CDC's clinical criteria were encouraged to take those children to their physician for testing and treatment as required, and advised not to return to school until adequately treated. The Public Health Nurses from the Immunization Program discussed disease incidence, symptoms and communicability with the parents.

Investigation revealed that some students had been coughing since October or longer. Some of the symptomatic students also had asthma, and there was some confusion about whether the symptoms indicated asthma or pertussis.

In addition to letters to parents, an alert message was sent to local physicians via the County's EMAN system (www.emansandiego.com).

As the winter break vacation period approached, the number of reports

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declined. Concurrently, the school's health attendant became symptomatic, and was asked to stay home. Immunization Program nurses provided the screening of symptomatic children via telephone in the absence of health attendant.

By January, 2003, the number of new reports had declined significantly. Immunization Program staff were busy during the first half of the month following up with symptomatic children and contacts. By mid-January, the outbreak had ended, resulting in a final total of 45 clinical and laboratory-confirmed cases.

This outbreak caused significant disruption to the educational process at the school and significant disruption to the families and households involved.

While most adolescents and adults with pertussis do not develop serious disease, when they spread disease to susceptible infants and young children, serious illness does result. For physicians, the following guidelines are recommended for dealing with a suspect case of pertussis:

- 1) Attempt to confirm case using PCR test if possible (available through Children's Hospital laboratory); DFA is not considered diagnostic. Culture confirmation is often difficult to obtain in adolescents and even more so in adults even when epidemiologically linked to a culture confirmed case.
- 2) Instruct patient to stay home (without visitors) until rendered non-infectious by treatment.
- 3) Treat with appropriate antibiotic (see chart on p. 4); and,
- 4) Report to County Public Health Services as soon as possible at

(619) 515-6620 (voice) or (619) 515-6644 (fax).

DTaP-IPV-Hep B Combination (Pediarix) Usage Guidelines

(adapted from an article in the April edition of Immunization Update, the newsletter of the State Department of Health Services Immunization Branch) In December 2002, FDA licensed this new combination vaccine for use in the U.S. The ACIP has published (MMWR 2003;52:203-4) supplemental guidelines for use of this product:

- Pediarix™ is approved for use in infants and children aged 6 weeks through 6 years. Primary usage will be for infants at ages 2, 4, and 6 months.
- The recommended interval between successive Pediarix™ doses is 6-8 weeks, but intervals as short as 4 weeks are acceptable when rapid acquisition of immunity to one or more of the diseases against which this vaccine protects is desired (see hepatitis B precautions below).
- Interchangeability of Pediarix™ with other vaccines containing one or more of the same components in an infant or child's immunization series: This is acceptable, though for the DTaP component it is preferred that Infanrix® (which is identical to the DTaP component of Pediarix™) be used for such "mix and match" immunization series.
- Special guidelines for the hepatitis B component of Pediarix™:

In addition to the FDA's approval for use of Pediarix™ only in infants of HBsAg-negative mothers, ACIP recommends that with these precautions it may be used for all infants (aged 6 weeks and older), regardless of whether the mother's HBsAg status is positive, negative, or unknown.

Use of a 3-dose series of Pediarix™ at, for example, ages 2, 4, and 6 months in an infant who has already received a dose of hepatitis B vaccine at birth, resulting in receipt of a total of 4 hepatitis B vaccine doses is fully acceptable.

Despite some language in the aforementioned MMWR article about the minimum age for receipt of the final dose in an infant's hepatitis B vaccine series being as early as 24 weeks (5^{1/2} months) when this dose is given as part of Pediarix™, the ACIP's actual recommendation is that the final dose of the hepatitis B vaccine series should be given no earlier than age 6 months, regardless of what vaccine product is used, including Pediarix™.

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**Visit the San Diego County
Immunization Initiative website at
www.immunization-sd.org!**

The *Physicians' Bulletin* is published on an as-needed basis by the County of San Diego Health and Human Services Agency (HHSA) to provide updated information on health issues of concern to San Diego County's medical community.

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Editor

Sandy Ross
(619) 692-8661
P.O. Box 85222, P-511B
San Diego, CA 92186-5222

This clarification is being published in MMWR.

• Special guidelines for the DTaP and IPV (polio) components of Pediarix™: The FDA approved Pediarix™ only for the first 3 doses of the 4-5dose DTaP series and only for the first 3 doses of a 4-dose IPV (polio) immunization series. The ACIP did not address how children who inadvertently receive their 4th or 5th DTaP dose and/or 4th IPV dose as Pediarix™ should be managed. CDC is currently working to develop consensus recommendations as to whether or not repeat doses of DTaP and/or IPV should be given in these situations.

Fever: Study data, some of it preliminary, indicate that when Pediarix™ is given (at a separate anatomic site) at the same time as Hib vaccine, or at the same time as Hib vaccine plus pneumococcal conjugate vaccine (PCV), post-immunization fever is more common than if this is done using separate DTaP, IPV, and Hep B doses rather than Pediarix™. However, after reviewing these study data, the ACIP still recommends that Pediarix™ can be given simultaneously (at a separate anatomic site) with PCV and/or Hib vaccine doses. (Of course, a standard AAP guideline

is that providers may elect to have administered age-appropriate doses of acetaminophen at the time of DTaP immunization and every 4-6 hours thereafter for 24 hours to infants and young children with personal or family history of convulsions.)

San Diego County Immunization Initiative Lauded for Good Work, Including New Spanish Language Version of Website

In January, the San Diego County Immunization Initiative (I-3) was recognized for a decade of working as a partnership to raise immunization coverage in San Diego County, and for their community education website, www.immunization-sd.org. At the January 8th meeting of the I-3 Advisory Council, representatives of Lt. Governor Cruz Bustamante and San Diego County Board of Supervisors Chairman Greg Cox presented I-3 with proclamations honoring the Initiative and its community partners. This meeting also featured the unveiling of the website's Spanish language version, which includes the Parents and Community and Child Care Providers sections, as well as Check Your Child's Record, an online way parents and caregivers can check a child's immunization record for missing shots.

2003 Recommended Childhood and Adolescent Immunization Schedule

Copies of the newest schedule from the federal Centers for Disease Control and Prevention (CDC) on semi-glossy card stock are available from the Immunization Program at 619-692-8661. The schedule can also be downloaded in .PDF format (Adobe Acrobat Reader software is required to open, read and/or print the downloaded file) from the CDC's National Immunization Program website at <http://www.cdc.gov/nip/recs/child-schedule.htm#Printable>.

California Immunization Record Update

The latest, redesigned version of the yellow card (California Immunization Record, or CIR) is dated 8/02 and contains a section for the pneumococcal conjugate (PCV) and pneumococcal polysaccharide (PPV23) vaccines. Providers who need supplies of this new version can call the Immunization Program at 619-692-8661.

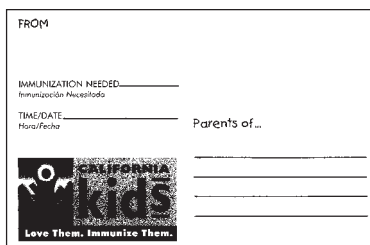
Vaccine-Preventable Diseases table

On p. 4 of this Physicians' Bulletin is a copy of the table of Vaccine-Preventable Diseases Reported in San Diego County, covering the years 1990-2002.

Immunization Materials Available From The Immunization Program (illustrations not to scale)



Sticker



Postcard



Counter Card

Chart Insert

Recommended Pertussis Treatment and Prophylaxis*

| <i>Drug</i> | <i>Children</i> | <i>Adults</i> |
|--|--|---|
| Erythromycin | 40-59 mg/day po divided into 4 doses /day for 14 days (max. 2gms/day) | 500 mg po q.i.d. for treatment; 250 mg/day q.i.d. for 14 days for prophylaxis |
| If person cannot tolerate erythromycin or compliance is questionable: | | |
| Trimethoprim/ Sulfamethoxazole, OR | >=2 mos. old: 8 mg TMP/40 mg SMX per kg/day po divided into 2 doses /day for 14 days | 2 regular strength or 1 double strength tablet b.i.d. for 14 days |
| Clarithromycin, OR | >=6 mos. old: 15 mg/kg/day divided into 2 doses/day for 14 days | 500 mg q.i.d. for 14 days |
| Oxytetracycline, OR | >=9 yrs. old: 25 mg/kg/day divided into 4 doses/day for 14 days | 500 mg q.i.d. for 14 days |
| Azithromycin | >=6 mos. old: 10 mg/kg/day for 5 days | 500 mg (in one dose) on 1st day, 250 mg once daily on 2nd - 5th days |

*Adapted from California Department of Health Services PERTUSSIS Case and Outbreak 'Quicksheet' (12/31/99)

Vaccine-Preventable Disease Cases Reported in San Diego County

| Calendar Year: | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <u>DTaP</u> | | | | | | | | | | | | | |
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tetanus | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 0 | 0 |
| Pertussis | 31 | 18 | 126 | 78 | 91 | 109 | 117 | 76 | 52 | 118 | 124 | 94 | 230 |
| (Deaths) | | (1) | (1) | | | (2) | | (1) | | | | (1) | |
| <u>POLIO</u> | | | | | | | | | | | | | |
| Poliomyelitis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>MMR</u> | | | | | | | | | | | | | |
| Measles | 985 | 22 | 4 | 0 | 2 | 2 | 3 | 1 | 2 | 1 | 2 | 4 | 0 |
| (Deaths) | (3) | | | | | | | | | | | | |
| Mumps | 38 | 35 | 12 | 17 | 5 | 4 | 1 | 3 | 9 | 7 | 4 | 3 | 2 |
| Rubella | 1 | 3 | 1 | 4 | 2 | 2 | 7 | 2 | 1 | 1 | 1 | 1 | 1 |
| Congenital Rubella | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| <u>HIB</u> | | | | | | | | | | | | | |
| Haemophilus | | | | | | | | | | | | | |
| Haemophilus, invasive (all) | 39 | 21 | 10 | 7 | 2 | 7 | 3 | 10 | 8 | 6 | 5 | 6 | 8 |
| Haemophilus influenzae (type b) | 9 | 4 | 2 | 0 | 2 | 2 | 2 | 2 | 4 | 1 | 0 | 1 | 0 |
| <u>HEP A</u> | | | | | | | | | | | | | |
| Hepatitis A | 770 | 629 | 349 | 504 | 648 | 479 | 642 | 534 | 441 | 276 | 310 | 146 | 174 |
| <u>HEP B</u> | | | | | | | | | | | | | |
| Hepatitis B: acute | 183 | 203 | 151 | 107 | 55 | 58 | 37 | 39 | 27 | 38 | 37 | 41 | 29 |
| chronic | 750 | 931 | 1005 | 1023 | 975 | 883 | 953 | 1115 | 1071 | 1029 | 1138 | 1039 | 1092 |