



PHYSICIANS' BULLETIN

Hepatitis B Immunization Series Required For 7th Grade Entry

Effective July 1, 1999, California school law requires that students must meet new immunization requirements for 7th grade entry, including the 3-dose hepatitis B vaccine series which takes a minimum of 4 months to complete. If regulation changes are approved, students will also be required to show evidence of a second dose of MMR (Measles-Mumps-Rubella) vaccine. Additionally, a Td booster and varicella vaccine are recommended for those who need protection. Schools will be required to exclude those who have not started the shots or are due or overdue for subsequent doses.

In addition to excluding students who fail to meet the entry requirements, school staff must track each conditionally admitted student until each subsequently due dose is completed. To meet the requirements, the student must present a shot record (typically, the yellow California Immunization Record) showing the date given and provider documentation for each vaccine dose.

Requirements may also be met through exemptions, either personal or medical, which typically account for fewer than 1% of student admissions. A medical exemption may be granted if a physician identifies the medical condition which contraindicates the vaccine and the duration of the exemption (permanent/temporary).

Statewide assessment of 7th grade immunization levels will be conducted annually, beginning in the fall of 1999. Additionally, a sample of public and private schools will be audited each spring, beginning in 2000.

To avoid the problems of large numbers of students flooding provider offices next fall, local schools and the County Health and Human Services Agency urge that students start the series of immunizations early, and finish the series no later than May, 1999.

Use of New, Shorter Shot Schedule Urged

Providers who learned to give hepatitis B vaccine since its licensure 18 years ago are familiar with the 0-1-6 schedule: first dose today, second dose one month from today and third dose six months from today. However, there are new alternative schedules of equal efficacy and safety that permit completing the schedule in shorter time intervals: 0-1-4 or 0-2-4. These newer schedules have been endorsed by ACIP, AAP and AAFP and used in public and private clinics for years for children completing the series at 6 months of age or older.

It cannot be overemphasized that there is no need to start the series over if it has been interrupted, no matter how long the interval between immunizations. For example, if the

series was interrupted after the first shot, simply give the second dose as soon as possible and the third dose 2 months later. If the third dose was delayed, give it now or when convenient, according to the schedules noted previously. Also, note that neither pregnancy nor lactation are contraindications to hepatitis B immunization in young girls or women.²

Reminder: hepatitis B vaccine is administered as an intramuscular injection in the deltoid muscle for this age group. Doses given in error in the buttocks must not be counted and must be repeated in the deltoid.³

Regardless of what schedule is used, the goal should be to complete the hepatitis B immunization series by May, 1999, for the student to present the completed record to the school.

Background

Hepatitis B vaccine has been routinely recommended for all infants since 1991, and in 1997, the Advisory Council on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP) and the American Academy of Family Physicians (AAFP) revised their recommendations to include all persons aged 0-18 years. Hepatitis B vaccine was made available through the Vaccines for Children (VFC) program for persons who are VFC eligible. Most preteens and teens have so far not been immunized

because they were too old for the infant recommendations in 1991. However, these children remain at risk. The lifetime risk for hepatitis B virus (HBV) infection is 4.2% for persons aged ≥ 6 years, and approximately 70% of HBV infections occur in late adolescence and early adulthood. In the United States, failure to vaccinate a single cohort of adolescents will result in an estimated 160,000 HBV infections, 10,000 chronic HBV carriers, and 1400 deaths. Without vaccination, San Diego County would expect an estimated 1512 cases of hepatitis B infection (4.2% of **population lifetime risk** for infection for persons aged ≥ 6 years), 91 chronic HBV infections (6% of HBV infections) and 13 hepatitis-related deaths (14% of chronic HBV infections) to occur among this single cohort of 36,000 local 7th grade adolescents during their lifetimes. Immediate action is needed to ensure that adolescents receive hepatitis B vaccine along with other recommended vaccinations.

Local Survey Shows Need is Great

A telephone survey conducted in San Diego County this past May/June found that 42% of 5th and 6th graders had received at least their **first** hepatitis B vaccine dose but only 16% of these adolescents had a record of 3 doses of hepatitis B vaccine. Most respondents assumed, however, that their children have had all the needed vaccines. The survey also found that adolescents who had been immunized against hepatitis B were more likely to also have younger siblings ($\ll 6$ years old) or to have seen their provider for well-child care during the past 6 months. Additionally, the survey revealed that most adolescents do have insurance coverage for the hepatitis B immunizations.

Requirement presents opportunity

Medical care providers can use the

hepatitis B immunization requirement as an opportunity to provide other immunizations and preventive health services. Adolescents may need the following in addition to the hepatitis B series:

1. A 2nd dose of MMR vaccine (the above-mentioned local survey found 30% of respondents lacked the 2nd MMR dose) This dose will probably be 7th grade entry requirement beginning Fall, 1999.⁴
2. A Td booster (reflecting the new ACIP and AAP recommendation for 11-12 year-olds to receive a booster if 5 years have elapsed since the prior tetanus- and diphtheria-containing vaccine dose).⁵
3. A varicella immunization (if adolescent has not had the disease or vaccine).⁶
4. Services provided according to the Guidelines for Adolescent Preventive Services (G.A.P.S.). This includes counseling adolescents about smoking, alcohol and other drug use, safety (including the use of helmets, seatbelts, etc.), sexual activity (e.g. abstinence, condoms, birth control, etc.) and other teen issues as well as a physical exam.

Preteen Immunization Week Set

The first California Pre-Teen Vaccine Week will be observed January 11-18, 1999. A video news release and public service announcement will be issued by the State Immunization Branch during the week long observance with the goal of reminding parents of 6th grade students that it is necessary to start the hepatitis B series very soon in order to finish prior to 7th grade. Local community activities include a health fair, student skits, and essay contests for students concerning the importance of adolescent immunizations.

On March 12 (location TBA), the

California Distance Learning Health Network will broadcast "Early Adolescents: How to Save Their Lives." This continuing education program will focus on preventive health and immunization needs in accordance with the healthcare recommendations of the Guidelines for Adolescent Preventive Services (G.A.P.S.)

In April (date TBA), a continuing education program covering adolescent risk assessment will be presented as a joint project of the Society for Adolescent Medicine, The California State Nurses Organization and National Association of Pediatric Nurse Associates and Practitioners.

Contact Leslie Linton, Adolescent Immunization Coordinator (619) 692-8593 to be put on the mailing list for these programs.

Information Available on Web

More information about the topics discussed in this Bulletin can be found on the World Wide Web at the following sites:

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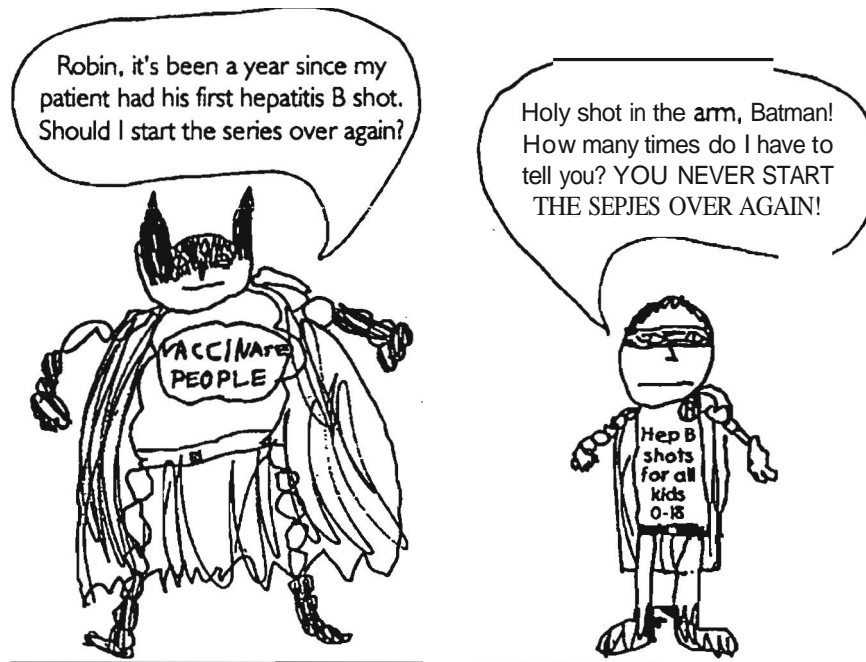
Information Available on Web*(continued from page 2)*

1. The American Medical Association offers extensive information on G.A.P.S. at <http://www.ama-assn.org/adolhlth/adolhlth.htm>
2. The federal Centers for Disease Control and Prevention has extensive information about various vaccines, including administration protocols and contraindications, in their Morbidity and Mortality Weekly Reports archives at <http://www.cdc.gov/epo/mmwr>. Searchers can access relevant documents such as the Recommendations and Reports issue on the immunization of adolescents (Nov. 22, 1996, Vol. 45, No. RR-13). Also of interest are the issues on the hepatitis B vaccine (Nov. 22, 1991, Vol. 40, No. RR-13), the MMR vaccine (May 22, 1998, Vol.

47, No. RR-08) and the Varicella vaccine (July 12, 1996, Vol. 45, No. RR-11).

References

1. American Academy of Pediatrics (AAP). Hepatitis B. (1997 *Red Book: Report of the Committee on Infectious Diseases*, AAP: 253.)
2. CDC. Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States Through Universal Childhood Vaccination. Recommendations of the Immunization Committee (ACIP). (MMWR, Nov. 22, 1991, Vol. 40, No. RR-13:10.)
3. CDC. Effectiveness of a Seventh Grade School Entry Vaccination Requirement-Statewide and Orange County, Florida. (MMWR Sept. 4, 1998, Vol. 47, No. 34: 714.)
4. CDC. Measles, Mumps, and Rubella-Vaccine Use and Strategies for Elimination of Measles, Rubella, and Congenital Rubella Syndrome and Control of Mumps: Recommendations of the Advisory Committee on Immunization Practices (ACIP). (MMWR, May 22, 1998, Vol. 47, No. RR-8:16.)
5. CDC. Immunization of Adolescents. Recommendations of the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Medical Association. (MMWR, Nov. 22, 1996, Vol. 45, No. RR-13:6-7.)
6. CDC. Prevention of Varicella. Recommendations of the Advisory Committee on Immunization Practices (ACIP). (MMWR, July 12, 1996, Vol. 45, No. RR-11:12-13.)

What hepatitis B question is asked over and over and over again?**Never start the series over! Never! Never! Never!***(Adapted from Needle Tips & the Hepatitis B Coalition News)*