We welcome many new members to the HepTalk Listserv! For those of you just joining, be sure to check the Listserv Archives at http://www.migrantclinician.org/excellence/hepatitis/listservarchive, or email the listserv moderator, Kath Anderson, at dempander@earthlink.net to have a previous edition e-mailed directly to you.

The following is a list of the monthly topics in 2006:

- **January 2006**: Updated Advisory Committee on Immunization Practices (ACIP) of the US Centers for Disease Control and Prevention (CDC) comprehensive guidelines for the eradication of hepatitis B virus (HBV) in the United States.

- **February 2006**: Update on Hepatitis C.

- **March/April 2006**: Cross cultural communication.

- **April 2006**: Hepatitis A and prevention, with guest editor Amy Liebman, MPA.

- **May 2006**: two successful adult immunization programs, one in Pennsylvania and one in New York. Each involves cooperation between state and local health departments and community clinics in order to provide immunizations, including Hepatitis A and B, to migrant seasonal farmworkers. The Pennsylvania program works with a HepTalk clinic participant.

- **June /July 2006**: Cultural Competency and Hepatitis, with guest editor Dr. Jennie McLauren

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For July 2006, we bring you some Hepatitis B updates. Of special interest is a new report from *MMWR Weekly* (May 12, 2006 / 55(18);509-511) "Hepatitis B Vaccination Coverage Among Adults"—United States, 2004." The whole report, as reprinted from HepExpress, is available below. We would also like to draw your attention to the Spanish language chapters of the Hepatitis B Foundation, and updated information about Hepatitis B drug therapy

1. **Hepatitis B Foundation Updates Non-English Language Chapters**

The Hepatitis B Foundation (HBF) online language chapters at http://www.hepb.org have been updated to make it easier for non-English speaking people to learn about hepatitis B. The chapters are arranged on a split screen, with both the foreign translation and English language shown side-by-side. This makes it easy for all family members to read the information in a language they are most comfortable with. It also makes it easy to print and share the information with your doctor. (reprinted from HEP Express)

We at HepTalk also think the information is concise and easy to understand. To go directly to the Spanish...
2. Comparison of Costs for Hepatitis B Drug Therapy *

<table>
<thead>
<tr>
<th>Drug Name / Dose</th>
<th>Monthly Cost</th>
<th>Annual Cost</th>
<th>FDA Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamivudine (Epivir-HBV) 100mg</td>
<td>$204</td>
<td>$2,482</td>
<td>Approved</td>
</tr>
<tr>
<td>Emtricitabine (FTC) 200mg</td>
<td>$318</td>
<td>$3,872</td>
<td>Phase III</td>
</tr>
<tr>
<td>Tenofovir 300mg</td>
<td>$478</td>
<td>$5,811</td>
<td>Phase III</td>
</tr>
<tr>
<td>Adefovir 10mg</td>
<td>$546</td>
<td>$6,647</td>
<td>Approved</td>
</tr>
<tr>
<td>Entecavir (Baraclude) 0.5mg</td>
<td>$715</td>
<td>$8,694</td>
<td>Approved</td>
</tr>
</tbody>
</table>

* Costs are based on average wholesale prices in the US

** Although peginterferon has the highest monthly and annual cost, it is FDA-recommended for one year only. The other oral drugs would likely need to taken lifelong.

Sources


3. MMWR Weekly May 12, 2006 / 55(18);509-511 Hepatitis B Vaccination Coverage Among Adults -- United States, 2004

Hepatitis B virus (HBV) infection is a major cause of cirrhosis and liver cancer in the United States. The Advisory Committee on Immunization Practices (ACIP) has recommended a comprehensive strategy to eliminate HBV transmission, including prevention of perinatal HBV transmission; universal vaccination of infants; catch-up vaccination of unvaccinated children and adolescents; and vaccination of unvaccinated adults at increased risk for infection. The incidence of acute hepatitis B has declined 75%, from 8.5 per 100,000 population in 1990 to 2.1 per 100,000 population in 2004, with the greatest declines (94%) among children and adolescents (1). Incidence remains highest among adults, who accounted for approximately 95% of the estimated 60,000 new infections in 2004. To measure hepatitis B vaccination coverage among adults, data were analyzed from the 2004 National Health Interview Survey (NHIS). This report summarizes the results of that analysis, which indicated that, during 2004, 34.6% of adults aged 18--49 years reported receiving hepatitis B vaccine, including 45.4% of adults at high risk for HBV infection. To accelerate elimination of HBV transmission in the United States, public health programs and clinical care providers should implement strategies to ensure that adults at high risk are offered hepatitis B vaccine.

NHIS is a multipurpose household health survey of the U.S. civilian, noninstitutionalized population, conducted by in-person interview. Hepatitis B vaccination coverage was estimated from self reports of sampled adults. The analysis was restricted to adults aged 18--49 years, age groups that account for approximately 80% of adult HBV infections.

In the 2004 NHIS, adults who responded "yes" to the question, "Have you ever received hepatitis B vaccine?" were assumed to have received >1 vaccine dose. For this analysis, adults were considered at high risk for HBV infection if they reported a risk factor in answering any of three questions related to human immunodeficiency virus (HIV) and sexually transmitted disease (STD) risk behaviors.*

For all adults aged >18 years, weighted age-specific and national hepatitis B vaccination coverage rates were estimated. Statistical analysis software was used to calculate weighted estimates and confidence intervals. Chi-square tests were used to compare coverage rates among groups. P-values <0.05 were considered statistically significant.
significant. Coverage rates with relative standard errors >0.30 were not reported. A logistic model was developed to determine whether high risk was an independent predictor of vaccination, including as possible confounders all terms identified to be predictors of vaccination in univariate analysis and those that have been determined to be associated in other studies. The final model fit the data (Hosmer-Lemeshow goodness-of-fit, p = 0.36).

During 2004, a total of 31,326 adults were interviewed, including 18,269 aged 18--49 years. The response rate was 72.5% (2). Of eligible adults aged 18--49 years, 17,249 (94%) who responded to the hepatitis B vaccination questions were included in this analysis, including 1,048 (5.7%) adults at high risk.

A weighted analysis of adults who were surveyed indicated that 34.6% (95% CI = 33.5%--35.6%) reported receiving hepatitis B vaccine. Coverage was highest among persons aged 18--20 years and declined with increasing age (Table). Coverage also was higher for persons in occupations for which vaccination is specifically recommended, including health-care workers (80.5%; CI = 77.3%--83.4%) and police officers or firefighters (63.6%; CI = 56.6%--70.1%), and for adults at high risk (45.4%; CI = 41.7%--49.2%).

Report of hepatitis B vaccination also was associated with certain population characteristics, including female sex, non-Hispanic ethnicity, and higher educational achievement. Persons with a routine source of health care (e.g., primary doctor, health maintenance organization, or clinic) and persons with health insurance also were more likely to report vaccination than those with no routine source of health care (Table). The same demographic and health-care use characteristics were associated with higher likelihood of vaccination among persons at high risk as among other respondents. In a multivariate model, after controlling for age, sex, education, occupation, and HIV test history, high risk remained a statistically significant predictor (adjusted odds ratio = 1.3) of hepatitis B vaccination.

Reported by: C Weinbaum, MD, K Billah, PhD, EE Mast, MD, Div of Viral Hepatitis, National Center for HIV, Viral Hepatitis, STDs, and Tuberculosis Prevention (proposed), CDC.

Editorial Note:

The findings in this report suggest that hepatitis B vaccination coverage among adults at high risk, as measured by NHIS, has increased substantially from 30% in 2000 to 45% in 2004 (3). Some of this increase in coverage represents the aging of persons vaccinated as adolescents, reflecting the effect of ACIP recommendations for routine vaccination of adolescents that were first made in 1995 (4). In addition, higher vaccination coverage among persons of all ages at high risk suggests successes vaccinating targeted adults and likely contributed to a decline in hepatitis B incidence. From 2000 to 2004, hepatitis B incidence among adults decreased 27%, from 3.7 to 2.7 per 100,000 population (CDC, unpublished data, 2006). However, hepatitis B vaccination coverage of adults at high risk remained lower than vaccination coverage of children (92%) and adolescents (86%) in 2004 (5), two other age groups included in the ACIP vaccination strategy to eliminate HBV transmission.

Several factors contribute to low hepatitis B vaccination coverage among adults at high risk. In contrast to vaccination of children, national programs that support vaccine purchase and infrastructure for vaccine administration are not available for adults. As a result, adults at increased risk often have missed opportunities to receive hepatitis B vaccination. In a study of 483 adults with acute hepatitis B infection, 61% reported a missed opportunity for vaccination during STD treatment, incarceration, or drug treatment during 2001--2004 (6). In primary care settings, patients and providers might be reluctant to discuss risk behaviors (7), and providers might not prioritize vaccination in the context of other clinical care services.

Adult vaccination coverage can be increased through the use of provider reminders and other interventions to increase access to vaccination (8). Demonstration projects have determined that provision of comprehensive HIV, viral hepatitis, and STD services increases vaccination coverage (9). In October 2005, ACIP provisionally recommended strategies to improve vaccination for adults at risk for hepatitis B, emphasizing vaccination of all adults at venues where a high proportion of persons are likely to have risk factors for HBV infection (e.g., STD/HIV testing and treatment facilities, correctional facilities, and drug-abuse treatment facilities) and the adoption of practices that remove barriers to vaccination in primary care settings (10). [The italics and bold are HepTalk’s emphasis.]

The findings in this report are subject to at least four limitations. First, criteria for adults at high risk used in this study might not identify all persons who are at risk for HBV infection, such as persons with multiple sex
partners, and might identify persons without risk, such as most persons with hemophilia. Second, the in-person format of the interview might lead to underreporting of risk behaviors. Third, hepatitis B vaccination was based on self-report and was not validated by medical records. Although differences might exist between self-reported vaccination and true vaccination, directional bias is unlikely, so correlates and trends in coverage are likely to reflect true trends. Finally, NHIS excludes all institutionalized persons (e.g., military or incarcerated) among whom both the risk for hepatitis B and vaccination coverage might differ from those of the rest of the population. Despite these limitations, NHIS is the only national survey that collects data related to adult hepatitis B vaccination.

Hepatitis B vaccine is safe and effective and the only licensed vaccine that prevents cancers. Despite these benefits, the majority of adults at risk for HBV remain unvaccinated. To increase coverage, public health programs and primary care providers should inform adults receiving preventive clinical services of the potential benefits of hepatitis B vaccination for their health, vaccinate all adults who seek protection from HBV, and adopt strategies appropriate for the practice setting to ensure that all adults at risk for HBV infection are offered hepatitis B vaccine.

Acknowledgments

This report is based, in part, on data contributed by S Stokley, MPH, National Center for Immunization and Respiratory Diseases (proposed); A Wasley, PhD, Div of Viral Hepatitis; and N Jain, MD, Div of STD Prevention, National Center for HIV, Viral Hepatitis, STDs, and Tuberculosis Prevention (proposed), CDC.

References <cut> Tables <cut>
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5518a3.htm

HepTalk is a project of the Migrant Clinicians Network and Community Health Education Concepts. HepTalk is funded by the Centers for Disease Control and Prevention. The goal of HepTalk is to help clinicians serving migrants and recent immigrants engage in productive discussions about hepatitis risks with their clients and help them make prevention plans. The HepTalk listserv is a support service for clinics participating in the project. This is a post-only listserv and postings will come from HepTalk staff about once a month. If others at your clinic would like to be on the listserv, or if you have questions about the listserv or resources listed here, or if you would like to add something to the posts, please contact Kathryn Anderson, HepTalk training and education coordinator and listserv administrator, at dempander@earthlink.net. You can also contact the listserv administrator if you would like to unsubscribe from the list.