November 2006 HepTalk Listserv

Welcome to all new members of the HepTalk Listserv!

For November, we offer a quick review of some Hep facts, and/or an in depth summary. Then we touch on Transmission Hot Spots, one each for A, B, and C.

1. **Review:** From the CDC, questions your patients may ask you: [Top 11 Most Frequently Asked Questions About Viral Hepatitis](#).

2. **Review:** Also from the CDC: Implementing VPH (vaccine preventable Hepatitis) Immunization into Practice Across Specialties: Primary Care Physicians. This is an excellent short CME program with a good concise review of Hep facts.

3. **Hep Transmission Hot Spots:** Staff at HepTalk clinics asked questions during on-site trainings about risk involved in tattooing so we offer an article on tattooing and piercing and Hep C.

4. **Hep Transmission Hot Spots:** Many clinics also indicated that diabetes is a primary concern for their client population. We hope this article on blood glucose monitoring and Hep B is relevant for you.

5. **Hep Transmission Hot Spots:** A discussion of levels of Hep A in fecal matter will encourage education about good handwashing in a month which includes National Handwashing Week.

Access the Listserv Archives at [http://www.migrantclinician.org/excellence/hepatitis/listservarchive](http://www.migrantclinician.org/excellence/hepatitis/listservarchive), or email the listserv moderator, Kathryn 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 McLaren
Hep Review

1. **Top 11 Most Frequently Asked Questions About Viral Hepatitis**

1. What is viral hepatitis?
2. What are the symptoms of viral hepatitis?
3. How are hepatitis A, B, and C viruses spread?

   - Hepatitis A Virus (HAV)
   - Hepatitis B Virus (HBV)
   - Hepatitis C Virus (HCV)

4. Can I donate blood if I have had any type of viral hepatitis?
5. How long can HAV, HBV and HCV survive outside the body?

   - Hepatitis A Virus (HAV)
   - Hepatitis B Virus (HBV)
   - Hepatitis C Virus (HCV)

6. For how long is hepatitis B vaccine effective?
7. Are booster doses of hepatitis B vaccine needed?
8. What does the term "hepatitis B carrier" mean?
9. If my hepatitis B vaccination series is interrupted, do I have to start over?
10. What drugs are used to treat chronic hepatitis B?
11. What is the treatment for chronic hepatitis C?

1. What is viral hepatitis?

**Hepatitis means inflammation of the liver.** Viral hepatitis is inflammation of the liver caused by a virus. There are five identified types of viral hepatitis and each one is caused by a different virus. In the United States, hepatitis A, hepatitis B and hepatitis C are the most common types. Hepatitis A is caused by hepatitis A virus (HAV), hepatitis B is caused by hepatitis B virus (HBV), and hepatitis C is caused by hepatitis C virus (HCV).

2. What are the symptoms of viral hepatitis?

**The symptoms of acute (newly acquired) hepatitis A, B and C are the same.** Symptoms occur more often in adults than in children. If symptoms occur, they might include: tiredness, loss of appetite, nausea, abdominal discomfort, dark urine, clay-colored bowel movements, yellowing of the skin and eyes (jaundice).
3. How are hepatitis A, B, and C viruses spread?

**Hepatitis A Virus (HAV)**
Hepatitis A virus is spread from person to person by putting something in the mouth that has been contaminated with the stool of a person with hepatitis A. This type of transmission is called "fecal-oral." Most infections result from contact with a household member or sex partner who is infected with HAV. Casual contact, as in the usual office, factory, or school setting, does not spread the virus.

**Hepatitis B Virus (HBV)**
HBV is spread when blood from an infected person enters the body of a person who is not infected. For example, HBV is spread through having sex with an infected person without using a condom (the efficacy of latex condoms in preventing infection with HBV is unknown, but their proper use might reduce transmission), by sharing drugs, needles, or "works" when "shooting" drugs, through needlesticks or sharps exposures on the job, or from an infected mother to her baby during birth.

**Hepatitis C Virus (HCV)**
HCV is spread when blood from an infected person enters the body of a person who is not infected. This could happen through sharing needles or "works" when "shooting" drugs, through needlesticks or sharps exposures on the job, or from an infected mother to her baby during birth.

4. Can I donate blood if I have had any type of viral hepatitis?

**If you had any type of viral hepatitis since age 11, you are not eligible to donate blood.** In addition, if you ever tested positive for hepatitis B or hepatitis C, at any age, you are not eligible to donate, even if you were never sick or jaundiced from the infection.

5. How long can HAV, HBV and HCV survive outside the body?

**HAV**
HAV can live outside the body for months, depending on the environmental conditions.

**HBV**
HBV can survive outside the body at least 7 days and still be capable of transmitting infection.

**HCV**
Recent studies have shown that HCV can survive outside the body and still transmit infection for 16 hours, but not longer than 4 days.

6. For how long is hepatitis B vaccine effective?

**Recent studies indicate that immunologic memory remains intact for at least 23 years** and confers protection against clinical illness and chronic HBV infection, even though anti-HBs levels might become low or decline below detectable levels.
7. Are booster doses of hepatitis B vaccine needed?

**No, booster doses of hepatitis B vaccine are not recommended routinely.** Data show that vaccine-induced hepatitis B surface antibody (anti-HBs) levels might decline over time; however, immune memory (anamnestic anti-HBs response) remains intact indefinitely following immunization. People with declining antibody levels are still protected against clinical illness and chronic disease.

8. What does the term "hepatitis B carrier" mean?

**“Hepatitis B carrier” is a term that is sometimes used to indicate people who have chronic (long-term) infection with HBV.** Two percent to 6% of persons over 5 years of age; 30% of children 1-5 years of age; and up to 90% of infants develop chronic infection. Persons with chronic infection can infect others and are at increased risk of serious liver disease including cirrhosis and liver cancer. In the United States, an estimated 1.25 million people are chronically infected with HBV.

9. If my hepatitis B vaccination series is interrupted, do I have to start over?

**No. If the vaccination series is interrupted, resume with the next dose in the series.**

10. What drugs are used to treat chronic hepatitis B?

**There are at least six drugs used for the treatment of people with chronic hepatitis B: Adefovir dipivoxil, interferon alfa-2b, pegylated interferon alfa-2a, lamivudine, entecavir, and telbivudine.**

11. What is the treatment for chronic hepatitis C?

**Combination therapy, using pegylated interferon and ribavirin, is currently the treatment of choice.**

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2. **Implementing VPH (vaccine preventable Hepatitis) Immunization into Practice Across Specialties: Primary Care Physicians.** Online Training link: [http://www.vphimmunization.com/](http://www.vphimmunization.com/)

“Options for the prevention of hepatitis A and B have become available through the identification of immunizations that have recently been elucidated after years of research. Physicians must understand this research, including findings regarding epidemiological trends and at-risk populations, in order to initiate positive changes in immunization practices. Moreover, physicians should be familiar with the benefits and liabilities associated with existing immunization policies, consensus guidelines and clinical evidence, strategies designed to close the gaps in immunization programs, and methods for overcoming barriers to universal vaccination initiatives. The relevance of this information must also be addressed with individual specialties—primary care, infectious diseases, gastroenterology, and obstetrics/ gynecology—to emphasize the broad applicability of preventative measures for vaccine-preventable hepatitis (VPH).”

**Transmission Hot Spots**

3. **CDC’s Position on Tattooing and HCV Infection**


Although some studies have found an association between tattooing and HCV infection in very selected populations, it is not known if these results can be generalized to the whole population. Any percutaneous exposure has the potential for transferring infectious blood and potentially transmitting bloodborne pathogens (e.g., HBV, HCV, or HIV); however, no data exist in the United States indicating that persons with exposures to tattooing alone are at increased risk for HCV infection. For example, during the past 20 years, less than 1% of persons with newly acquired hepatitis C reported to CDC’s sentinel surveillance system gave a history of being tattooed. Further studies are needed to determine if these types of exposures, and the settings in which they occur, are risk factors for HCV infection in the United States. CDC is currently conducting a large study to evaluate tattooing as a potential risk.
Effect of Tattooing, Body Piercing and Intranasal Drug Use on Risk of HCV and HBV Infection

http://www.hivandhepatitis.com/hep_b/news/2006/080106_b.html  Posted on the HBV-listserv on Tuesday, August 1, 2006 3:03 AM. Web Archive of all messages is at: http://archive.mail-list.com/hbv_research/

In recent years, there has been growing concern among medical professionals and hepatitis B and C community service providers that certain cosmetic procedures, including tattooing and body piercing -- as well as intranasal drug use -- might be associated with an increased risk for hepatitis C virus (HCV) and hepatitis B virus (HBV) infection.

To explore this issue, researchers at the University of Texas School of Public Health in Houston and the U.S. Centers for Disease Control and Prevention (CDC) conducted a cross-sectional seroprevalence study of a population with a low frequency of injection drug use. Students 18 years and older from eight college campuses in Houston were invited to participate.

Results

Of the 7,960 participants who completed an anonymous self-administered questionnaire and provided a blood sample, 5,282 U.S.- or Canadian-born participants were analyzed.

The median age was 21, 62% were female, 42% were white, 26% were black, 2% were Hispanic, and 10% were Asian or other race/ethnicity.

2% of participants reported injection drug use and 13.7% reported intranasal drug use.

21.2% reported having body piercings and 25.2% reported having tattoos.

The overall prevalence of HCV infection was 0.9%.

The overall prevalence of HBV infection was 5.2%.

Higher HCV prevalence was independently associated with:

- increasing age;
- history of injection drug use;
- blood transfusion before 1991;
- incarceration.

Among 5,066 students who denied injecting drugs, the HCV prevalence rates were:

- 0.8% for those who reported intranasal drug use;
- 0.6% for those who reported tattoos;
- 0.6% for those who reported body piercing.

Increased HBV prevalence was associated with high-risk sexual behaviors and black or Asian race.

Conclusion

Based on these results, the authors concluded, "There was no increased risk for HCV or HBV infection in low-risk adults based solely on history of cosmetic procedures or snorting drugs. However, proper infection control practices for cosmetic procedures should be followed, illegal drug use discouraged, and hepatitis B vaccination provided to adolescents and sexually active adults."

08/01/06

Reference

L-Y Hwang, J R Kramer, C Troisi, and others. Relationship of cosmetic procedures and drug use to Hepatitis B and Hepatitis C virus infections.

4. From the CDC Viral Hepatitis Website: Blood Glucose Monitoring and the Risk of Hepatitis
http://www.cdc.gov/ncidod/diseases/hepatitis/spotlights/glucose.htm

8/15/2007
If healthcare professionals share devices or fail to follow infection control practices related to blood glucose monitoring, hepatitis B virus and other bloodborne pathogen transmission might occur. Following are specific infection control recommendations targeting diabetes care procedures in healthcare and group residence settings.

**Diabetes care procedures and techniques**

- Prepare medications such as insulin in a centralized medication area; multiple dose insulin vials should be assigned to individual patients and labeled appropriately.
- Never reuse needles, syringes, or lancets.
- Restrict use of fingerstick capillary blood sampling devices to individual patients. Consider selecting single-use lancets that permanently retract upon puncture.
- Dispose of used fingerstick devices and lancets at the point of use in an approved sharps container.
- Environmental surfaces such as glucometers should be decontaminated regularly and anytime contamination with blood or body fluids occurs or is suspected.
- Glucometers should be assigned to individual patients. If a glucometer that has been used for one patient must be reused for another patient, the device must be cleaned and disinfected.
- Maintain supplies and equipment such as fingerstick devices and glucometers within individual patient rooms if possible.
- Any trays or carts used to deliver medications or supplies to individual patients should remain outside patient rooms. Do not carry supplies and medications in pockets.
- Because of possible inadvertent contamination, unused supplies and medications taken to a patient’s bedside during fingerstick monitoring or insulin administration should not be used for another patient.

**Hand hygiene and gloves**

- Wear gloves during fingerstick glucose monitoring and during any other procedure that involves potential exposure to blood or body fluids.
- Change gloves between patient contacts. Change gloves that have touched potentially blood-contaminated objects or fingerstick wounds before touching clean surfaces.
- Remove and discard gloves in appropriate receptacles after every procedure that involves potential exposure to blood or body fluids, including fingerstick blood sampling.
- Perform hand hygiene (i.e., hand washing with soap and water or use of an alcohol-based hand rub) immediately after removal of gloves and before touching other medical supplies intended for use on other residents.

**Medical management**

- Review regularly the individual patients’ schedules for fingerstick blood glucose sampling and insulin administration and reduce the number of percutaneous procedures to the minimum necessary for appropriate medical management of diabetes and its complications.
- Assure that adequate staffing levels are maintained to perform all scheduled diabetes care procedures, including fingerstick blood glucose monitoring.
- Consider the diagnosis of acute viral hepatitis infection in LTC residents who develop an illness that includes hepatic dysfunction or elevated aminotransaminase levels (AST or ALT).

**Training and oversight**

- Provide a full hepatitis B vaccination series to all previously unvaccinated LTC staff persons whose activities involve contact with blood or body fluids. Check and document post-vaccination titers one to two months after completion of the vaccination series.
- Establish responsibility for oversight of infection control activities. Investigate and report any suspected
case that may represent a newly acquired bloodborne infection.

- Have staff demonstrate knowledge of standard precautions guidelines and proficiency in application of these guidelines during procedures that involve possible blood or body fluid exposures.
- Provide staff members who assume responsibilities involving percutaneous procedures with infection control training that includes practical demonstration of aseptic techniques and instruction regarding reporting exposures or breaches. Direct annual retraining to all staff members who perform procedures that involve exposure to blood or body fluids.
- Assess compliance with infection control recommendations for fingerstick glucose monitoring (such as hand hygiene and glove changes between patients) by periodically observing personnel and tracking use of supplies.

**Important Links**

Transmission of Hepatitis B Virus Among Persons Undergoing Blood Glucose Monitoring in Long-Term--Care Facilities --- Mississippi, North Carolina, and Los Angeles County, California, 2003--2004

MMWR, 03/11/05, vol. 54(09); 220-223


NEW YORK (Reuters Health) Nov 24 - At 1 month after symptom onset, high levels of hepatitis A virus (HAV) are still present in stool samples of patients with acute infection, suggesting that the infectious period is longer than previously thought, new research shows. Moreover, HAV may be present in the blood for longer than 1 month.

Previous reports have suggested that HAV-infected patients are infectious 1 to 2 weeks before and after symptom onset. However, coupled with other recent reports, the present findings suggest that the infectious period can last a month or longer after the onset of jaundice.

The current study, which is reported in the Journal of Medical Virology for November, involved an analysis of blood and fecal samples collected for up to 26 weeks from 27 patients with acute hepatitis A. In addition, 55 additional patients provided a single blood donation. All of the subjects were immunocompetent.

The median period of HAV excretion in stool was 81 days after symptom onset and half of the patients were still excreting high levels of the virus at Day 36, senior author Dr. Sylvia M. Bruisten, from the Public Health Service of Amsterdam, and colleagues note.

The median period of detectable viremia was 42 days, the report indicates.

Higher ALT levels were predictive of higher viremia, but only in the first 10 days of clinical disease. Viral genotype appeared to play no role in determining the duration of HAV excretion or jaundice.

The authors note that blood banks should be aware that HAV patients can still be viremic up to 2 months after symptom onset. They also point out that while the persistence of HAV excretion in the current study group is longer than previously thought, it is still shorter than the 106-day excretion period described in one study of patients coinfected with HIV.

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.