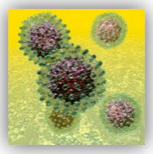
The Lab Rat NEWS
November 2012

EMORY UNIVERSITY
Environmental Health and Safety Office
Research Administration

Hepatitis B vaccination – What's the big deal?



Hepatitis B is a viral infection of the liver. Being in research, I wager most readers know that. However, what many may not know is that Hepatitis B virus (HBV) can result in a chronic infection. People with chronic infections are more likely to pass the infection on to others. Also, some patients with chronic infection will progress to liver failure or liver cancer. Both conditions can result in either death or need for a liver transplant. Currently, the Centers for Disease Control and Prevention (CDC) estimates that there are about 1 million people in the U.S. living with chronic Hepatitis B infection. In addition, there are 3,000 deaths annually in the US because of Hepatitis B.

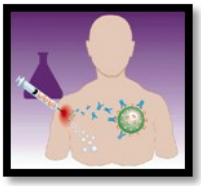
Are treatment options available for Hepatitis B?

Fortunately, HBV is a preventable infection. Since 1991, the CDC's Advisory Committee on Immunization Practices has recommended the HBV immunization for all infants in the US. Additionally, the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogen Standard requires every employer to offer the HBV immunization at no cost to healthcare workers and other employees who may come into contact with human blood, human body fluids, or other potential infectious material.

If an employee decides to be immunized, they must complete the entire vaccination series. According to CDC guidelines, which OSHA follows, a complete HBV immunization includes three doses and a titer check. The first dose must be administered before the employee performs tasks or procedures involving blood borne pathogens. The second dose of HBV is administered one month after the initial dose. The third dose is administered 6 months after the initial dose. The vaccination is complete once the antibody is performed.

The antibody titer check **must** be conducted after the employee receives the HBV vaccine. The results of the antibody titer check will indicate whether the employee responded to the HBV immunization. If the employee didn't respond to the immunization, then he or she will need a second series of three shots with another recheck of the antibody titer.

Why check the antibody titer after each vaccination series?



Ten to fifteen percent of recipients will not respond to the vaccine. However, 67 -75% of non-responders will respond to a second series. Without adequate antibodies against the HBV surface antigen, a non-responder is susceptible to infection with hepatitis B. In addition, many experts believe that if a non-responder is infected, the person is more likely to develop a chronic infection with HBV. Thus, it's important to know whether one has responded after the vaccination series. Knowing an employee's HBV titer can also help streamline Employee Health's response in the event of a blood or body fluid exposure.

If exposed to HBV in the workplace, there are measures which can be taken to prevent infection. The employee can receive passive immunization with Hepatitis B immunoglobulin, or the employee can receive antiviral medicines against HBV. Either can be effective in preventing infection and ultimate morbidity or mortality from HBV infection. So, while it may seem like a hassle, employees should return for another visit after receiving their third HBV vaccination dose to receive their antibody titer check. In the end, it may save a lot of time and worry for employees and their families.

By Dr. Marshall Lyon, Associate Professor of Medicine in the Infectious Diseases Division

Training

Most of EHSO's Trainings are available online.
www.ehso.emory.edu
for registration information.
Radiation Safety Training
2nd Tuesdays at 9:00 am
Laboratory Safety Training
3rd Thursdays at 10:00 am

Chemical/Radioactive Waste Pick-up Schedule

Full Schedule here...
All **chemical** waste pick up should be requested by emailing chemwaste@emory.edu
All **radioactive** waste pick up should be requested via EHS Assist pick-up.
Chemical waste disposal inventory form and/or **radioactive** waste inventory form should accompany all waste containers at the time of pick-up.

PPE

Choice to be based on potential exposures involved:
Eye: Glasses, goggles & face shields
Gloves: Appropriate for the type of procedure
Clothing: Gowns, lab coats, aprons, coveralls
Respirators: Appropriate for the type of procedure

EMORY UNIVERSITY | Emory Learning Management System

Helpful Hints for Taking Training in the Emory Learning Management System (ELMS)

Check to ensure that your pop-up blocker is turned OFF when using ELMS to take your online training.

Mozilla Firefox and Internet Explorer are the most compatible with ELMS. When using Microsoft Internet Explorer, it is also helpful to reduce the size of your browser's window to 75%. This will make the presentation easier to read.

Be aware of who must take which training module:

- Lab Safety Training – Must be completed annually by all personnel working with chemicals.
- Biosafety Training – Must be completed every three years. This training must be completed by all personnel working with biohazardous material, toxins, and recombinant DNA.
- Blood Borne Pathogen Training – Must be completed annually by personnel working with Human blood, human body fluids, or other potentially infectious material.

Is Your Lab Leaving Emory or Relocating to another location?

If so, prior to departing from your research space, all labs are requested to contact EHSO to schedule a Lab Decommissioning meeting. During this meeting, our office provides a comprehensive overview of the decommissioning process to discuss the safety requirements that apply to your lab move. Additionally, at the meeting, we assist with identifying the various waste streams and provide methods for disposal. To schedule the meeting, contact your designated Research Safety Building Liaison or call the EHSO main line (404-727-5922).

Also, here is another quick reminder. Prior to reoccupying a new research space, the Department will need to contact EHSO and Campus Services. EHSO must be contacted to ensure that your research spaces are provided with Hazard Signs outside of the entrance. Campus Services must be contacted to ensure that the research space is cleaned in preparation for the new occupant.

Notice

Signature indicates: I have read and I understand the information in this issue of Lab Rat Newsletter. Use an additional sheet of paper for more signatures, if needed and attach to this document.

- This newsletter is a tool to help fulfill a legal requirement for ongoing safety training.
- Supervisors are responsible for ensuring that individuals in their area have read and understood the information that applies to their area.
- The signed newsletter should be placed into the PIs EHSO Lab Safety Binder.

1. _____
2. _____
3. _____
4. _____
5. _____

Eye Wash Testing

Lab Personnel should test the eyewash station once a month.

Certifications

Bio-safety Cabinets/ Chemical Fume Hoods Certification required annually.

Fire Extinguishers

Visual fire extinguishers inspections conducted monthly:

A. Is it present and mounted in its proper location?

B. Is it readily accessible?

C. Initial and date attached tag.

If it appears to need servicing contact the Maintenance HELP line at 7-7463

Tell us how we are doing!

The newsletter has a new home. Every individual article is now hosted online at blogs.emory.edu/labratnews/

Got something to share? Tell us! Post comments, related articles/links, and safety concerns.

Feel free to also send your comments to **biosafe@emory.edu**.

We look forward to reading your ideas and comments!

Building Liaisons

Click here to find your building's Radiation and Research liaisons.