**Illinois Institute of Technology**

**Hepatitis B Vaccination Information Sheet and Exemption Form**

IIT offers vaccination against hepatitis B virus for all IIT employees who have frequent contact with blood and blood products. Persons who have direct, intense contact with blood or infected tissues and who are at risk of trauma, needle sticks, cuts, and abrasions that may result in percutaneous introduction of materials infected with hepatitis B virus are at high risk and should consider vaccination.

**The Disease**

Hepatitis B is a disease, formerly called serum hepatitis, caused by the hepatitis B virus (HBV). Most people who contract hepatitis B recover completely and are immune to subsequent exposures. About 0.1% die of fulminating hepatitis. The prognosis depends on age, dose, and severity of underlying disease. Five to ten percent of cases become chronic lifetime carriers capable of transmitting the disease to others and are at risk of developing chronic active hepatitis B, cirrhosis (2%) or liver cancer (0.4%).

**Risks of Hepatitis B Infection for IIT Employees**

IIT employees who have contact with blood, infected tissues or secretions, and regular exposure to trauma, needle sticks, cuts and abrasions are most at risk of acquiring hepatitis B. In the United States about 5% of volunteer blood donors show evidence of past or present hepatitis B infection, while up to 30% or more health care workers in high-risk areas may show evidence of past hepatitis B infection.

**The Vaccine**

A genetically engineered hepatitis B vaccine was licensed by the FDA in July of 1986. This will be the vaccine offered for IIT employees who are identified as potentially exposed to the hazards listed in the above "Risks" section. The vaccine, referred to as recombinant HB vaccine, ("Recombivax HB", Merck Sharp & Dohme) is comparable to the "Heptavax B" vaccine used since 1981. The difference between the two vaccines relates to their methods of derivation.

The three-dose series of recombinant HB vaccine induce protective antibodies (anti-HBs) in over 95% of healthy adults 20-39 years of age. These results are similar in plasma-derived hepatitis B vaccine.

A high percentage of susceptible healthy people who receive two doses of vaccine one month apart and a booster six months after the primary dose achieve high levels of surface antibody (anti-HBs) and protection against hepatitis B. The dose is 1 ml IM in the deltoid muscle. There is no evidence that the vaccine ever caused hepatitis B. Administration of the vaccine to persons already positive has no adverse or beneficial effect. Administration of hepatitis B hyperimmune gamma globulin given prophylactically does not interfere with the development of antibodies to the vaccine. Persons already incubating hepatitis B prior to receiving the vaccine may go on to develop clinical hepatitis in spite of the immunization.

The duration of immunity is unknown at present, but current information indicates five to seven years, at least. A booster may be needed in five to seven years, but this time is not recommended.

**Vaccine Risks and Possible Side Effects**

The incidence of side effects is very low, usually limited to soreness at the injection site, and mild systemic symptoms (fever, headache, fatigue, and nausea). "Early concerns about safety of plasmaderived HB vaccine, especially the concern that infectious agents such as human immunodeficiency virus (HIV) present in donor plasma pools might contaminate the final product, have proven to be unfounded. There is no data to indicate that the recombinant vaccine is potentially or actually safer than the currently licensed plasma derived product." (MMWR 1987; 38:356). "No information is available about the safety of the vaccine for unborn babies; however, because the vaccine contains only particles that do not cause hepatitis B infection, there should be no risk. In contrast, if a pregnant woman gets a hepatitis B infection, this may cause severe disease in the mother and chronic infection in the newborn baby. Therefore, pregnant woman who are otherwise eligible can be given hepatitis B vaccine." (CDC 02/01/90).

Additional information about hepatitis-B is available from the Centers for Disease Control and

Prevention at: https://www.cdc.gov/hepatitis/hbv/bfaq.htm

**Exemption Statement**

Choose A or B below. For option B please have your signature notarized.

A**.** I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, have been previously vaccinated with the complete series of the hepatitis B vaccine in the past and have attached documentation confirming my vaccination.

B. I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time.

I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

I understand that, my exemption notwithstanding, I may be prohibited from working in person or subject to other accommodations during an epidemic or pandemic.

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

Signed (or subscribed or attested) before me on \_\_\_\_\_\_\_\_\_(date) by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(seal)

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Signature of Notary

If you have any questions please contact iacuc@iit.edu.