

**UNIVERSITY OF CALIFORNIA SAN FRANCISCO  
ENVIRONMENTAL HEALTH AND SAFETY/BIOSAFETY**

**HEPATITIS B AND HEPATITIS C VIRUS  
SURVEILLANCE FOR THE RESEARCH LABORATORY SETTING**

**I. PURPOSE**

The purpose of this policy is to provide a sustainable, healthy, and safe working environment for UCSF research laboratory staff, and animal research care staff; and, to prevent illness when conducting research on Hepatitis B and Hepatitis C.

**II. REFERENCES**

UCSF Communicable Disease Surveillance and Vaccination Policy

**III. DEFINITIONS**

**Staff:** applies to all UCSF employees, faculty, temporary workers, trainees, volunteers, students, and vendors, regardless of employer. This includes staff that provide services to or work in a UCSF Research Laboratory or Animal Research Center.

**Risk Category 1:** applies to staff performing activities with the highest risk of transmission of an infectious agent. These activities usually involve direct and/or prolonged contact with the infectious agent or with an animal capable of spreading the infection.

**Risk Category 2:** applies to staff performing activities with a probable risk of transmission of an infectious agent as a result of the geographic location of their work in a research laboratory or animal research center.

**IV. POLICY**

It is UCSF policy that staff in **risk category 1**, who work with or are exposed to Hepatitis B virus (HBV) and/or Hepatitis C virus (HCV) in a research laboratory, or to animals infected with HBV and/or HCV, participate in the mandatory HBV immunization and HCV Medical Surveillance Program respectively.

It is UCSF policy that staff in **risk category 2** who work in research laboratory, or in an animal research center where there is probable exposure to HBV, or to animals infected with HBV and/or HCV to participate in the elective HBV immunization program.

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**V. PROCEDURES**

1. The Public Health Officer in conjunction with the Biosafety Officer will identify all staff who performs either risk category 1 or risk category 2 activities with respect to HBV or HCV.
2. All research and LARC personnel who are risk category 1 for HBV – working directly with HBV or HBV infected animals – **MUST** be vaccinated for HBV or provide proof of HBV before starting work. Any necessary HBV screening will be provided by Occupational Health Services. Information about clinic hours and location can be found on the UCSF Occupational Health Program website: <http://www.occupationalhealthprogram.ucsf.edu/>.
3. Risk Category 2 for HBV includes other laboratory personnel sharing the same ABSL 2 housing and procedural rooms with HBV labs. These individuals will be offered the HBV vaccination by Occupational Health Services at no cost to the employee. Those who do not want the vaccine are able to decline, but **MUST** complete the online or paper Hepatitis B Vaccine Vaccination/Declination form (Appendix A).
4. Risk category 2 for HBV also includes all non-laboratory personnel entering or working in areas where HBV is used or where HBV infected animals are housed, such as LARC, IACUC, EHS and Facilities Management staff. These individuals will also be offered the HBV vaccination by Occupational Health at no cost to the employee. Those who do not want the vaccine are able to decline, but **MUST** complete the online or paper Hepatitis B Vaccine Vaccination/Declination form (Appendix A).
5. Personnel working in laboratory spaces or animal rooms where HBV and/or HCV are used **MUST** follow personal protective equipment (PPE) requirements posted for entry into that specified laboratory area.
6. All research laboratory personnel and animal care staff who are risk category 1 for HCV, working directly with HCV or HCV infected animals, **MUST** obtain a one-time baseline HCV titer test through UCSF Occupational Health Services before starting of work. There is currently no vaccination available for HCV. Any positive HCV antibody test will be followed up with viral load testing, and with advice to seek an assessment with the primary care provider.
7. The Public Health Office can assist with arranging the screening appointments and will maintain compliance records.
8. The Public Health Office will prepare an annual compliance report to be submitted to the Institutional Biosafety Committee (IBC), the Occupational and Wellness Committee, and the Institutional Animal Care and Use Committee (IACUC).

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**VI. RESPONSIBILITY**

Direct any questions about this policy are to be directed to the Public Health Officer, the Biosafety Officer, or Occupational Health Services.

The contact information for the Public Health Office is as follows:

Office of Environmental Health and Safety  
50 Medical Center Way  
San Francisco, CA 94146  
Phone: (415) 514-3531  
Fax: (415) 476-0581  
Email: [PublicHealthOffice@ucsf.edu](mailto:PublicHealthOffice@ucsf.edu)  
Campus Box: 0942

**VII. HISTORY OF POLICY**

It has been reviewed by the following:

Biosafety Officer – Peili Zhu  
Public Health Officer – Krista Lindstrom  
Occupational Health Services – Robert Kosnik

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**Appendix A**

**INFORMATION REGARDING HEPATITIS B EXPOSURE RISKS**

**HEPATITIS B:** Hepatitis B is a viral infection of the liver caused by the Hepatitis B virus (HBV). Each year approximately 40,000 new infections occur. Acute, short term illness can lead to a loss of appetite, diarrhea and vomiting, tiredness, jaundice, and general myalgia. However, long term chronic HBV infection can lead to much more severe liver disease, such as cirrhosis or liver cancer, and even death. Most people who become infected with Hepatitis B recover completely, but 5% to 10% will become chronic carriers of the virus. Although many chronic carriers do not have symptoms, they are capable of transmitting the virus, primarily through blood exposures and sexual contact.

**OCCUPATIONAL EXPOSURE:** In the hospital and university setting, health care workers with direct patient contact, laboratory workers and researchers with blood or body fluid contact are at increased risk for acquiring the Hepatitis B virus. An unvaccinated individual who receives an accidental blood or body fluid exposure from an infected source has up to a 30% chance of becoming infected with Hepatitis B. Each year in the U.S. several hundred health care workers contract Hepatitis B and of those, some will die from liver-related disease.

**VACCINATION:** Becoming infected with Hepatitis B is preventable. The Hepatitis B vaccine, a synthetic vaccine made from a yeast base, is currently being offered to health care workers and other exposed staff at UCSF at no cost to the employee. Full immunization requires completion of a series of three vaccinations given over a six-month period. Eighty to 90% of healthy people who receive the vaccine develop antibodies that protect them from getting Hepatitis B. There is no evidence that the vaccine has ever caused Hepatitis B. At this time, it is believed that immunity produced by the vaccine should last at least 20 years; the need for additional vaccinations has not been determined. Health care workers who are immunocompromised or on dialysis might require increased doses of the vaccine in order to convert to positive antibodies. The incidence of side effects from vaccination is very low. A few persons experience tenderness and redness at the injection site. A low-grade fever may occur. Rash, nausea, joint pain and mild fatigue have also been reported.

**TITER CONFIRMATION:** It is recommended to complete a titer test to confirm immunity whether the series was completed recently or in the past. Those that have completed the vaccination series in the past are also urged to complete a titer test in case additional vaccinations may be beneficial to boost immunity.

**TREATMENT OF EXPOSURE:** If an individual has received the Hepatitis B vaccine and has documented antibodies to Hepatitis B, no further treatment is necessary at the time of exposure. However, someone who is not protected by the vaccine and does not have antibodies to Hepatitis B needs to receive HBIG (Hepatitis B Immunoglobulin) as soon as possible after the exposure. These persons are also encouraged to receive the Hepatitis B vaccine at this time.

**REPORTING AN EXPOSURE:** UCSF has a 24 hour Exposure Hotline for anyone who has a blood or body fluid exposure. **Anyone with an exposure should call the Exposure Hotline 353-7842 (STIC).**

If you have any questions about Hepatitis B or the Hepatitis B vaccine, call UCSF Occupational Health Services at 415-885-7580.

**STATEMENT OF ACKNOWLEDGEMENT TO RISK**

I understand that due to my potential occupational exposure to bloodborne pathogens, I may be at risk of acquiring Hepatitis B and have been given the opportunity to receive the vaccination at no charge to me.

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

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**UCSF Occupational Health Services  
HEPATITIS B VACCINATION OR DECLINATION FORM**

Please return completed form to the [PublicHealthOffice@ucsf.edu](mailto:PublicHealthOffice@ucsf.edu) or fax (415-476-0581)

Last Name*: _____	First Name*: _____
UCSF Employee ID#*: _____	PI (if applicable): _____
Employment Start Date: _____	Email*: _____

\*Required field

**Have you completed the three-shot series of Hepatitis B vaccine in the past?**

Yes  No

I do not remember

If you responded yes or if you do not remember, would you like to complete a titer test with Occupational Health to confirm your immunity?

Yes  No

**Please select one of the following two options:**

Based off my personal medical history,

**Option 1: I consent to receive the Hepatitis B Vaccination.**

- I have read the information sheet about Hepatitis B and the Hepatitis B vaccine.
- I have had an opportunity to ask questions and understand the benefits and risks of Hepatitis B vaccination.
- I understand that I must have three doses of vaccine to confer immunity.
- Although, as with all medical treatment, there is no guarantee that I will become immune or that I will not experience an adverse side effect from the vaccine, I request that it be given to me.

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

**Option 2: I decline to receive the Hepatitis B Vaccination.**

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B (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 vaccine 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 the Hepatitis B vaccine or to confirm my immunity, I can receive the vaccination series or titer test at no charge to me.

Please check one of the following:

- I am declining the vaccination because I have received the vaccination in the past.
- I am declining the vaccination due to a medical contradiction.
- I am declining the vaccination for personal reasons.

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