

Hepatitis B Immunisation Policy

Introduction

The University is aware that some of its staff and students may be exposed to the Hepatitis B virus (HBV) as a consequence of their work activities. Good working practices should minimise the risk of occupationally acquired Hepatitis B, but these should be supplemented by a Hepatitis B immunisation policy.

The following document provides guidance for provision of Hepatitis B immunisation for workers who come into contact with human blood, blood products or blood stained bio-fluids, faeces and human tissues in the course of their work. Biofluids include: serum, plasma, breast milk, semen, vaginal and cervical secretions, urine, saliva, tears, peritoneal fluid, pleural fluid, pericardial fluid, synovial fluid, amniotic fluid and cerebrospinal fluid.

Clinical personnel who have contracts with both the University and with NHS Hospitals will be governed by the policy of the NHS Trust. The NHS trust would be expected to provide occupational health vaccinations for these staff.

What is Hepatitis B?

Hepatitis B virus (HBV) is a serious viral infection causing inflammation of the liver which is spread by contact with blood or body fluids from an infected person through broken skin or mucous membrane. The virus can infect without causing symptoms but some people suffer an acute disease with flu-like symptoms. If the infection persists it becomes chronic and the infected person may go on to develop cirrhosis or liver cancer.

HBV immunisation

Immunisation is by intramuscular injection of a Hepatitis B surface antigen (HBsAg) containing vaccine; this vaccine cannot cause the disease against which it protects.

There are several regimes available for the administration of Hepatitis B; Occupational Health (OH) will assess the risk to the employee from information given in the Biological agents medical questionnaire and select the most appropriate: the normal protocol is injection at 0, 1, 6 months with a blood test to check the immune response being performed 2 months after the 3rd injection (at approximately 8 months).

Who requires vaccination?

High-Risk – Workers working directly with purified HBV or handling blood, biofluids and tissues from donors with known HBV infection, or from sample populations with

increased risk of infection (e.g. intravenous drug users, donors from certain geographical locations where HBV is endemic).

For those employees in the High Risk category, unless there are medical reasons to the contrary, the University will normally require evidence of immunity to Hepatitis B prior to work commencing (undertaken as part of the Biohazard or GM health clearance process).

Moderate-Risk - Activities where there is a risk of contamination on a regular basis, but safe systems of work (including use of suitable and appropriate personal protective equipment where necessary), should normally provide adequate protection against Hepatitis B. Contamination incidents are isolated and recognisable. This includes laboratory workers handling blood, blood-stained biofluids or tissues from unscreened general UK population as well as staff undertaking the collection of blood from study participants.

Immunisation is offered and is recommended for these workers, work can usually proceed following the first two doses of vaccine.

Low-Risk - Work where there is occasional risk of exposure, but this is not a regular feature of employment. Potential contamination incidents are isolated and recognisable. This may include technical and safety staff working in areas where human materials are used or encountered. Also to include ancillary or domestic staff, security and maintenance workers who may come into occasional contact with blood-stained human fluids.

Immunisation is not recommended for these workers. Application of good personal hygiene and universal precautions (use of gloves, covering cuts with plasters and avoiding direct handling) should be sufficient to protect low-risk workers.

No Normal Risk - No potential for contamination in normal course of employment. Immunisation is not recommended for workers at no normal risk of HBV exposure at work.

Implementation of Policy

Research staff and postgraduate students who work with human material will be asked to contact Occupational Health Service who will discuss the current arrangements for vaccines and any required follow up procedure.

Workers in the high-risk category should supply OH with a copy of the project risk assessment

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Response to vaccine and the use of additional doses

A recommended level of Hepatitis B surface antibody (anti HBs) for those in the high-risk category is >100 IU/ml with a booster dose given after 5 years or following a contamination injury if appropriate.

For those in the moderate risk group a level of >10 IU/ml is considered adequate protection. A booster dose at 5 years will be to those in moderate risk categories.

OH will brief all recipients of the Hepatitis B vaccine prior to its administration according to their protocol.

Booster Doses of Vaccinations:

Occupational Health will keep a vaccination recall list and remind employees when a booster dose is due.

Management of Non-Responders to Hepatitis B Vaccine and workers who do not wish to receive vaccination

Existing staff and postgraduate students- the University recognises that a proportion of recipients may fail to develop an adequate immune response following the primary course or subsequent booster courses. Such individuals are seen at OH for a detailed review of their working practice to assess the potential for modification of those practices to reduce the risk of Hepatitis B transmission as far as this is reasonably practicable. Should this prove impossible, the employee will be fully counselled by OH (including discussions of the procedure to be followed in the event of a potential contamination episode where post exposure vaccination might be appropriate). If OH is then satisfied that the employee is fully aware of the degree of risk involved, it is expected that he/she will confirm in writing that he/she understands and accepts that risk. OH will then inform the University Human Resources (HR) Department of this decision.

Commencing New Projects

New Staff and postgraduate students - it should be noted that all successful applicants to posts designated High Risk would normally be required to demonstrate adequate immunity to Hepatitis B, as a condition of employment.

All employees and postgraduate students in the moderate risk categories will be required to complete the appropriate OH questionnaire. Although strongly advised, vaccination and subsequent antibody testing will not be compulsory in these groups.

OH will maintain a record of an individual's immune status, and document any decision to decline immunisation.

Record keeping

Occupational health will keep records of all staff and postgraduate students in the high and medium risk categories that undergo hepatitis B vaccination.

Contamination Injury/Accident

In the event of an incident exposing the individual to HBV contaminated material, the individual must attend the Accident & Emergency department in Royal Berkshire Hospital on the same day as the incident, where necessary a prophylactic vaccination may be given. The University Occupational Health Service must then be contacted and the risk assessed. The source of potential contamination (specimen, sample etc.) should be clearly identified and retained for testing (if necessary). A report of the incident should be completed by the line manager or principal investigator and sent to H&S Services.

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