

## EXECUTIVE SUMMARY

### POLICY FOR PREVENTION OF BLOODBORNE VIRUSES (HBV,HCV& HIV)

<b>HANDWASHING</b>	Hands should be washed or decontaminated appropriately before and after each procedure. Cover cuts and abrasions with a waterproof dressing (no visible air-holes). If skin is contaminated with blood or blood stained body fluids, wash off immediately. <b>Do not</b> use alcohol gel/rub as this cannot penetrate organic matter.
<b>GLOVES &amp; APRONS</b>	Non-sterile or sterile, as appropriate for the procedure. Gloves and apron should be worn for direct contact with any blood or blood stained body fluids or where it is likely that direct contact will occur.
<b>EYE PROTECTION</b>	Use mask/eye protection as appropriate to the procedure and where there is risk of facial splashing. If exposure occurs, contact Consultant Microbiologist or Director Nursing immediately (via hospital exchange).
<b>CONTAMINATED LINEN</b>	Wear apron and non-sterile gloves, for linen visibly contaminated with high risk fluids. Put contaminated linen into a plastic bag and label as "Risk of Infection" and send it to the laundry for further processing
<b>CLINICAL WASTE</b>	Discard into an <b>Red bag</b> for incineration
<b>SHARPS</b>	Discard used sharps immediately into a sharps bin. Do not re-sheath, disconnect or bend needles. Never overfill sharps container - seal and replace when 3/4 full. If exposure occurs, contact Consultant Microbiologist or Director Nursing for advice.
<b>SPILLAGES:</b>	Always wear gloves
<b>HIGH RISK FLUIDS</b>	<p><b>Minor spills</b> Should be soaked or sprayed with <b>Sodium Hypochlorite 1%</b> and left undisturbed for 5 minutes. Wipe with a cloth soaked with <b>Sodium Hypochlorite 1%</b>.</p> <p><b>Extensive blood spills:</b> Wipe <b>Fresh/dried blood</b> spill with paper towels, then spray it with <b>Sodium Hypochlorite 1% solution</b>. Wipe with a clean moist cloth</p> <p><b>Triacid-N can be used if Sodium hypochlorite not available</b> <b>Triacid-N 1% solution</b> should be sprayed on blood spillage and left for 15 minutes and then wiped with a moist clean cloth to remove blood stains.</p>
<b>LOW RISK FLUIDS</b>	Remove excess with paper towels. Wipe with general purpose detergent and hot water.



## **POLICY FOR PREVENTION OF BLOODBORNE VIRUSES (HBV,HCV& HIV) infection**

### **INTRODUCTION**

The Consultant in charge of the patient is responsible for ensuring that all members of the surgical team are aware of the infection hazards and the infection control measures to be taken.

Advice may be sought at any time from Consultant Microbiologist (contact via switchboard)

Hepatitis B Vaccination Hepatitis B vaccination is essential for all surgeons and members of the surgical team who have regular contact with blood.

### **HIGH RISK PATIENTS**

Patients at high risk of blood borne infections include patients who are:

- a) HIV Ab positive (with or without AIDS)
- b) HepB sAg positive
- c) Hep C Ab positive (especially those with viraemia i.e. HCV RNA PCR positive)

### **UNIVERSAL / STANDARD PRECAUTIONS FOR THE CONTROL OF INFECTION**

All staff working within theatre must use standard precautions at all times.

Healthcare workers who may come into contact with blood, secretions and excreta may be exposed to pathogens including blood borne viruses such as HIV, Hepatitis B and C. It is impossible to identify all those with infection, blood borne or otherwise. Therefore, it is recommended that all body fluids are regarded as potentially infectious and that standard precautions are used.

The most common means of transmission is direct contact, particularly via hands. Blood borne infections are most likely to be transmitted by direct percutaneous inoculation of infected blood via a sharps injury. Blood contact with broken skin or mucous membranes also provides a route of transmission. Adoption of universal / standard precautions aim to prevent transmission of blood borne viruses and minimize the transmission of other pathogens. The aim is to:

- Prevent sharps injuries
- Prevent contaminated items being used between patients

Universal/standard precautions apply to:

- Invasive procedures
- Care or procedures involving the handling of blood and body fluids
- Handling and cleaning of contaminated equipment
- Disposal of clinical waste materials and sharps.

Staff should ensure that they are familiar with infection control Policy and contact Consultant Microbiologist in case of any query (via hospital switchboard).

**Hand washing:** Hand washing must be carried out after removal of protective clothing, between patient contacts, after contact with blood and body fluids, before invasive procedures and before handling food.

**Skin:** Cuts and abrasions in any area of exposed skin should be covered with a dressing which is waterproof, breathable and is an effective viral and bacterial barrier.

**Gloves:** Seamless, non-powdered gloves should be worn whenever contact with body fluids is anticipated. Sterile gloves are required for invasive procedures.

**Aprons:** Disposable plastic aprons or water-impermeable gowns should be worn whenever splashing with body fluids is anticipated.

**Eye protection:** Visors or safety spectacles should be worn whenever splashing with body fluids or flying contaminated debris/tissue is anticipated.

**Masks:** Masks are worn when there is a risk of blood splash to the face.

**Sharps:** Take care during the use and disposal of sharps. Do not resheath sharps. Dispose of all sharps **at the point of use** into an approved sharps container. Do not overfill sharp container.

## **NEEDLESTICK INJURY**

**In the event of a sharps or needle stick injury:**

- 1 Encourage bleeding from the wound. Do not suck or rub.
- 2 Wash area thoroughly with soap and water
- 3 Cover with a waterproof dressing
- 4 If known, note the name of the patient
- 5 Report to Consultant Microbiologist
- 6 Notify line manager and document incident

### **Conjunctivae/mucous membranes:**

If splashed with blood/bloodstained body fluids, irrigate with copious amounts of saline and follow steps 4-7 above.

### **Spillages:**

Wear apron and disposable gloves. Absorb liquid using paper towels. For blood spills, sprinkle with NaDCC granules and leave for several minutes. Clean area with detergent and water and dry. In the absence of disinfectants, and for spillage of all other body fluids, clean

area thoroughly with detergent and water wearing protective clothing. Discard all equipment into yellow clinical waste bags.

### **Waste:**

All waste contaminated with blood or body fluids must be discarded into yellow clinical waste bags, labeled and sent for incineration according to local policy.

## TRANSPORTATION OF THE HIGH RISK PATIENT

### To theatre from ward

Where clinically appropriate, the patient may walk to theatre. If required, transport the patient to and from theatre in his own bed or trolley, made up completely with fresh linen. When transferred onto the operating table the theatre trolley should be inspected and if it is visibly dirty or blood/body fluid stained it should be cleaned with 1% hypochlorite solution\*.

\*If Sodium hypochlorite is not available, then Triacid-N 1% can be used. Spray Triacid-N 1% on blood/ body fluids stains and leave for 15 minutes before being wiped with a clean cloth.

### On return to ward

Recovery High-risk patients should be recovered in the recovery area following universal/standard precautions.

All used linen should be placed in a plastic bag, labeled as “High Risk of Infections” and returned to the laundry for further processing. Disposable linen must be discarded into yellow clinical waste bag. The trolley should be returned to theatre for cleaning using:

- a. A detergent wipe if not visibly dirty.
- b. 1% hypochlorite solution (10,000 p.p.m. available chlorine) if contaminated with blood. Obvious spillages must be cleaned immediately using this solution.

## GENERAL PRECAUTIONS

- 1 Whenever possible the Consultant/operating surgeon must ensure that the high risk patient is put last on the list, in order to allow time for adequate decontamination of the theatre afterwards.
- 2 Unnecessary equipment should be removed from the theatre, in order to reduce the amount of decontamination required after the operation. If it is envisaged that the operation will cause blood or body fluid loss which could splash or contaminate any surfaces then any movable equipment must be pushed away from the operating field and/or covered with a plastic sheet.
3. The operating team should be limited to essential staff only.
4. Disposable drapes should be used. Always check that the mattress cover is intact.
5. Pre-op shaving should be avoided. Clippers or depilatory cream may be used for

essential hair removal. Hair removal should not be carried out in the operation theatre.

## CONSULTANT RESPONSIBILITIES

The consultant in charge of the patient has ultimate responsibility for ensuring that all members of the surgical team are aware of any infection hazards and any infection control measures to be taken. In emergency situations or out of hours the operating surgeon will be responsible

PREPARATION OF THEATRE/EQUIPMENT Clear rooms of all non-essential equipment. Strip the anaesthetic machine of non-essential items. Autoclavable or disposable breathing circuits should be used. Use disposable suction bottles and tubing. Always make sure that the tubing is connected correctly, to avoid contamination of suction equipment.

INSTRUMENT DECONTAMINATION Please note that utmost care must be taken when handling used instruments. Instruments should not be pre-soaked in disinfectant before cleaning as this will not be fully effective in the presence of organic material and may give staff a false sense of security.

### Autoclavable instruments

Used instruments must be wrapped in original packaging and returned to HSDU where all sets and instruments are treated as contaminated. Plastic aprons and gloves (domestic quality rubber) must be worn when handling used equipment.

### Non-autoclavable instruments

Wear apron and domestic quality gloves. Wash instruments thoroughly, rinse and sterilise by immersion in appropriate disinfectant (according to manufacturers recommendations).

## SPILLAGES:

Blood: Wear gloves. Spray 1% Sodium Hypochlorite solution over spillage. Wait for 2 minutes. Wipe clean using a disposable cloth. Rinse disinfected area thoroughly. Wipe dry.

Faeces/vomit: Wear gloves & clean with disposable cloth and 1% Hypochlorite solution. Repeat a second time. Rinse disinfected area thoroughly and wipe dry.

Urine: Put on plastic apron and gloves and mop up excess urine using paper towels. Clean area thoroughly using 1% Hypochlorite solution . Rinse disinfected area with a fresh cloth and wipe dry.

## DISPOSAL OF WASTE

All waste/disposable items must be placed into a yellow plastic bag for incineration. Bags must not be filled more than  $\frac{3}{4}$  full. The top must be securely tied. The outside of the bag must not be contaminated with any blood.

Used disposable wound suction bottles must be properly capped, then placed inside a yellow plastic bag and sent to CSSD for cleaning and decontamination.

### FOOTWEAR DECONTAMINATION

Boots/clogs must be removed on leaving the contaminated area since blood is readily disseminated unwittingly from footwear. It is the responsibility of every individual to ensure that their own footwear is cleaned/decontaminated after every case.

**Decontamination procedure:** Wear gloves and plastic apron. Wipe outer surface of boots or clogs with disposable cloth soaked in 1% hypochlorite (10,000 ppm.) available chlorine) (use HazTabs). Wipe off with disposable cloth soaked in water. Repeat. Allow to dry. Discard cloths, gloves and aprons.

### DOMESTIC MANAGEMENT

Domestic quality gloves and aprons must be worn.

All equipment, surfaces and floor must be thoroughly cleaned with hot water and detergent. All surfaces should then be wiped over with a 0.1% solution of Sodium hypochlorite and allowed to dry. Disposable cleaning cloths should be used and disposed of immediately after use into yellow bag. The theatre can be reused after the surfaces have all dried and sufficient air changes have occurred.