

PROTOCOL:	ACCIDENTAL INOCULATION (SHARPS/NEEDLE-STICK/SPLASH) INJURY OCCUPATIONAL HEALTH POLICY AND PROCEDURE GUIDANCE DOCUMENT (V6)
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ACCIDENTAL INOCULATION INJURY GUIDANCE

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1. DEFINITIONS/ ABBREVIATIONS

Inoculation injury: any incident involving **inoculation** with blood or body fluids, splashes to broken skin, eyes, mouth or nose, or a bite.

NSI: Needle-stick injury or percutaneous injury from a 'medical sharp' source.

HCW: Healthcare Worker (including laboratory and clinical undergraduate, postgraduate & staff).

Recipient: The individual who sustained the inoculation injury.

Source (donor) Patient: Is the individual from whom the body fluid originated.

Medical sharp: Is any object, which can puncture the skin and may be contaminated by blood or body fluids from a clinical procedure. This might include the following: hypodermic needles, suture needles, scalpel blades, and dental burs, pieces of bone, teeth splinters, glass ampoules, and pathological specimens

Safer Sharp: Is a medical sharp that incorporates a protection mechanism into the design of the instrument, which reduces the risk of injury, particularly post-use and pre-disposal

Body Fluid Splash: Body fluid splash to mucous membrane or broken skin.

PPE: Personal Protective Equipment designed to protect the healthcare worker or member of staff from injury or exposure.

BBV: Blood-borne virus - a virus which is carried in the blood of an infected individual and which can be transmitted to another person exposed to the individual's blood.

HBV: Hepatitis B Virus

HCV: Hepatitis C Virus

HIV: Human Immunodeficiency Virus

HIV PEP: (Post Exposure Prophylaxis): HIV treatment medication given after an inoculation injury from a known or high risk HIV positive source patient to reduce the risk of transmission/seroconversion.

RIDDOR: Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (to HSE).

HSE: Health and Safety Executive

PHE: Public Health England

EPP's: Exposure Prone Procedures - Are procedures where injury to the HCW could result in the worker's blood contaminating the patient's open tissues. These include procedures where gloved hands may be in contact with sharp instruments, needle tips and sharp tissues (spicules or bone or teeth) inside a patient's open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times. The majority of HCW's and staff do *not* perform EPP's.

Percutaneous injury: Puncture of the skin with an object contaminated by blood or a body fluid e.g. needlestick injury.

Mucocutaneous injury: Blood or body fluid is in contact with a mucous membrane (e.g. eye, mouth) or visibly damaged skin (e.g. a wound or an area of dermatitis is exposed).

2. INTRODUCTION

Inoculation injuries such as needle-stick injuries (NSI), sharps injuries and body fluid splashes, present a potential infection risk for all HCW's. Inoculation injuries can also result in the transmission of Blood Borne Viruses (BBV's) from patients' blood, body fluids and tissues or from clinical waste products.

BBV's can be transmitted by percutaneous injury and mucocutaneous exposure from body fluid. BBV's are also potentially transmissible by a human bite if the bite breaks the skin of the person bitten.

Transmission of BBV's can occur from blood, visibly blood-stained body fluids, including cerebrospinal fluid, pleura and pericardial fluid, peritoneal and synovial fluid, amniotic fluid, vaginal fluid, breast milk, exudates and semen. . There is an increased potential infection risk from NSI's with: hollow bore needles; deep injuries; visible blood on the sharp object; a sharp that has been in an artery or vein; a source patient who has significant associated risks (see 7.3)

Most NSI and body fluid splashes are avoidable if suitable equipment is used and safe working practices implemented.

3. LEGISLATION:

The University has legal duties under the Health and Safety at Work Act 1974, to so far as is reasonably practicable, reduce the potential infection risks associated with the use of medical sharps and body fluid exposures to HCW's and staff. The Management of Health and Safety at Work Regulations 1999 and the Control of Substances Hazardous to Health Regulations 2002, impose further duties to assess and control these risks.

The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013 were developed to implement the EU Council Directive 2010/32/EU on the prevention of sharps injuries in hospital and healthcare sectors. The regulations apply specifically to healthcare employers and contractors working with healthcare employers. They support other health and safety legislation and although they recognise that medical sharps are an essential healthcare tool, they require their use to be risk-assessed. The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013, puts duties on employers, the self-employed and people in control of work premises (the Responsible Person) to report certain serious workplace accidents, occupational diseases and specified dangerous occurrences.

4. ROLES AND RESPONSIBILITIES

4.1. Clinical and Laboratory Staff and Student Responsibilities:

- to take reasonable care of themselves and others who may be affected by their actions;
- to use closed systems of phlebotomy and 'safer sharps' correctly, following rules, procedures and policies designed in the interests of health and safety;
- to report all incidents, illness and injury associated with or resulting from inoculation injuries to their Line Manager and to the Occupational Health at the hospital Trust where they are working in clinical placement; or the university Occupational Health if working on a University site/department;
- to complete an Incident Report for Health and Safety Services as soon as practicable;
- to follow the correct procedures where an inoculation injury occurs;

- to inform the university's Occupational Health Service of the incident as soon as reasonably practicable or if out of hours on the next working day.

4.2. Occupational Health Service Responsibilities:

- undertake individual clinical assessment post-injury and follow up screening if applicable for injuries occurring during work/study related activities amongst UOM clinical and laboratory staff, students and ancillary staff.
- provide medical advice and support (including immunisation);
- refer to Northern Sexual Health Service (preferably within the hour), or A/E for recipients requiring specialist treatment/PEP.
- report higher risk exposures to the HSE (note this is voluntary)

5. BLOOD-BORNE VIRUSES AND TRANSMISSION RISKS

In general, transmission of Hepatitis B virus (HBV), Hepatitis C virus (HCV) and HIV are the most significant presenting occupational cross-infection risks to health care workers (HCWs). The risk of BBV transmission is greater from patient to HCW than from HCW to patient, and is proportional to the prevalence of that infection in the population and to the infectious status of the individual source patient. Not all patients infected with BBV's have had their infections diagnosed. It is therefore important that all blood, body fluids and tissues are regarded as potentially infectious, and HCW's should follow precautions in all circumstances to avoid contact with them.

There is **no** evidence that BBV's can be transmitted by blood contamination of intact skin. It is foreseeable that a situation may arise where a patient could be exposed to the blood or other body fluid of a HCW, e.g. if a surgeon received a cut whilst performing an exposure prone procedure. Further advice can be sought from Occupational Health Services.

5.1 Human Immunodeficiency Virus (HIV)

Most cases of occupationally acquired HIV infection have arisen from percutaneous exposure to HIV infected material following injury from a hollow bore needle placed in a vein or artery e.g. venepuncture or cannulation; others have arisen through exposure of mucous membranes or non-intact skin to blood. Statistics for 2015 estimated that the HIV prevalence in the UK was estimated to be 1.6 per 1,000 population, or 0.16%, approximately 101,200 people. Of these more than 13,500 are living with an undiagnosed infection. Those currently on treatment for HIV (i.e. known diagnosis) usually have a very high rate of viral suppression (and so negligible transmission risk) – with 94% approximately having an undetectable viral load. (PHE 2016).

HIV transmission in health care settings is rare. The risk of acquiring HIV after a single percutaneous injury from a HIV positive source is approx. 0.3% (1 in 300) (HPA 2012)

There is at present no vaccine to prevent HIV infection. Post exposure prophylaxis (PEP) is available following a known/suspected HIV related inoculation injury from Northern Sexual Health Service Monday – Friday 9am -3pm Saturday 9.15am – 11.15am. Tel: 0161 701 1513 or A&E (out of hours). PEP should ideally be started within the hour but can still be considered for up to 72 hours afterwards.

5.2. Hepatitis B Virus (HBV)

HCW's can be protected against HBV by immunisation, which provides protection in up to 95% of those receiving it. (GSK 2017). However, immunisation is not a substitute for good infection control practice since it provides no protection against infection with other BBV's. All student HCW's who have direct contact with patients' blood or other potentially infectious body fluids or tissues, should be immunised against HBV. Occupational Health is responsible for keeping accurate health and immunisation records for each employee.

The risk of acquiring HBV after a single percutaneous injury from a Hepatitis B positive source is approx. 30% (1 in 3) (HPA 2012). However, 'of healthcare workers exposed to HBV and for whom immunisation status was reported (data limited to 2009 - 2013), 96% (300/313) were known responders to the HBV vaccine; no HBV seroconversions have been reported' (*Eye of the Needle United Kingdom Surveillance of Significant Occupational Exposures to Bloodborne Viruses in Healthcare Workers December 2014*).

5.3. Hepatitis C Virus (HCV)

At present, there is no vaccine to prevent HCV infection and no post-exposure prophylaxis for hepatitis C. However early treatment of acute hepatitis C infection may prevent chronic hepatitis C infection. This underlines the need for careful management and follow-up of occupational exposures and early referral for assessment and treatment. The risk of acquiring HCV after percutaneous injury from a Hepatitis C positive source is approx. 3% (1 in 30) (HPA 2012)

6. LOCAL RISK ASSESSMENT AND REDUCTION

All tasks and procedures that require the use of medical sharps or have a risk of body fluid splashes must be risk assessed locally and considered against the controls hierarchy:

1. Risk Avoidance
2. Substitution
3. Procedural Controls/Universal Precautions
4. Personal Protective Equipment (PPE)

6.1. Risk Avoidance

Adequate control measures must be implemented locally to avoid the unnecessary use of medical sharps. Where it is not reasonably practicable to avoid their use, 'safer sharps' must be introduced so far as is reasonably practicable (see **Health and Safety Sharp Instruments in Healthcare Regulations 2013**). <http://www.hse.gov.uk/pubns/hsis7.pdf>

6.2. Substitution – Introduction of 'Safer Sharps'

All 'safer sharps' must be evaluated locally before being introduced to determine if the device is suitable and appropriate for the procedure. It may be necessary to consider factors such as patient safety, reliability, ease of use and any other hazards the device may introduce.

6.3. Procedural Controls/Universal Precautions:

Where it is not reasonably practicable to introduce a safer sharp, the procedure must be risk-assessed to ensure that adequate controls and safe systems of work are implemented to reduce the risk so far as is reasonably practicable.

Many inoculation injuries are preventable by appropriate use and implementation of Standard Precautions. These universal measures include the following safe working procedures: 'closed' systems of phlebotomy, as needles and syringes present a risk of a needle-stick injury when transferring the sample from the syringe to the specimen bottle and because the technique may result in blood separation in the syringe (The Health and Safety Regulations 2013)

- checking the product instructions or local procedures to ensure correct use of medical sharps;
- not re-capping or re-sheathing medical sharps after use;
- using Sharpsafe® systems and equipment when available;
- disposing of used medical sharps immediately into a sharps bin;
- taking sharps bins to the point of use (e.g. patient's bedside on a tray or trolley);
- not overfilling sharps bins;
- using sharps bins that are a suitable size for the medical sharp being disposed of;
- ensuring medical sharps are fully contained in the sharps bin;
- disposing of needles and syringes as a single item whenever possible;
- using a needle-remover device in sharps containers where necessary (e.g. re-usable pen devices);
- ensuring that temporary closer mechanisms are secured when sharps bins are not being used;
- storing sharps bins appropriately to prevent access by children or vulnerable individuals;
- avoiding passing medical sharps from person-to-person or hand-to-hand.

6.4. Personal Protective Equipment (PPE)

Where other control systems do not control the risk adequately, PPE should be used. When required:

- risk assess and use the most appropriate PPE;
- wear suitable gloves where contact with blood and/or body fluids is foreseeable and change gloves between patients;
- use eye and face protection where there is a foreseeable risk of body fluid splashes (e.g. surgical procedures, delivery of babies, dentistry etc.);
- cover existing wounds, skin lesions and all breaks in exposed skin with waterproof dressings (seek Occupational Health advice and wear gloves if hands are extensively affected).

Remember! **Open>Use>Dispose**. Do not let anything interrupt this sequence of events.

The responsibility for safe disposal of medical sharps and other potentially infectious waste rests with the person who has used/created it. The person using the medical sharp has a legal and moral duty to dispose of it correctly and in accordance with the safe system of work for that procedure.

6.5. Medical Sharps Discarded by Others

The risk of bloodborne virus transmission from a needle found discarded in the community is very low.

The risk of BBV transmission following a percutaneous injury involving a used needle from an IVDU is dependent on the risk that the source is HIV, HCV or HBV positive, and the time that has elapsed since the needle was used.

Note: A discarded needle may well have been used to inject illicit intravenous drugs; however, blood in the bore of the needle is probably diluted with injection material, and viral load should diminish as it dries. Blood on the outside of the needle is likely to have been wiped by contact with grass, soil, clothing etc.; all this reduces the likely risk of HIV transmission from a needle of an unknown source to **no more than 1 in 30,000** (NHS Scotland). This does not justify the risks of post-exposure prophylaxis in most cases. Although HIV is often the greatest fear, hepatitis C and hepatitis B are more common and more transmissible. However, hepatitis C transmission is unlikely in the absence of detectable HCV RNA, and similarly, many chronically-infected hepatitis B carriers may also be of low infectivity.

Inappropriately discarded sharps may be discovered anywhere on the University's premises. They may be found in the grounds, secluded areas and are sometimes deliberately concealed (e.g. in toilet cisterns or above ceiling tiles). The most common source is from members of the public, particularly IV drug users.

On discovering discarded sharps, the priority is to prevent others from coming into contact with them and to report them, so that appropriate safe disposal can be arranged. No one should put themselves at risk by attempting to dispose of them. The Health and Safety Advisors or the Estates Team/Helpdesk (0161 275 2424) can be contacted for assistance.

7. ACTION TO BE TAKEN FOLLOWING INOCULATION INJURY

(See flowcharts in appendix 1).

Following an inoculation injury, the following steps must be followed:

7.1. First Aid

Bleed it – encourage the wound to bleed (**do not** suck it).

Clean it – wash the wound in clean running water with soap. Splashes to the eyes should be bathed with copious amounts of clean tap water and if applicable before and after removal of contact lenses as soon as possible

Cover it – cover the wound with a waterproof dressing.

Report it – report the injury to your Supervisor or Line Manager as soon as possible.

7.2. Reporting Inoculation Incidents:

In the first instance all individual to report the incident to their Line Manager, and complete relevant accident/incident form. Further action see below:

- a. **UOM Laboratory Staff/ Undergraduate/Postgraduate students based on a university campus**

For injuries occurring Monday- Friday 09:00-16:00.

Report to the UOM Occupational Health Department for advice and follow up.
Staff and postgraduates = 0161 306 5806 Email: millocchealth@manchester.ac.uk
Undergraduates = 0161 275 2858 Email: waterloocchealth@manchester.ac.uk
4th floor, Crawford House, Booth Street East, Manchester, M13 9QS

b. UOM Dental staff, Undergraduates and Postgraduates -

For injuries occurring Monday- Friday 08:00-17:00
Report all incidents Contact Employee Health and Well-being service Occupational
Manchester University NHS Foundation Trust, Oxford Road, Manchester
on 0161 – 276 -4289 for advice and follow up.

c. UOM Clinical Staff and Health Care Undergraduates and Postgraduates working within hospital and community areas.

For injuries occurring whilst on NH clinical placement Monday- Friday during normal office hours. Report to the Trusts Hospital Occupational Health Department for advice and follow up.

Outside these hours, at weekends or on Bank Holidays contact **A&E Department** of the nearest hospital for advice.

ALL INCIDENTS MUST ALSO BE REPORTED TO THE UOM OCCUPATIONAL HEALTH DEPARTMENT AS SOON AS PRACTICABLE OR IF OCCURRED OUTSIDE OFFICE HOURS ON THE NEXT WORKING DAY

Please ensure that all the relevant details regarding the source e.g. name and date of birth if available prior to contacting the relevant department.

d. Staff and undergraduate students on an elective placement outside the United Kingdom (UK).

Report all incidents to the person in charge. Incidents will be managed locally. If staff/students are travelling to endemic areas and there is limited availability or delayed access to hospital/clinical facilities. For example working in rural under developed areas it is advisable to have available their own supply of HIV post exposure prophylaxis (PEP) medication. Supplies can be purchased by contacting Dr Alec Bonington's (Infectious Diseases Specialist) secretary at the Infectious Diseases Unit at North Manchester General Hospital, Delaunays Road, Crumpsall, Manchester M8 5RB Tel : 0161 720 2734 and booking a place on a seminar.

All incidents must also be reported to the UOM Occupational Health Department as soon as is reasonably practical to arrange any further screening and follow up advice as appropriate.

Please ensure that all the relevant details regarding the source is available prior to contacting the relevant department.

Report the incident to the relevant Health and Safety Services. Staff/Postgraduates will use an Accident/Incident/Ill-health notification Form (see H&S intranet).

<http://www.healthandsafety.manchester.ac.uk/>

HCWs to complete local incident form as advised by the hospital Trust/Dental School/UOM department.

7.3. Source Risk Assessment and Relevant Information to Consider:

A risk assessment of the incident and exposure will be undertaken by those managing the incident and the recipient referred to the appropriate service (see appendix 1)

Source of the Inoculation Incident Unknown or Known?

If unknown, is there any indication of the origin of the device or body fluid? For example, was the device from a unit or area with patients/specimens known to have hepatitis B or C or HIV? (see also 6.5.).

If known, is the source patient known to be infected with HIV, Hepatitis B or Hepatitis C? If so, the validity of negative results varies depending on how long ago the tests were completed and current risks factors.

If the source patient is known to be infected with HIV:

- Has there been a recent/current seroconversion illness?
- Are they terminally ill with HIV-related disease? If so, viral load may be high.
- What is the most recently recorded viral load?
- Are they taking anti-retroviral drugs?
- Is there any evidence of viral drug resistance?

If the source patient is known to be infected with hepatitis B, are they:

- Hepatitis B surface Antigen positive?
- Hepatitis B e Antigen positive?

If the source patient is known to be infected with hepatitis C, are they:

- Hepatitis C rna positive

Risk factors if the Source Patient BBV status is unknown

The risk of being infected with HIV & HBV and HCV is increased in patients within the following groups:

- Men who have sex with men
- IV drug user
- Commercial sex worker
- Patients from Sub-Saharan Africa, L. America, S&SE Asia, E Europe, Caribbean
- Receiving transfusion of unscreened blood or plasma products (in the UK prior to September 1991 and 1985 respectively)
- Children born to mothers who are positive for BBVs

- Receiving invasive medical treatment in areas of the world where infection control precautions may have been inadequate; or with populations with a high prevalence of these infections.

7.4. Actions to be undertaken for Source Patient:

- SP blood tests are taken and managed by the hospital where the inoculation incident took place.
- The SP's clinical team will obtain blood for HBV, HCV & HIV to comply with Department of Health recommendations. This helps prevent discrimination of individual patients. Consent for testing should ideally not be obtained by the recipient, but by a member of staff in the clinical area.
- In high-risk incidents, arrangements should be made with virology for urgent testing of the SP's blood.
- Where it is not possible to gain informed consent, e.g. refusal or confused/unconscious patient, the recipient will be clinically managed according to available information and risk-assessment.
- In the case of a deceased source patient, *'testing should not be done routinely simply to protect the HCW. In any instance where there are grounds for believing that a serious communicable disease is present, the GMC advises doctors to assume that the body is infectious and take precautions accordingly'* (BMA).
- Incidents from a BBV positive SP can be reported by those managing the incident, to Public Health England (PHE) using the appropriate form (search PHE: *Occupational exposure to blood borne viruses: initial report form*). Additionally, in the rare event of the recipient seroconverting, an additional report can be sent.
- Incidents from a BBV positive SP should be reported by the relevant Health & Safety Department, to RIDDOR in the following circumstances; the SP is positive for a BBV; the recipient seroconverts, the recipient is absent from work, or unable to perform their normal work duties for more than 7 consecutive days as the result of their injury. The seven-day period does not include the day of the accident, but does include weekends and rest days.

7.5. Actions to be undertaken for Recipient:

- Undertake a blood test from the recipient for storage.
- Assess/test the recipient's hepatitis B immunity status as appropriate and determine the need for additional vaccines:
 - Are they unvaccinated?
 - Have they had one, two, three or more doses of hepatitis B vaccine?
 - What is the date of their last booster?
 - What is the hepatitis B surface antibody result?

If appropriate, arrange blood test follow up/recall with the exception of high risk follow-up which will take place at The Manchester Sexual Health Centre (Hathersage Centre).

- Recipients who subsequently seroconvert are managed by Occupational Health, under Public Health England guidelines (see Appendix 4): where *Integrated guidance of healthcare workers infected with blood borne viruses* October 2017 (diagnostic cut-off levels for healthcare workers performing EPP).

- Incidents from a BBV positive source patient can be reported by those managing the incident, to Public Health England (PHE) using the appropriate form (search PHE: *Occupational exposure to blood borne viruses: initial report form*). Additionally, in the rare event of the recipient seroconverting, an additional report can be sent.
- Incidents from a BBV positive SP should be reported by the relevant Health & Safety Department, to RIDDOR in the following circumstances; the SP is positive for a BBV; the recipient seroconverts, the recipient is absent from work, or unable to perform their normal work duties for more than 7 consecutive days as the result of their injury. The seven-day period does not include the day of the accident, but does include weekends and rest days.

7.6. Counselling of the Recipient:

Include information about:

- statistics regarding seroconversion risks;
- risks involved in this particular incident;
- steps to reduce the risk of BBV transmission;
- follow-up procedure and rationale behind it;
- ‘window period’ if the source patient has ongoing risk factors for BBV infection;
- infection control precautions (i.e. safe sex) and no blood donation during follow-up period, but no additional work restrictions;
- establishing support networks: friends, family and so-on;
- HIV and HCV follow-up tests (and HBV if not immune);
- Confidentiality.

Specific Advice to Needle stick Recipient following Injury

- Encourage safer sex practice following injury for a six month period until all follow up bloods are tested and results known.
- Advise not to share personal items like tooth brushes and razors that could hold small amounts of blood which could be a possible risk to others.
- Do not share needles or other drug equipment.
- Cover cuts and abrasions to the skin.

Allow time for the recipient to express anxieties and concerns and to answer questions.

8. CONTRACTORS, VISITORS & MEMBERS OF THE PUBLIC:

Contractors, visitors and members of the public should be advised to report inoculation injuries to the local Accident and Emergency department.

9. APPROVAL PROCESS

The Guidance is approved by the Head of Occupational Health, Pete Connolly.

10. REVIEW ARRANGEMENTS

This Policy will be reviewed in 3 years or when there are any significant changes. It will then be revised if appropriate.

11. REFERENCES

Needle stick injuries and blood borne viruses: decisions about testing adults who lack the capacity to consent. British Medical Association May 2016

<http://www.bma.org.uk/advice/employment/ethics/mentalcapacity/testing-for-bbv-from-needlestick-injuries>

Health and Safety Sharp Instruments in Healthcare Regulations 2013

<http://www.hse.gov.uk/pubns/hsis7.pdf>

Public Health England *Eye of needle: United Kingdom surveillance of significant occupational exposures to blood borne viruses in health care workers*, December 2014

Public Health England Guidelines *Integrated guidance of healthcare workers infected with blood borne viruses* July 2019

Reporting of Diseases Injuries and Dangerous Occurrences Regulations 1995 (RIDDOR) Health and Safety Executive

GlaxoSmithKline <https://gskpro.com/en-gb>

APPENDIX 1

1a. UOM Laboratory staff, undergraduate and postgraduate students based on a university campus immediate management flow chart

1b. Dental staff, undergraduate and postgraduates immediate management flow chart

1c. UOM clinical staff and health care undergraduates and postgraduates working within hospital and community clinical areas immediate management flow chart

1d. Contactors, visitors and members of the public not employed by UOM immediate management flow chart

APPENDIX 2

2a. Risk assessment for HIV PEP (post exposure prophylaxis)

2b. Risk assessment for Hepatitis B prophylaxis

APPENDIX 3

Risk assessment template for OHA use in clinic

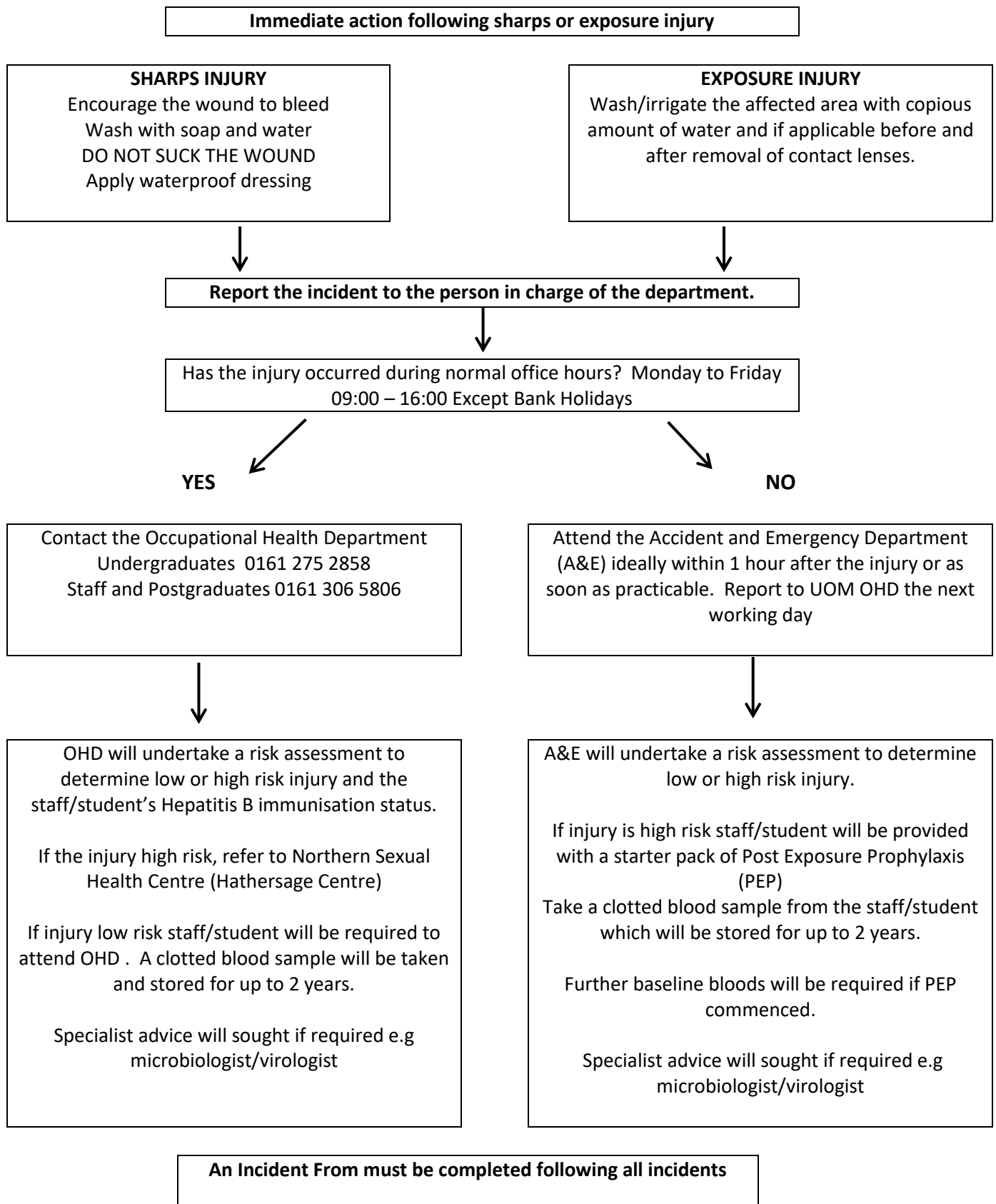
APPENDIX 4

Public Health England Guidelines *Integrated guidance of healthcare workers infected with blood borne viruses* October 2017

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/655418/Integrated_guidance_for_management_of_BBV_in_HCW_v1.1_October_2017.pdf

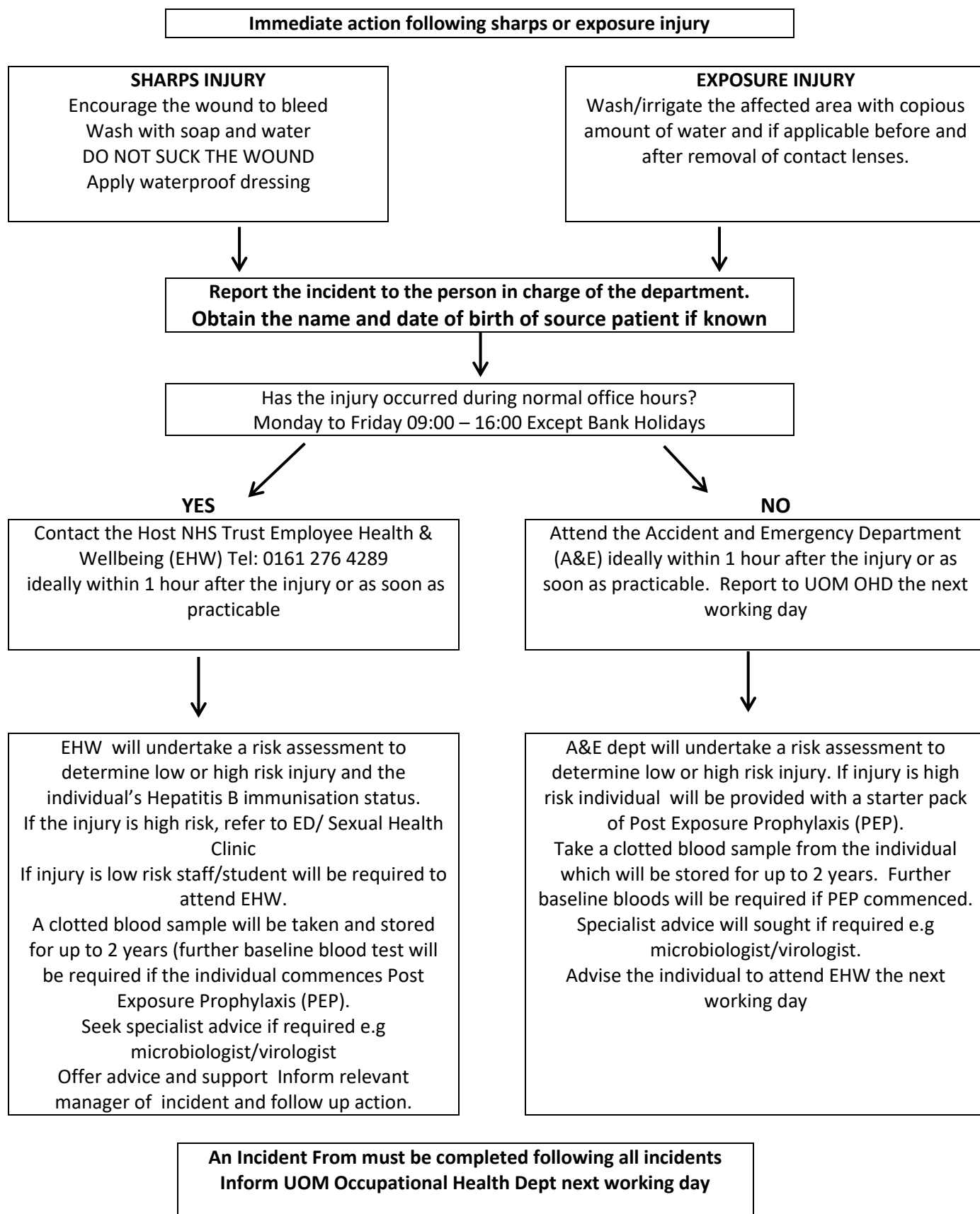
APPENDIX 1A

UOM Laboratory Staff/Undergraduate/Postgraduate Students based on a university campus Immediate Management of sharps and exposure injuries



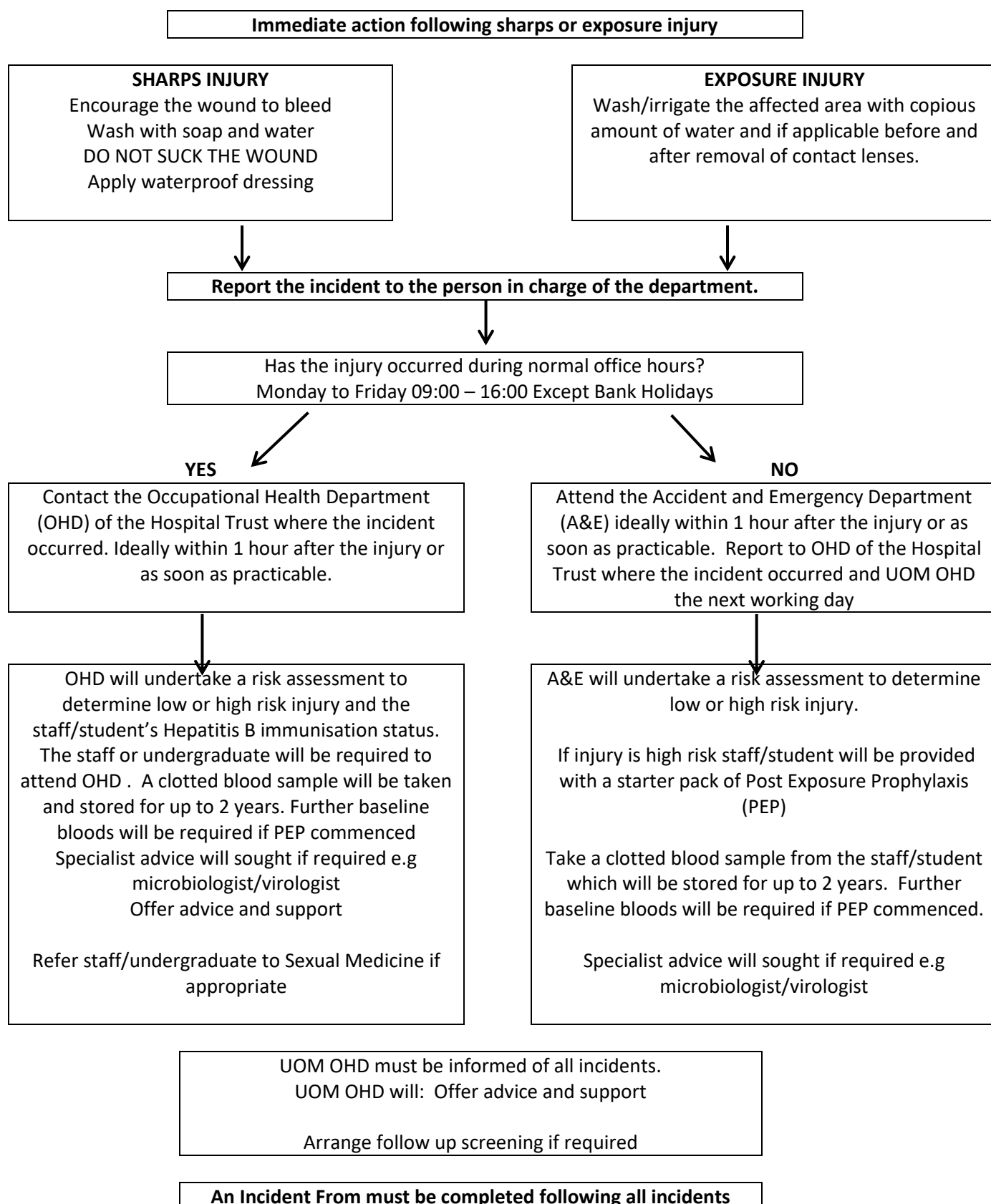
APPENDIX 1B

UOM Dental Staff, Undergraduates and Postgraduates Immediate Management of sharps and exposure injuries

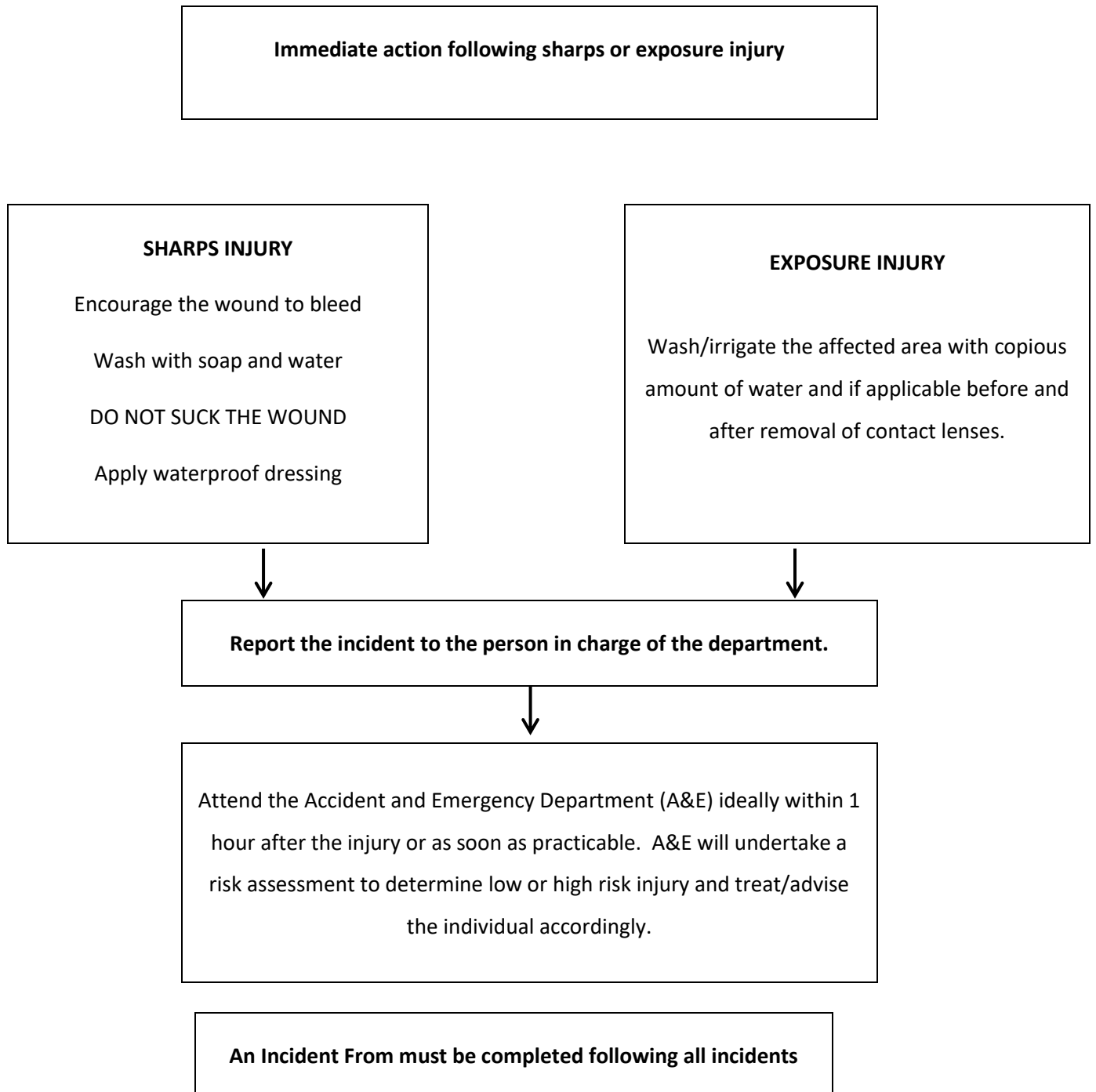


APPENDIX 1C

UOM Clinical Staff and Health Care Undergraduates and Postgraduates working within hospital and community clinical areas Management of sharps and exposure injuries



Contractors, Visitors and Members of the Public not employed by UOM
Management of sharps and exposure injuries



RISK ASSESSMENT FOR HIV PEP (POST EXPOSURE PROPHYLAXIS)

Recipient exposed to blood or high risk Body fluid within last 72 hours?

YES

NO

- High risk body fluids Blood, CSF, pleura & pericardial fluid, peritoneal & synovial fluid, amniotic fluid, breast milk, exudates, vaginal fluid, semen.
- Other visibly blood stained fluid.
- Saliva in association with dental procedures?
- Blood transfusion prior to 1991
- recipient of invasive medical treatment in developing countries

PEP Not Recommended

YES

NO

Donor risk factors for HIV
Known HIV +ve
Known BBV carrier
IV drug user
Commercial sex worker
Men who have sex with men
Donor from Sub-Saharan Africa,
L. America, S&SE Asia. E
Europe, Caribbean?

PEP Not Recommended

YES

NO

PEP Recommended
*First dose ideally to be given within
1 hour of exposure or as soon as
possible.*

PEP Not Recommended

**Refer to Northern Sexual Health Service
280 Upper Brook St, Manchester M13 0FH
Telephone number: 0161 701 1513**

APPENDIX 2B Risk assessment for Hepatitis B prophylaxis

Table 18.7 Hepatitis B prophylaxis for reported exposure incidents

HBV status of person prior to exposure	Significant exposure			Non-significant exposure	
	HBsAg positive source	Unknown source	HBsAg negative source	Continued risk	No further risk
Unvaccinated	Accelerated course of HepB vaccine plus HBIG with first dose	Accelerated course of HepB vaccine	Consider course of HepB vaccine	Initiate course of HepB vaccine	No HBV prophylaxis Reassure
Partially vaccinated	One dose of HepB vaccine and finish course	One dose of HepB vaccine and finish course	Complete course of HepB vaccine	Complete course of HepB vaccine	Complete course of HepB vaccine
Fully vaccinated with primary course	Booster dose of HepB vaccine if last dose $\geq$ 1 year ago	Consider booster dose of HepB vaccine if last dose $\geq$ 1 year ago	No HBV prophylaxis. Reassure	No HBV prophylaxis. Reassure	No HBV prophylaxis. Reassure
Known non-responder to HepB vaccine (anti-HBs < 10mIU/ml 1-2 months post-immunisation)	HBIG Booster dose of HepB vaccine A second dose of HBIG should be given at one month	HBIG Consider booster dose of HepB vaccine A second dose of HBIG should be given at one month	No HBIG Consider booster dose of HepB vaccine	No HBIG Consider booster dose of HepB vaccine	No HBV prophylaxis. Reassure

Adapted from: PHLS Hepatitis Subcommittee (1992).

Hepatitis B
June 2017

Hepatitis B

NB. HBIG – Hepatitis B Immunoglobulin is obtained via on-call virologist, Central Manchester hospital Tel 0161 276 0188
HBIG should ideally be given within 48 hours but can be administered up to 7 days post injury. An accelerated dose vaccine schedule consists of doses given at interval of zero, 1 and 2 months followed by booster at 12 months (12 months after first dose). Please note a booster dose should be given if the recipient is known to respond and has not had a Hep. B vaccine in the last 12 months.

APPENDIX 3

Accidental Inoculation Injury Management Flow Chart For OHA

Reported to UOM OHS Date..... Time.....

Description of incident.....

Clinical area..... Location

Immediate First Aid Measures

Date

Time

Encourage bleeding & wash with
copious amounts of running water

Cover with a dry dressing where
appropriate

Manager Informed

Date

Time

Incident Form

Date

Time

Completed/Advised

Type of sharp

Delete where applicable

Hollow bore needle Solid bore needle Other sharp.....

Depth of injury

Delete where applicable

Superficial (surface scratch)

Moderate (skin penetration)

Deep (penetrating wound)

Assessment of Exposure

Delete where applicable

Significant exposure

- Contaminated sharp (with blood etc)
- Contamination of broken skin
- Splash to conjunctiva/mouth
- Human bite (where the skin is broken)

Non-significant exposure

- Clean sharp
- Sharp not used in direct patient contact eg drawing up medicines/fluids

If any of the above apply,
administer first aid.

If any of the above apply continue with completion

of this form

No further action required re BBV

Material Involved

Delete where applicable

Blood / Plasma	Amniotic fluid
CSF	Saliva – visibly blood-stained or in association with dentistry
Pleural / Peritoneal fluid	Vaginal secretions
Other blood-stained fluid	Other
Specify:	Specify:

NB. Urine, faeces and vomit unless blood stained carry no risk of blood borne virus transmission.

Details of donor:

(where applicable) Name Date of birth Hospital number

Bloods obtained with consent for BBV testing (HIV 1, 2 abs/ag Hep. B sag, Hep. C rna and abs)

Yes..... Date..... Hospital/Clinic Location.....

No.....

Factors why (ie. patient unable to /refused to give consent).....

Donor Blood Results

HIV 1, 2 abs/ag

Hep. B sag

Hep C rna and abs.

Contributing factors

Sharps bin not at hand Sharps bin full Patient moved/confused.....Other.....

PPE

Delete where applicable

Gloves worn Yes/no Single/Double

Eye protection worn Yes/no Type:Goggles.Visor/Glasses

Assessment of need for HIV prophylaxis

Refer to appendix 2A

PEP indicated *Delete where applicable*

No

Yes

Refer to Sexual Health Service 280 Upper Brook St, Manchester, M13 0FH Tel 0161 701 1513.

Hepatitis B details of the recipient

PC dates Booster

Responder /non responder/unvaccinated. Course commenced/booster date.....

Assessment of need for Hepatitis B post exposure prophylaxis

Refer to appendix 2b

Hepatitis B IG indicated *Delete where applicable*

No

Yes Refer to Northern Sexual Health Centre Service

280 Upper Brook St, Manchester M13 0FH Tel 0161 701 1513

Baseline bloods taken for storage

Delete where applicable

Yes

Date.....

No

Appointment Date.....

Follow up screening schedule for:

Significant injury/exposure to known BBV or high risk incident and unknown source.

Time after exposure	HBV		HCV		HIV
	HBsAg	Anti-HBcore	HCV RNA testing	HCV Ab testing	
Baseline	Storage & test for HBsA/B if appropriate				
6 weeks	✓		✓		
12 weeks	✓		✓	✓	✓
24 weeks		✓		✓	✓

If HIV prophylaxis has been issued follow up screening to be guided by Sexual health specialist.

Follow up appointment date and required test.....

.....

.....

Assessment completed by OHA.....

Date.....

PLEASE ENSURE THIS FORM IS UPLOADED TO PATIENTS RECORD IN E-OPAS

APPENDIX4

Public Health England Guidelines *Integrated guidance of healthcare workers infected with blood borne viruses* July 2019

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/655418/Integrated_guidance_for_management_of_BBV_in_HCW_v1.1_October_2017.pdf

