PROTOCOL FOR NEEDLESTICK INJURIES IN COVID VACCINATION SITES

This document is summarised on the NICS Flowchart for "Management of Exposure to Blood Borne Viruses - Penetrating skin injury (needle-stick or human bite) or splash to mucous membranes with blood/saliva" (Appendix 2) which is based on PHE guidance (Appendix 1).

INTRODUCTION

The purpose of this protocol is to provide guidance for the urgent treatment and attention to injuries by sharps. It should be readily available in the event of an incident. For the covid vaccination sites there are two risks of needlestick injuries.

1. The syringe that the vaccine is drawn up into has an attached needle that cannot be changed. After drawing up the vaccine the needle needs to be re-sheathed as part of the aseptic technique.
2. Needlestick injury may occur when giving or having just given the vaccine.

MINIMISING THE RISK OF NEEDLESTICK INJURIES

Extreme care must be taken to ensure that needles and other sharp instruments are handled safely to prevent inoculation accidents.

1. No needle recapping or re-sheathing unless making up the vaccine.
2. When re-sheathing the needle at vaccine draw up, the needle case should not be held in the hand but put on the vaccine tray as the needle is re-sheathed.
3. Sharps should never be carried in the hand but in a tray.
4. The person receiving the vaccination must have their upper arm clear of clothing. When the syringe is removed it must be **immediately** put into the yellow lidded sharps bin.
5. Vaccination station should be set up correctly so sharps bin is within arm's reach.
6. Vaccinator should ensure the layout is comfortable for them and should move the sharps bin and cotton wool as necessary to avoid any need for reaching across a patient or across the desk with a sharp in hand
7. In use sharps bins should be off the floor and out of the reach of children. The lid should be closed when the vaccinator is not at the desk – so opened at start of shift and closed at end and if vaccinator goes away for a break.
8. Sharps should be disposed of by the person using them. **Never leave sharps to be disposed of by someone else.**
9. Do not overfill sharps containers. When three quarters full, securely close the container, completing the appropriate section on the front of the container and place at the clinical waste collection point.

PROCEDURE

The following action is recommended in the event of an inoculation injury. If the sharp object has been in contact with blood, tissue or other body fluids before the exposure, treat as a medical emergency

1. **IMMEDIATELY**:

    a) Make the wound bleed, if possible, by massaging under warm water
    b) Clean well with copious amounts of soap and running water, don't scrub or use antiseptic
    c) Apply occlusive dressing.
    d) Identify the source of the sharp.

2. If the needle stick was due to re-sheathing the needle before the injection was given the vaccine must be discarded.

3. Refer to the lead clinician at the vaccine centre and site manager who should speak to the patient and escalate to one of the Clinical leads of the vaccine programme (Dr Caroline Baker or Dr Nicki Mantel-Cooper).

Role of the Lead Clinician

1. Assess incident for seriousness of the wound
2. Obtain sufficient information to identify the patient and the member of staff.
3. Use the Risk Assessment form (Appendix 3) to take a focused and impartial history from the donor to identify risk of HIV, HEP B (HBV) and HEP C (HCV). This should be given to the recipient to take to A&E.
4. If a **STAFF MEMBER** has been exposed ("recipient"), they should contact Occupational Health (OH) IMMEDIATELY and attend local A&E. See flow chart for OH contact details.
5. Take the source ("donor") patient's details and ask for their consent for testing for blood borne viruses (BBVs). Ask them to attend their GP as soon as possible for blood tests. Contact the GP to inform them of required blood tests (HIV, HepB and HepC) so they can produce a blood test form.
6. If a **PATIENT** has been exposed ("recipient") they should be counselled and attend local A&E immediately regardless of history. The healthcare worker ("donor") should report the incident immediately to OH who will arrange for their blood tests. If OH is not available, they should attend A&E.
7. If either patient or healthcare worker is **known or highly likely** to be infected with a blood borne virus, then the "recipient" should attend A&E **within the hour** as they may need to start prophylactic treatment following full risk assessment. However, this is still worthwhile up to 36 hours post-exposure
8. The exposed individual will have a baseline serum sample taken for storage
9. A&E/OH will determine HBV status of "recipient" and consider booster even if good immunity, consider HEP B immunoglobulins.
10. The exposed individual will also require follow-up testing: Hepatitis C (RNA) at 6 weeks; Hepatitis B and C (antibody) at 12 weeks; further blood test at 24 weeks (anti-HCV/HIV, HBsAg)

Role of Site Manager

The site manager should complete both the accident report and a NICS incident form which should be sent immediately to Governance Manager , (lis.stanford@nhs.net), caroline.baker7@nhs.net and syheartlandsccg.svoc@nhs.net

Ensure the following is recorded

- The source of the sharp and description of the accident. Include the place, date, time and any witnesses.
- The name of the source patient (only use initials on the incident form but ensure full name and contact details are recorded separately)
- The action taken
- Any persons who gave advice and the advice given
- The advice given to the patient and/or staff member concerned
- The action taken to prevent recurrence
- Any identified root causes of the incident

Role of Governance Manager

Sharps injuries must be reported to HSE under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) if:

- An employee is injured by a sharp known to be contaminated with a blood-borne virus (BBV), e.g. hepatitis B or C or HIV. This is reportable as a dangerous occurrence
- The employee receives a sharps injury and a BBV acquired by this route seroconverts. This is reportable as a disease
- The injury itself is so severe that it must be reported

If the sharp is not contaminated with a BBV, or the source of the sharps injury cannot be traced, it is not reportable to HSE unless the injury itself causes an over-seven-day injury. If the employee develops a disease attributable to the injury, then it must be reported.

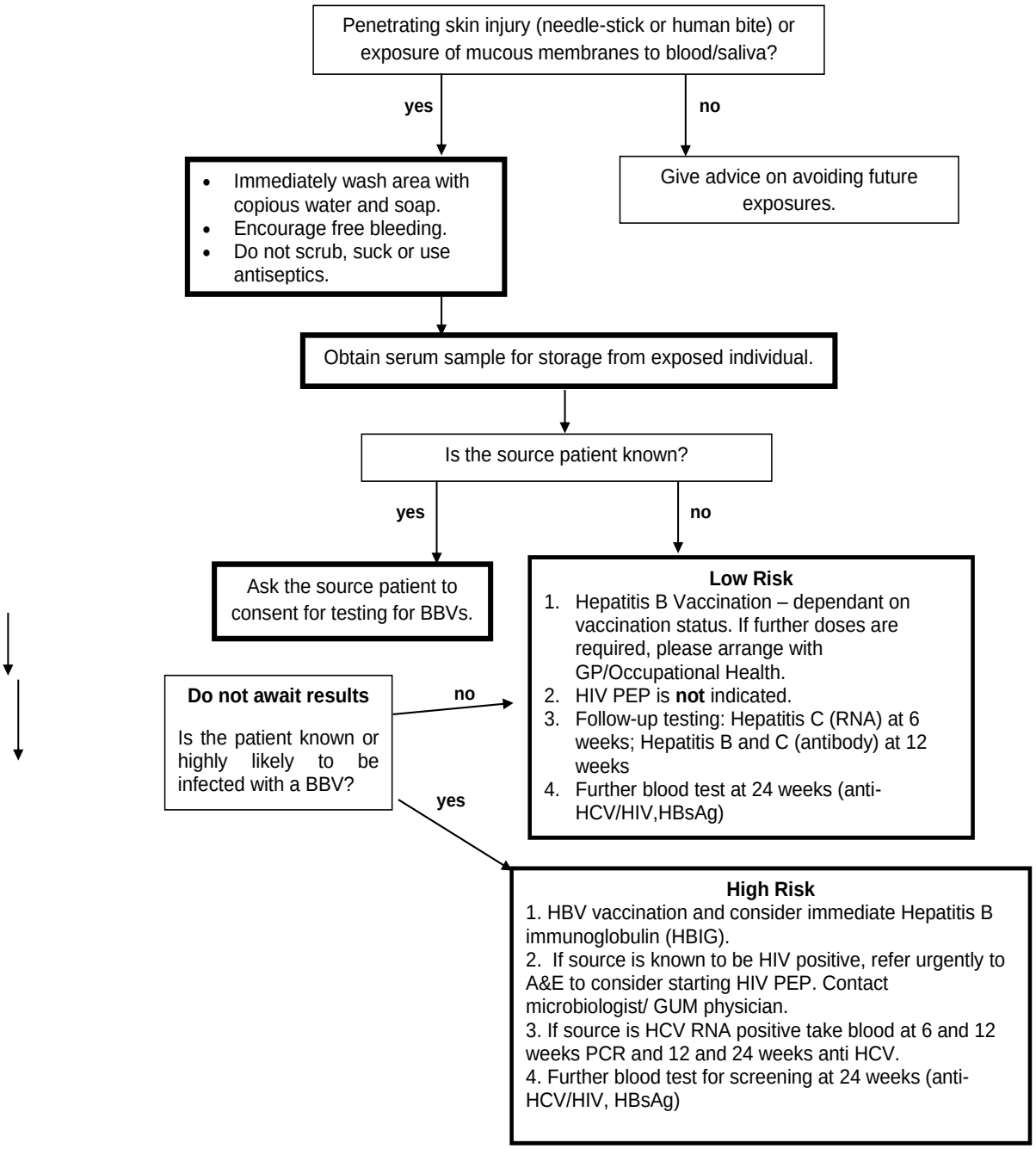
All contaminated needlestick injuries are reportable as Serious Incidents to Surrey Heartlands CCG. Email syheartlandsccg.sisurreyheartlands@nhs.net who will then send SI notification form and 72 hour report template

To raise awareness and to minimise the risk of future occurrences, a sharps injury should be discussed at safety huddles and the next Board meeting, where lessons identified can be discussed and any additional training delivered.

It is the responsibility of the person suffering a sharps injury to ensure that it is reported/recorded appropriately.

Appendix 1 PHE Guidance on Management of Exposure to BBVs

Management of Exposure to Blood Borne Viruses
(Includes primary health care workers, dental staff and members of the public)



It may be difficult to assess risk and will depend on the individual situation. Therefore, at a vaccination site, adopt the precautionary principle - assume that more protection is required as a precaution rather than less and refer all exposed individuals immediately to A&E for full risk assessment. In the case of a healthcare worker, also notify Occupational Health.

Appendix 2: Management of Exposure to Blood Borne Viruses - Penetrating skin injury (needle-stick or human bite) or splash to mucous membranes with blood/saliva

If the sharp object has been in contact with blood, tissue or other body fluids before the exposure, treat as a medical emergency

First Aid

- Needlestick injury- gently encourage bleeding by massaging under warm water
  - wash with soap and water – don't scrub or use antiseptic
  - cover with impermeable dressing
- Splash to mucous membranes with blood/saliva - wash copiously with water or saline
- Eyes – use emergency eye wash- before and after removing contact lenses if worn

Report Incident

- If YOU have been exposed after you have vaccinated a patient - ensure you ask the source patient ("donor") to remain on site
- If a PATIENT has been exposed due to you pricking yourself prior to vaccinating them - ensure you ask them ("recipient") to remain on site
- Report to the lead clinician and the site manager who will escalate to Clinical Lead of the vaccine programme and speak to the patient

Role of Lead Clinician

- Assess incident for seriousness of the wound
- If a STAFF MEMBER has been exposed, they should contact Occupational Health (OH) IMMEDIATELY or if not available, they should attend local A&E
- Take the source patient's details and ask for their consent for testing for blood borne viruses (BBVs). Ask them to attend their GP as soon as possible for blood tests
- If a PATIENT has been exposed advise them to attend local A&E immediately. The healthcare worker should report the incident immediately to OH who will arrange for their blood tests. If OH is not available, they should attend A&E
- If either patient or healthcare worker is known or highly likely to be infected with a BBV, then the "recipient" should attend A&E **within the hour** as they may need to start prophylactic treatment following full risk assessment
- The exposed individual should have a serum sample taken for storage
- They will also require follow-up testing: Hepatitis C (RNA) at 6 weeks; Hepatitis B and C (antibody) at 12 weeks; further blood test at 24 weeks (anti-HCV/HIV, HBsAg)

Role of Site Manager

- Fill out accident book and incident form - send to governance manager (lis.stanford@nhs.net),caroline.baker7@nhs.net and syheartlandsccg.svoc@nhs.net

Role of Service/Governance Manager

- Report to HSE if a sharps injury occurs with known BBV contamination, the recipient seroconverts following the injury or the injury lasts more than 7 days
- Email : syheartlandsccg.sisurreyheartlands@nhs.net if contaminated needlestick injury who will send SI notification form and 72 hour report template

Occupational Health Details

For NICS Employed Staff & CCG Redeployed staff (state NICS staff)
Medwyn Centre, Dorking
Tel: 01306 873936

Normal opening hours are 8.30-4.30 Monday to Friday so for any incidents outside these times individuals should attend their local emergency department and notify OH the next working day.

For CSH Staff:
esth.occhealth@nhs.net
Tel: 0208 296 2678

Normal opening hours are 8-4 Monday to Friday so for any incident outside these times individuals should attend their local emergency department and notify OH the next working day.

Other useful numbers:
The Health Protection Team
Public Health England South East
Tel: 0344 225 3861

Appx 3: RISK ASSESSMENT / ACTION FORM FOLLOWING POTENTIAL BLOOD BORNE VIRUS EXPOSURE INCIDENT IN HEALTH CARE WORKER OR OTHER INJURED PERSON

Form to be completed by clinical lead at vaccination site and taken to A&E by injured person

Date of assessment:	Time of assessment :

Assessors name :	Position :

Name of injured person:	D.O.B.	NHS Number

Please give details

Vaccination Site where injury occurred:

Telephone No:

GP Practice:

Employer (if healthcare worker): NICS/CSH/CCG/LMS/Other

Hepatitis B vaccination status:

Where a patient attending for vaccination is involved, ensure all details are also recorded at the site and follow flow chart. Complete a NICS Incident form for all needlestick injuries.

1. THE INCIDENT AND TYPE OF INJURY

Date of incident: **Time of incident:**

Document brief details of the incident (where it happened, part of body injured, activity being carried out).

Document the type of injury:
PERCUTANEOUS (NEEDLE OR SHARP)

	Hollow needle
	Solid needle
	Other sharp item

Was the sharp visibly contaminated with blood or high-risk body fluid? Yes No NK

Was there bleeding from the site of injury? Yes ☐ No ☐ NK ☐

Was the wound made to bleed immediately? Yes ☐ No ☐ NK ☐

Was the wound washed? Yes ☐ No ☐ NK ☐

EXPOSURE OF BROKEN SKIN OR MUCOUS MEMBRANE to blood / high risk body fluid

☐ Broken skin

☐ Mucous membrane (eye/mouth)

Type of body fluid or material involved:

NOTE: Human bites, in the absence of obvious blood in the mouth of the biter, are low risk for BBV transmission. A decision on whether to act as if an exposure incident has occurred should be taken on a case-by-case basis

2. IMMEDIATE ASSESSMENT OF THE SOURCE (donor) if known – please note this may be the healthcare worker OR the patient depending on the incident

The following are risk factors for BBV infection in the source – indicate which of these apply, if known:

NOTE: The clinical lead should complete this with the source (donor)

	Known HIV antibody positive
	Probable HIV positive (told by contact or someone else)
	Known Hep BsAg positive
	Known Hep C antibody positive
	Possible HIV related illness
	Homosexual / Bisexual man, especially if practising unsafe sex & not taking PrEP
	IVDU and needle sharing
	Country of birth / travel to sub-Saharan Africa (HIV and Hep B risk)
	Country of birth / travel to East Asia (Hep B risk)
	Prisoner
	Commercial sex worker
	Partners of the above

If the source is known HIV positive – are they on treatment? ☐ Yes ☐ No

If yes, what? _____

What is their viral load?_____ Which clinic do they attend? _____

Has a previous antiretroviral regimen failed? ☐ Yes ☐ No

Do they have any known resistance to antiretrovirals? ☐ Yes ☐ No