



What it is

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Immunisation

What actions to take

Reduce & prevent injuries



## NEEDLESTICK INJURY INFORMATION LEAFLET

This leaflet is intended for workers in a health care setting who have the potential of sustaining an inoculation injury. It is produced to help individuals take the appropriate actions when an injury has occurred, in-addition to the preventative measures that the individual or an organisation should take to minimise inoculation injuries.

Accidental inoculation with infected blood and or body fluids presents a real risk to health care workers. It constitutes a means of contracting occupationally acquired infections with Hepatitis B, C and HIV.

Percutaneous injuries involving hollowbore needles remain the most commonly reported occupational exposures in the healthcare setting. The Health Protection Agency reported in 2014 that doctors and dentists are known to report a higher number of occupational exposures than nursing professionals.



### What is it?

An inoculation injury is:

- **A needle or sharps injury:** where an accidental puncture of the skin has taken place by a contaminated needle or sharps instrument (blades, dental probes, scalpels).
- **Human bite:** blood borne virus (BBVs) are also potentially transmissible by a human bite if the bite breaks the skin of the person bitten.
- **Mucocutaneous injury:** is where blood, or body fluids mixed with blood comes in contact with a mucous membrane (eyes, nose, mouth, cuts).



### Who is at risk?

The main group of workers at risk from inoculation injuries are those within the healthcare sector. This includes doctors, nurses, dentists, physiotherapists, speech and language therapists, podiatrists, dental nurses, students. Non-clinical staff such as housekeeping staff may also be exposed to inoculation injuries.

Injuries can also occur in other fields of work such as the prison service, police, parks constabulary, probation services, social workers, youth workers, funeral industry, body piercing/body art industry.

Individual risks may vary according to the nature of work undertaken so risk assessment should be an ongoing process.



### What are the risks?

Generally, your risk of being infected with hepatitis B, hepatitis C and HIV is low. Moreover, risks of infection will vary on an individual basis, level of immunity(if any), type of contact and exposure to and type of disease. Prevalence rates of BBVs are known to be higher in certain populations and groups.

This may include:

- People who have injected drugs intravenously
- People who are from parts of the world where BBVs are common
- Men who have sex with men
- Recent history of body piercing, tattoos and blood transfusion, organs or body products that have not been screened for BBVs.

The risks are higher if:

- Visible blood is seen on the device which caused the injury
- The injury was caused by a needle which has been placed in a source patient's artery or vein
- There is a high virus load in the source patient's blood e.g. in terminal HIV.

The risks of transmission following an inoculation injury to a HCW from an infected patient has been estimated at:

- **1 in 3** when the source patient is infected with **Hepatitis B**.
- **1 in 30** for a patient infected with **Hepatitis C**.
- **1 in 300** for an **HIV positive patient**.

### Immunisation against blood-borne viruses:

All health care workers, including students and trainees who have direct contact with patient's blood or other potentially infectious body fluids or tissues, are expected to be immunised against the hepatitis B virus. The hepatitis B vaccine is known to provide up to 90% of protection to recipients. Those who are not immunised and sustain an injury will receive immediate treatment to prevent seroconversion of the virus.

However, immunisation does not lessen the need to follow strict cross-infection procedures.

**Hepatitis C:** There is currently no vaccine available to prevent hepatitis C infection following an inoculation injury.

**HIV:** There are currently no vaccine available to prevent the HIV. If you come into contact with HIV positive body fluid or tissues, report the incident to the needlestick helpline and go to the local Accident and Emergency department for PEP (post-exposure prophylaxis). Contact OH for a follow up.



### What actions do I need to take following an injury?

## Following an injury, try to remain calm and not panic



Encourage bleeding



Wash area immediately



Call Occupational Health



Report & complete incident form

- Do not scrub the affected area but encourage bleeding under running water by gently squeezing above the wound to reduce the risk of a virus entering the circulation.
- Wash the site immediately with soap and water, but do not put the broken area of skin into your mouth.
- Cover the area with a water proof plaster.

### Splashes to the mucutaneous areas:

- If you have had blood or blood-stained fluids splashed in your eye, mouth, cuts or abrasions, rinse the area with warm water or saline ( remove contact lenses first if you are wearing one. If you have had a splash in your mouth, DO NOT swallow the water used for rinsing the mouth).
- Keep a note of the name, medical information and location of the patient concerned.

Report to the Occupational Health Department between the hours of 9-5, Monday to Friday by calling:

**03333 449 006**

- If Occupational Health is closed or the source patient is known to be high risk for any of the mentioned infections, you should attend the Accident and Emergency department immediately and inform them of the circumstances of the incident. They will advise you on any further treatment that may be necessary and may inform you, your GP or Occupational Health of further blood tests to be taken at a later date. (NB: It is important to note that the management of your injury will depend on the hospital's inoculation policy).
- Report the accident to your manager and complete an incident form or as according to your company policy.



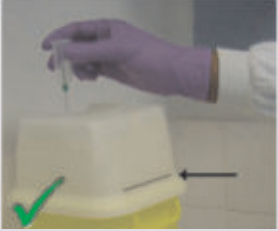



### How can I reduce and prevent inoculation injuries?

With due care and good working practices, the risk of experiencing an inoculation injury can be reduced considerably and the majority of inoculation injuries sustained in the healthcare settings are avoidable. Not all patients infected with BBVs have had their infections diagnosed. It is therefore important that all blood and body fluids and tissues are regarded as potentially infectious, and HCWs should follow precautions conscientiously in all circumstances to avoid contact with them.

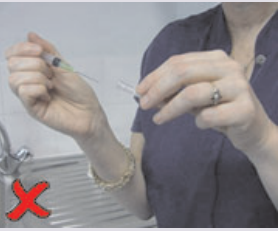


1. Wash hands before and after contact of each patient.
2. Do not place others at risk by leaving sharps exposed where they might result in an inoculation injury; always remove them promptly after use.
3. Wear gloves when cleaning equipments prior to sterilisation or disinfection.
4. Cover existing wounds, skin lesions and all breaks in exposed skin with waterproof dressings.
5. Clear up spillage of blood promptly and disinfect surfaces.
6. Place all disposable sharps in sharps containers immediately after use.
7. Discard disposable items as a single unit where possible, rather than dismantling them into their components.

**GOOD PRACTICE**

1. 
2. 
3. 
4. 

1. Dispose of sharps immediately after use in a designated sharps disposal bin
2. Take sharps bin to site of use and dispose of sharps directly into the sharps bin after use
3. Dispose of sharps bin immediately when it is full (indicated by arrow)
4. Always use universal precautions when at risk of exposure to or when handling blood, body fluids or tissues

**BAD PRACTICE**

1. 
2. 
3. 

1. Regardless of circumstances NEVER recap needles. Do not handle syringes without gloves
2. Do NOT use non specific bins for sharps disposal
3. Used sharps should NEVER be passed by hand between healthcare workers. The user of the sharps has the responsibility for disposal



### Documents used in producing this leaflet:

- HSE, Health and Safety (Sharp Instruments in Healthcare) Regulations 2013
- The Health and Safety at Work Act 1974
- The Reporting of Injuries, Death and Dangerous Occurrences Regulations (RIDDOR) 2013
- NHS Employers, Managing the Risks of Sharps Injuries, December 2015
- Public Health England, Eye of the Needle, December 2014
- HSE, Blood-borne viruses in the workplace, September 2011
- NHS Choices, What should I do if I injure myself with a used needle
- NHS Choices, What infections can used needles or sharps pass on

