NHS Employers

DECEMBER 2015

MANAGING THE RISKS OF SHARPS INJURIES

THE NHS STAFF COUNCIL
WORKING IN PARTNERSHIP

HEALTH, SAFETY AND WELLBEING PARTNERSHIP GROUP

INTRODUCTION

Sharps injuries are a well-known risk to workers in healthcare and for those who receive them they can cause anxiety and distress and may result in exposure to bloodborne viruses (BBVs) such as HIV or hepatitis B or C.

This guide has been developed to help individuals understand and manage the risks from sharps injuries.

CONTENTS

"Although the number of sharps injuries each year is high, only a small number cause infections that lead to serious illness."

1. SETTING THE SCENE

What are sharps?

Sharps are needles, blades (such as scalpels) and other medical instruments that could cause an injury by cutting or pricking the skin.

What is a sharps injury?

Sharps injuries occur when a needle or other sharp instrument accidentally penetrates the skin. This is called a percutaneous injury. If the needle or sharp instrument is contaminated with blood or other body fluid, there is the potential for transmission of infection and when this occurs in a work context, it's called, 'occupational exposure'.

When blood or other body fluid splashes into the eyes, nose or mouth or onto broken skin, the exposure is said to be mucocutaneous. The risk of transmission of infection is lower for mucocutaneous exposure than for percutaneous exposures. Other potential routes of exposure to blood or other body fluids include bites and scratches.

What are the risks from a sharps injury?

The main risks from a sharps injury is the potential exposure to the major blood-borne viruses:

- Hepatitis B virus (HBV)
- Hepatitis C virus (HCV)
- Human immunodeficiency virus (HIV)

Other infectious agents also have the potential for transmission through sharps injuries:

- Human tlymphotrophic retroviruses (HTLV I & II)
- Hepatitis D virus (HDV or delta agent, which is activated in the presence of HBV) hepatitis G virus (GB virus or GBV-C)
- Cytomegalovirus (CMV)
- Epstein-Barr virus (EBV)
- Parvovirus B19
- Transfusion Transmitted virus (TTV)
- West Nile virus (WNV)
- Malarial parasites
- Prion agents such as those associated with transmissible spongiform encephalopathies (TSE).

The risk of infection depends on a number of factors, including the worker's natural immune system, the depth of the injury, the type of sharp used, where the sharp entered the body and how infectious the patient is at the time of the injury.

Although the number of sharps injuries each year is high, only a small number cause infections that lead to serious illness. However, the effects of the injury and anxiety about its potential consequences, including the side effects of post exposure prophylaxis can have a significant impact on an injured employee.

Who is at risk?

Anyone working in healthcare can be at risk. This includes those who directly handle sharps but also includes workers who may be put at risk when sharps are not stored or disposed of correctly eg cleaners.

Public Health England runs a national surveillance scheme[1] collecting information on significant occupational exposures caused by sharps injuries and publishes the results in its *Eye of the Needle* report.[2]

The *Eye of the Needle* report stated that of all BBV related injuries:

- 45 per cent were experienced by nurses, midwives and healthcare assistants
- 41 per cent by doctors
- 7.5 per cent by professions allied to medicine
- 5 per cent by dentists and dental nurses
- 1.5 per cent by ancillary staff.[3]

Although this latter figure may appear low, it is still significant considering that ancillary staff do not provide direct clinical care and therefore should not be required to handle used needlestick devices.

65 per cent of injuries were sustained during a clinical procedure, 27 per cent after the procedure but before disposal, and 10 per cent using and after disposal.

It difficult to know the true nature of the problem as many sharps injuries go unreported each year. Employers in the NHS estimated approximately 40,000 needlestick injuries a year and recognised that the true figure may be twice this. In 2008 the Royal College of Nursing (RCN) estimated 100,000 needlestick injuries a year and in the same year a survey of members indicated that 48 per cent of respondents had been injured by a needle or other sharp at some point in their career.

The 2014 *Eye of the Needle* report showed that:[4]

- Between 2004 and 2013, 4,830 occupational exposures to blood or other high-risk body fluids were reported, of these 3,396 were caused by a sharps injury.
- Between 2004 and 2013, 1,478 healthcare workers were exposed to HIV following a sharps injury, 590 to hepatitis B and 2,566 to hepatitis C.

The report also stated that there had been nine seroconversions to hepatitis C but none to HIV and hepatitis B. The 2012 edition of *Eye of the Needle*[5] documented cases going back as far as 1984 and reported that there had been five documented and 47 probable cases of seroconversion to HIV following an occupational exposure.

In 2003, the National Audit Office (NAO) published *A safer place to work – improving the management of health and safety risks to staff in NHS trusts*. The report and the subsequent Public Accounts Committee hearing, highlighted the need for better management of sharps incidents in the NHS.[6] The report claimed that sharps injuries accounted for 17 per cent of accidents to NHS staff and were the second most common cause of injury, behind moving and handling at 18 per cent.

Reporting sharps injuries

One of the major problems associated with the management of sharps incidents is the under-reporting of exposure incidents. One study evaluating sharps injury reporting amongst surgeons identified that although 73 per cent had had a sharps injury in the last year, only 26 per cent of these said they had reported all their injuries.

The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013, require that employees 'promptly report all injuries from medical sharps to their employer, or to their employer's representative with specific responsibility for the health and safety of persons at work.'

At a local level

Under the sharps regulations the employer must ensure they have sufficiently robust arrangements to allow employees to report a sharps injury as soon as practicable, including those who work out-of-office hours and away from the employer's premises. This is important for four reasons:

1. It ensures appropriate management to reduce the risk of blood-borne virus transmission.
2. It documents the incident and the circumstances, which is essential for the subsequent investigation of occupational injury or infection.
3. It provides accurate surveillance, so that collective data analysis can inform measures to reduce the risk of further exposures.
4. It is a legal requirement.

Trusts interested in devising a format for collecting their data comprehensively might wish to refer to the Safer Needles Network[7] or to one of the health service unions, who all have experience in this area.

Certain exposures to blood-borne pathogens must be reported to the Health and Safety Executive under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

In 1991, the Exposure Prevention Information network[8] was developed in the USA to provide standardised methods for recording and tracking sharps injuries.

The system allows you to:

- identify injuries that may be prevented with safer sharps devices
- share and compare information and successful prevention measures with other organisations
- analyse injury frequencies by attributes like jobs, devices and procedures.

At a national level

Public Health England collect occupational exposures which include:

- percutaneous exposures – where the skin has been broken by a needle or other sharp object, or a human scratch or bite
- mucocutaneous exposures – where the mucous membranes, (mouth nose or eyes), or non-intact skin has been contaminated.

These are defined as significant exposures. All such cases should be reported to the Public Health England national surveillance scheme. Further information about the scheme can be found on the Gov.co.uk website.[9]

Certain exposures to blood-borne pathogens must be reported to the Health and Safety Executive under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).[10]

Sharps injuries must be reported when:

- an employee is injured by a sharp known to be contaminated with a blood-borne virus (BBV), eg hepatitis B or C or HIV. This is reportable as a dangerous occurrence
- the employee acquires a BBV infection as a result of a sharps injury. This is reportable as a disease
- the employee is absent from work for over seven days.

If the sharp is not contaminated with a BBV, or the source of the sharps injury cannot be traced, it is not reportable 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.

The legal position

There are a number of legal requirements that place duties on employers to protect workers from sharps injuries. By failing to prevent sharps injuries, employers can be found to be in breach of these legal requirements and may be prosecuted. Many employers have settled such cases, resulting in substantial legal expenses and compensation payments.

In 2004 a legal ruling against the Scottish Ambulance Service ruled that cost grounds alone cannot be a reason not to purchase safer sharps devices, as this breached European health and safety laws.

In 2010 the Health and Safety Executive prosecuted an NHS trust after a healthcare worker acquired hepatitis C infection after injuring herself on a needle used to take blood from an infected patient. The trust was fined £12,500 plus £9,000 costs and suffered reputational damage.

Health and safety legislation

The Health and Safety at Work Act 1974 (HSWA) is the primary legislation covering occupational health and safety in the UK. It sets out the general duties that employers have towards employees and members of the public, and employees have to themselves and to each other. These duties are qualified in the act by the principle of 'so far as is reasonably practicable'. This means balancing the risk against the sacrifice (whether in money, time or trouble) involved in taking the measures needed to avert the risk.

Key regulations that apply to managing the risks of sharps injuries.

The Health and Safety (sharp instruments in healthcare) Regulations, 2013.

These regulations supplement existing health and safety legislation (listed below) that already require employers to take effective action to control the risk from sharps injuries. In summary, employers and contractors working in healthcare are required to:

- have effective arrangements for the safe use and disposal of sharps (including using 'safer sharps' where reasonably practicable, not recapping of needles after use and placing sharps bins close to the point of use)
- provide the necessary information and training to workers
- investigate and take action in response to work related sharps injuries.

HSE has produced an information sheet Health Services Information Sheet 7 – Health and Safety (Sharp Instruments in Healthcare) Regulations, 2013 to provide guidance on how to comply with the regulations.

Key regulations that apply to managing the risks of sharps injuries *continued*

Existing health and safety legislation

- **The Control of Substances Hazardous to Health Regulations, 2002**
  These regulations require employers to make an suitable and sufficient assessment of the risks to the health of workers exposed to hazardous substances, with a view to preventing or controlling the risks. This includes the proper use of protective equipment and regular monitoring of exposure.
- **The Management of Health and Safety at Work Regulations, 1999**
  These regulations require employers to assess risks to the health and safety of their employees and arrange for the implementation of a system of safety management.
- **The Provision and Use of Work Equipment Regulations, 1998**
  These regulations set out the requirement to provide suitable, maintained work equipment and provide adequate information and training in their use.
- **The Personal Protective Equipment at Work Regulations, 1992**
  These regulations set out the requirement to provide appropriate personal protective equipment where other controls cannot sufficiently control the risks.
- **The Reporting of Injuries, Deaths and Dangerous Occurrences Regulation,(RIDDOR), 2013**
  RIDDOR require employers to report certain types of occupational diseases, injuries and dangerous occurrences.
- **The Safety Representatives and Safety Committee Regulations, 1977**
  These regulations set out the requirement for employers to consult with accredited trade union safety representatives on health and safety issues.
- **Health and Safety (consultation with employees) Regulations, 1996**
  These regulations require employers to set up effective means of liaising and consulting with employees.

Healthcare legislation

Under the Health and Social Act (2008), the government published a specific code of practice for the prevention and control of healthcare-associated infection. The code requires NHS bodies to implement policies that encompass 'the provision of medical devices incorporating sharps protection mechanisms'. It places a statutory duty on NHS healthcare organisations to make arrangements to put the provisions of the code into practice, backed up by action if there are significant failings in relation to the code.

The Care Quality Commission (CQC) operates the legislation regulating health and adult social care in England. Every health and adult social care service in England is legally responsible for making sure it meets fundamental standards of quality and safety. The CQC registers and licenses care services to ensure they meet fundamental standards and monitors them to make sure they continue to do so.

The CQC assesses NHS trusts' performance against the provisions laid out in the code of practice for the prevention and control of healthcare associated infections. The code specifically addresses the need to prevent exposures to blood-borne viruses including the prevention of sharps injuries.

The code states that measures to avoid exposure to blood-borne viruses should include:

- immunisation against hepatitis B
- the wearing of gloves and other protective clothing
- the safe handling and disposal of sharps, including the provision of medical devices incorporating sharps protection
- measures to reduce risks during surgical procedures.

2. PREVENTING EXPOSURE

Everyone has a role to play in the prevention of sharps injuries, from the chief executive and the board who have overall legal responsibility for the health and safety of their staff. To individual workers who have a duty to protect themselves and others around them, employers are responsible for assessing risk and preventing exposure to biological hazards, or reducing the risks of exposure as far as possible.

Employers should:

- determine the policy and plan for preventing sharps injuries
- identify and assess risks (five steps to risk assessment)
- manage significant risks by implementing appropriate control measures
- measure performance to ensure risks are being managed
- review performance to ensure your plan for implementation is still effective.

Determine the policy and plan for implementation

Organisations should have a strategic plan to reduce sharps injuries and commitment should be secured from senior management to put necessary funding and resources in place to achieve this.

Organisations should familiarise themselves with the requirements of existing legislation, implementation guidelines and any supplementary information to support the risk assessment process.

Employees and safety representatives should be consulted and fully involved and, local partnership working and good communication between internal parties, i.e. health and safety, infection prevention and control, occupational health, clinical leads and procurement staff is key to successfully implementing a plan that will work. As a result of assessing and managing the risks from sharps injuries, organisations should develop suitable policies and procedures to help employees understand the actions that are required to prevent exposure and to help employers monitor and measure how the risks are controlled.

Identifying and assessing the risk

Employers are responsible for assessing risks and preventing exposure to biological hazards, or reducing the risks as far as possible. Below is a five step guide to risk assessment based on the Health and Safety Executive's, *Five Steps to Risk Assessment*. This is not the only way to do a risk assessment, and there are other methods that work well, however, this is the most straightforward to follow.

Step 1 – identify the hazards

All used sharps injuries are a hazard that could lead to a worker being exposed to a bloodborne virus. The risk of exposure will vary depending on the activities undertaken. However, while in some areas the risk may be relatively low, the anxiety of having to go through blood tests, waiting for results and possible treatment can cause the worker a great deal of distress.

Therefore, the risks should be assessed in all situations where a worker may be exposed to blood or other potentially infectious material.

Step 2 – decide who might be harmed and how

The legal requirements cover all workers under the managerial authority and supervision of healthcare employer organisations. This extends not only to those who are directly employed, but also some self-employed workers, agency and bank nurses, and any workers employed by organisations contracted to provide services (eg cleaners and other ancillary staff).

There are many types of healthcare and hospital work that can expose individuals to the risk of sharps injuries. These include:

- clinical work and procedures such as phlebotomy, cannulation, vaccination, acupuncture and surgical procedures
- ancillary services such as cleaning, portering, hospital laundry and sterile supplies
- diagnostic and laboratory work
- mortuary work.

Workers who carry out procedures using sharps are those most at risk. These include nurses, Operating Departmental Practitioners (ODPs), phlebotomists, physiotherapists, doctors and laboratory technicians. Cleaning staff also have a high exposure risk if sharps are not properly disposed of. Community based staff also need to be considered, as managing risks away from a healthcare site can be more difficult.

Injury can occur with a wide range of devices, but those with a higher risk of injury include needles, intravenous cannulae, winged steel needles ('butterfly' devices) and phlebotomy needles.

"The majority of incidents occur in wards, theatres and accident and emergency units."

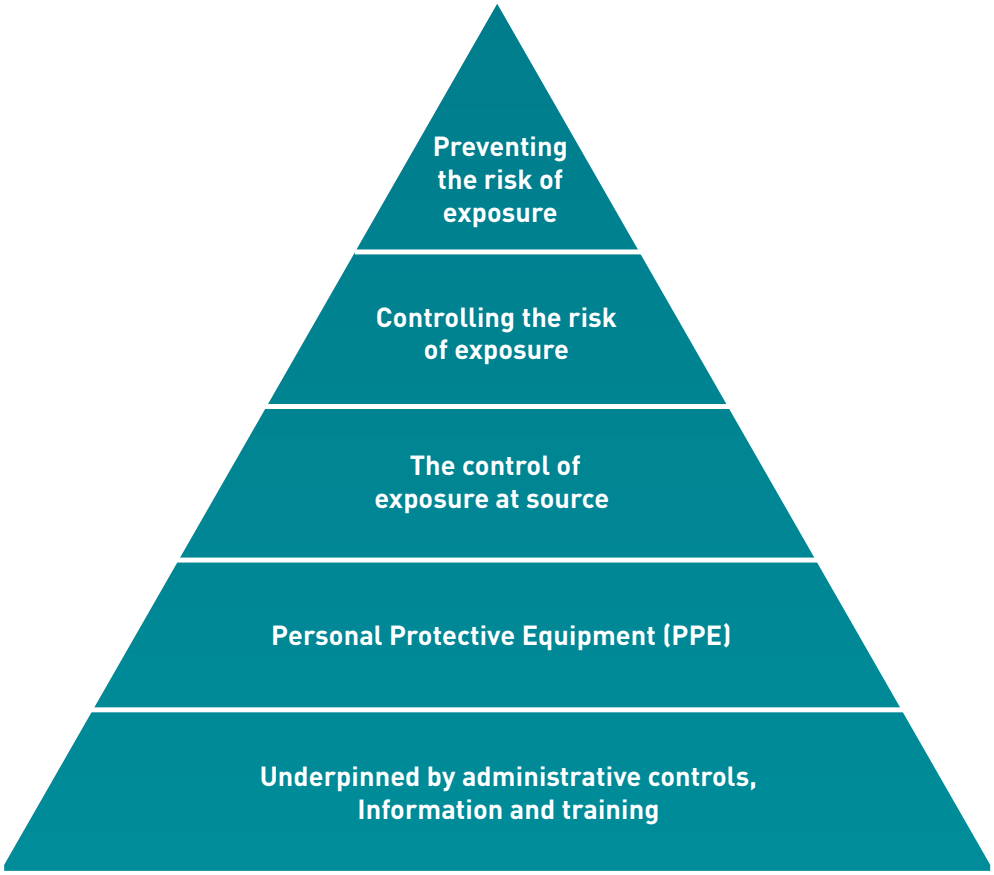
Existing data on sharps injury reports can be used to identify areas that report high numbers of sharps. However, as there is often under reporting of sharps injuries within organisations, this may not be reliable. The Public Health England's *Eye of the Needle report*[11] shows that the majority of incidents occur in wards, theatres and accident and emergency units.

Risk to Patients – this guidance is primarily aimed at reducing and managing the risks (associated with sharps injuries) to healthcare staff. However, when managing sharps injuries it will be necessary to consider the risks to patients, advice on this can be found on the Public Health England website.[12]

Step 3 – evaluate the risks and decide on precautions

The easiest way to start step three is to compare what you are doing now with good practice. Firstly you should consider whether you can eliminate the hazard altogether and if not, how the risks can be controlled so that harm is unlikely.

The Control of Substances Hazardous to Health Regulations (COSHH) require you to follow a hierarchical approach to the prevention of sharps injuries (see diagram below). The hierarchy reflects the fact that eliminating and controlling risk by using physical engineering controls and safeguards is more dependable than relying solely on systems of work.



You can find further information on safety devices currently available under NHS procurement services by emailing sharps@supplychain.nhs.uk

Preventing the risk of exposure

The complete removal of a hazard from the work area is the most effective way to control hazards; this approach should be used whenever possible. Examples include:

- removing sharps and needles when possible eg substituting jet injectors for needles and syringes or using needleless intravenous systems
- eliminating all unnecessary injections
- eliminating unnecessary sharps such as towel clips.

Controlling the risk of exposure

If the risk cannot be prevented, then the risk of exposure to hazardous substances must be adequately controlled.

Controls that need to be considered:

a. The design and use of appropriate work processes, systems and engineering controls and the provision and use of suitable work equipment and materials, eg providing safer sharps devices.

b. Engineering controls – These are used to isolate or remove a hazard from a workplace. Examples include use of safety engineered devices for all procedures. Many medical devices incorporating sharps injury prevention mechanisms are now available. These are designed to significantly reduce or eliminate the risk of needlestick injury. They include safety-shielded and retractable needles, safety lancets, blunt needles (for example for suturing), needle-free systems, blunt plastic cannulae and shielded cannulae.

c. Use of safety engineered devices – There is a large range of diverse products available, so it is essential to select the most appropriate product for a particular clinical procedure. It is important that devices are evaluated locally by relevant parties.

You can find further information on safety devices currently available under NHS procurement services by emailing sharps@supplychain.nhs.uk. Not all of the safety engineered devices will be available through these services and you may need to discuss specific requirements with your procurement services.

When considering safety-engineered medical devices the following selection criteria should be applied:

- The device must not compromise patient care.
- The device must perform reliably.
- The safety mechanism must be an integral part of the safety device, not a separate accessory.
- The device must be easy to use and require little change of technique on the part of the health professional.
- The activation of the safety mechanism must be convenient and allow the care-giver to maintain appropriate control over the procedure.
- The device must not create other safety hazards or sources of blood exposure.

- A single-handed or automatic activation is preferable.
- The activation of the safety mechanism must manifest itself by means of an audible, tactile or visual sign to the health professional.
- The safety mechanisms should not be easily reversible once activated.

In 2003, the National Institute for Health and Clinical Excellence (NICE) published guidelines for the Prevention of Healthcare Associated Infections in Primary and Community Care.

Recommendation Standard Principle (SP) 24 states: 'Needle safety devices must be used where there are clear indications that they will provide safer systems of working for healthcare personnel.'

The guidelines acknowledge that safety devices not only minimise the risk of operator injury but also reduce 'downstream injuries following the disposal of sharps, involving housekeeping or portering staff'.

There is a growing body of independent evidence from Europe and beyond regarding the effectiveness of these devices.[13] Independent European academic studies have investigated the issue of cost effectiveness of medical devices incorporating sharps protection mechanisms. These studies explore the overall costs of managing needlestick injuries and assess the cost of purchasing devices incorporating sharps protection mechanisms against the overall financial benefits of reducing injuries.

They conclude that investments to prevent needlestick injuries will achieve overall economic savings.

The control of exposure at source

Clinical waste procedures that ensure safe collection, storage, transport and final disposal of waste.

Work Practice Controls

These controls aim to change the behaviour of workers to reduce exposure to occupational hazards.

- No needle recapping or resheathing.
- Availability of portable sharps containers.
- Adequate number and placing of sharps containers within arm's reach.
- Disposing of sharps immediately at the point of use in designated sharps containers.
- Sealing and discarding sharps containers when they are three quarters full.
- Establishing means for the safe handling and disposal of sharps devices before the beginning of a procedure.

Studies in the United States and Europe have shown significant reductions in the numbers of needlestick injuries from improving sharps disposal.

Sharps should never be passed hand to hand and handling should be kept to a minimum.[14] All sharps should be disposed of carefully at the point of use. This means that suitable sharps containers (conforming to British Standard

BS 7320) should be portable enough to take to the site of a procedure, and designed specifically to allow needles and sharp instruments to be disposed of easily and safely at the point of use. It is not acceptable to reduce the number of sharps bins to such an extent that staff are forced to carry used needles to the sharps bin to dispose of them.

This should also reduce the number of incidents resulting from incorrect disposal or non-disposal of sharps, for example in clinical waste bags, bed linen and laundry, or on floors and other surfaces.

Ideally sharps bins should be designed to prevent overfilling and accidental spillage of contents. They should be easy to close temporarily and permanently, and there should be no risk of puncture of the container. Cardboard sharps bins should not be used. Care is needed to ensure portable sharps bins are not left unattended in areas where non-healthcare workers (especially children) can access them. Syringes/cartridges should be disposed of intact. Employers will also need to consider environmental factors such as good lighting and adequate space for carrying out the procedure.

Following standard precautions (formerly known as universal precautions)

The Guidance for Clinical Health Care Workers: Protection against infection with bloodborne viruses, published by the Department of Health in 1998 contain standard precautions. These are aimed at preventing the transmission of bloodborne viruses by considering that blood and certain body fluids are potentially infectious and adopting specific procedures where contact is anticipated.

The principle of following standard precautions means never assuming that there is no risk. If every patient is assumed to be potentially infected with a blood-borne infection, the same precautions to prevent exposure should be used for every procedure.

Following these precautions alone will not help you prevent sharps injuries, but following them alongside other control measures, i.e using safety engineer devices, safe disposal and training etc will help you reduce the risk.

Where adequate control of exposure cannot be achieved by other means, provision of suitable personal protective equipment (PPE) in addition to the measures outlined above.

PPE provides barriers and filters between the worker and the hazard, they prevent exposures from blood splashes and reduce the risk from sharps injuries.

— Gloves – although a needle or sharp instrument can easily penetrate a glove, the risk of transmission of infection is significantly reduced. The glove material will remove up to 86 per cent of the blood on the outside of a needle.[15] An inner glove will remove most of blood not removed by the outer glove. Double gloving therefore substantially reduces the risk of blood-borne virus transmission from a sharps injury.

- Eye protection – this is important wherever blood or other body fluids could splash into the eye. Ordinary prescription spectacles offer inadequate protection, as they are not generally designed for this purpose. Eye protection should therefore be worn routinely, not just in operating theatres, delivery suites and endoscopy suites, but also in emergency departments and any other clinical areas where pressure may lead to spurting or splashing of body fluids, such as when unblocking or irrigating lines and tubes.

Blood may become aerosolised due to surgical drilling techniques, such as those used in orthopaedic surgery, and mucous membrane exposure may not always be recognised.

There are many designs of safety spectacles now available, many of which will fit over prescription lenses and frames.

Administrative controls that limit the exposure to hazards

The above hierarchical approach needs to be underpinned by administrative controls providing the right information and training to workers. These controls may include:

- ensuring that the health and safety responsibilities of all staff are clear, well coordinated and adequately resourced
- an organisational sharps injury prevention committee is set up (which may be part of health and safety committee)
- a sharps policy which covers exposure prevention as well as treatment and follow up is in place
- ensuring there is reference to sharps injury prevention in infection control and procurement policies
- removal of all unsafe devices
- safe systems of work particularly in high risk areas such as theatres, obstetrics and emergency care
- consistent information and training which includes safe systems of work, correct use and disposal of sharps, the use of medical devices incorporating sharps protection mechanisms, measures to be taken in the event of a sharps injury and how to use any PPE provided
- promotion of a no blame culture
- incident reporting procedures and investigations that include feedback to staff/staff groups involved
- vaccination programmes and follow up procedures.

Information and training

Independent studies show that a combination of training, safer working practices and the use of medical devices incorporating sharps protection mechanisms can prevent more than 80 per cent of sharps injuries.[16]

Organisations should include specific time within training programmes and at induction for all staff.

Information to be provided to employees must include:

- the risks of injury from medical sharps
- legislative requirements relating to the protection of persons at work form the risks to health and safety from medical sharps, including duties on employers and employees.
- good practice in preventing injury from medical sharps
- the benefits and drawbacks of vaccination and non-vaccination in respect of BBVs
- the support provided by the employer to an employee who is injured at work by a medical sharp.

Training must cover:

- risks associated with blood and body fluid exposures
- preventive measures including standard precautions, safe systems of work and the importance of hepatitis B immunisation
- correct use and disposal of sharps
- correct use of medical devices incorporating sharps protection mechanisms
- what employees should do if they are injured at work by a contaminated sharp.

In a pressurised work environment, staff may be tempted to take short cuts to save time, this can increase the risk of a sharps injury. It is important that healthcare workers receive continuously updated education and training about safe systems of work with sharps and body fluids. This will ensure that safety becomes embedded into organisational culture. Refresher training should be made available on a regular basis.

Step 4 – record your findings and implement them

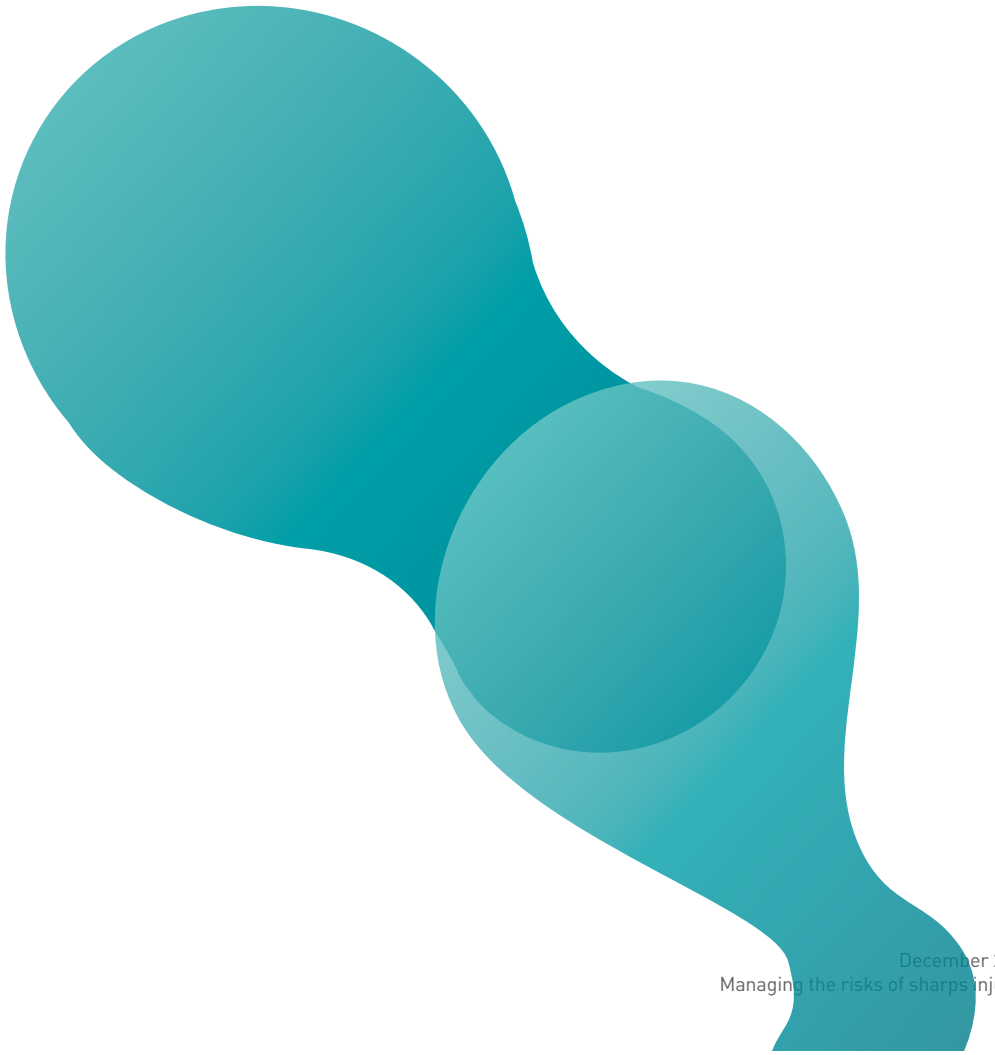
The findings of the risk assessment should be documented and should form part of the action plan to reduce the risks of injury. Such action plans should be time sensitive. The risk assessment can be organisation-wide if the organisation is small eg a GP practice, or ward based for larger healthcare organisations such as a hospital.

The results of the risk assessment should be shared with all workers identified as being at risk. Performance indicators can also be used to ensure that risk assessments are being implemented eg increase in the number of safety devices being purchased.

Step 5 – monitor performance and review

Steps should be taken to periodically review the effectiveness of the risk assessment and control measures in place. This could be reactive for example following an incident report, or proactive such as an audit or workplace inspection looking at performance indicators including the number of devices being purchased. It is recommended that a review date is set for a risk assessment

Risk assessments should also be reviewed if changes take place to work practices or new equipment is introduced, or if there is any other reason to suspect that the risk assessment is no longer valid.



3. EXAMPLE RISK ASSESSMENTS AND CASE STUDIES

These examples cover some of the issues you may consider in your local assessments, but should be used for reference only.

Phlebotomy risk assessment

Title of assessment:	Phlebotomy procedures		
Description of activity:	Phlebotomists completing routine duties of collecting blood samples from patients		
Area / Department:	All departments staffed by trust phlebotomists	**Site:**	All departments staffed by trust phlebotomists
Risk assessor:	Joe Bloggs	**Date of Assessment:**	June 2014
Hazard	**Who's at risk**	**Measures to control the risk**	
Sharps injury, resulting in exposure to blood-borne viruses via: — needlestick injury through insertion, withdrawal, and disposal of needle during a routine procedure — needlestick injury during insertion, withdrawal and disposal of needle while bleeding a non-compliant patient (e.g a patient who is agitated and stressed).	Phlebotomists	Key points in procedures include: — safer sharps devices must be sed where available — do not unsheathe needle until ready for procedure — never re-sheath a needle — never walk holding an un-sheathed needle — never pass unprotected sharps from hand to hand — dispose of sharps at point of use — sharps bins should be placed as close to the procedure as possible.	

Hazard	Who's at risk	Measures to control the risk
		Use of safer sharps devices Safer sharps devices are used to carry out phlebotomy procedures and which reduce the risk of sharps injuries. Devices currently used include: — blood collection set adaptor, with butterfly safety device. This is a safe needle device where you bring the safety butterfly to the needle. This is used for back of hand /finer veins / difficult to bleed patients — quick shield complete plus. These devices are used where the above devices do not come ready assembled and therefore the risk of clean sharps injuries is minimal. The safety device on these provide a protective shield that clips over the needle when it is withdrawn. This can be done with the hand/finger holding the device, therefore risk of sharps injury reduced.
		Difficult patients — Phlebotomists should have no more than two attempts at bleeding a patient. — If the patient becomes anxious, reassure the person. If you deem the procedure to be unsafe to proceed, then guidance should be sought from a senior colleague.
		Training in safe use of sharps — Staff to receive appropriate training and competency assessment in the relevant procedures. — Staff to receive one day theory training. — Staff to receive specific training on use of safer devices.
		Information provided on wards. Display posters on wards that can provide easy access guidance, including: — 'what to do after a sharps injury' — safe disposal of sharps.
		— Vaccinations — Staff to have relevant vaccinations (Hep B).

Hazard	Who's at risk	Measures to control the risk
		Relevant procedures for staff include: — procedure for sample collection — staff guide to infection control — accidental exposure to body fluids — sharps awareness and your safety — managers to have training on immediate referral to A&E and OH.
Review dates:		
Any further action required:		

Hospital laboratory

Title of assessment:	Use of sharps within laboratories		
Description of activity:	This risk assessment is for the use of needles and scalpels (sharp instruments) within laboratories and hospital environments. — Needles are used for the collection of blood/tissues or to innoculate bottles. — Scalpels and needles are used for the collection and retrieval of samples.		
Area / Department:	All laboratories	**Site:**	All trust sites
Risk assessor:	Joe Bloggs	**Date of Assessment:**	June 2014
Hazard	**Who's at risk**	**Measures to control the risk**	
— The risk is of blood-borne viruses (BBV) in the event of a needlestick or scalpel injury to a member of staff.	Staff members	— Avoid the use of sharps - the manager should ensure that sharps are only used where they are required (syringes with needle free spikes are used for bottles when innoculating). — Safer sharps are used where it is not reasonably practicable to avoid using sharps. — The recapping of needles is banned. — Suitable containers for sharps (clinical) waste are placed close to the work area and disposed of safely. — All staff have been offered hepatitis B immunisation and are encouraged to take this up. — A requirement to cover cuts and wounds with waterproof plasters. — Posters about sharps are displayed in all laboratories and first aid provision is in place including a 24hr/365 days a year sharps hot-line for staff to call to report the incident and to receive advice. — Managers investigate accidents including sharps injuries with managers trained on how to do so.	
Review dates:			
Any further action required:			

Nuclear medicine

Title of assessment:	Needle resheathing risk assessment		
Description of activity:	This risk assessment is for the risks associated with resheathing in nuclear medicine.		
Area / Department:	Nuclear medicine	**Site:**	All sites
Risk assessor:	Joe Bloggs	**Date of Assessment:**	June 2014

Hazard	Who's at risk	Measures to control the risk
— Needlestick injury while manipulating sterile radioactive solutions. — Exposure to radioactive materials – mainly gamma emitters, occasionally beta emitters. — Needlestick injury while measuring residual activity in syringe may contain blood products. — Exposure to BBVs	Staff members	— Systems of work and procedures in place. Needle guards have to be replaced in order to measure activity in the syringe — Not replacing the needle would mean a significant risk of contamination in the calibrator and exposure during the patient dose measuring step. Measurement is needed to comply with the regulations IRMER. Replacing the needle before measurement without resheathing would increase risk of contamination within the room and could invalidate future measurements on the calibrator, as well as increasing operator radiation dose with extra manipulations. — Needle resheathing devices would mitigate against the risk of a needlestick injury during the resheathing process. — Resheathing devices would allow resheathing to take place with no risk of injury, reducing the risk of exposure to radiation, and BBV's — As much as possible the use of safety cannulae and butterflies and blind hubs. Not always possible to use these with syringe shields as these are needed to protect staff from radiation.

Review dates:	
Any further action required:	

"That it is everyone's responsibility to make sure we behave in a way that contributes to an injury free and healthy workplace."

3. CASE STUDIES

The case studies have been provided by a number of NHS organisations to give you an idea of how they have managed compliance with the sharps regulations. They were gathered in early 2015 and the respective organisations may have completed further work since then to improve sharps safety.

NHS Blood and Transplant

Background

NHS Blood and Transplant (NHSBT) are dedicated to saving and improving lives through a wide range of services provided to the NHS. Formed in October 2005 from the merger of the National Blood Service and UK Transplant, they employ around 5,800 staff.

NHSBT are responsible for:

- encouraging people to donate organs, blood, stem cells and tissues
- optimising the safety and supply of blood, organs, stem cells and tissues and matching them to patients
- helping to raise the quality, effectiveness and clinical outcomes of blood and transplant services
- providing expert advice to other NHS organisations and to the health departments of the four UK countries
- commissioning and conducting research and development to improve outcomes for patients
- implementing relevant EU statutory frameworks and guidance.

The chief executive is ultimately responsible for health and safety within the organisation, their policy states: 'The safety of our employees, products and services is at the core of everything we do. We believe that it is everyone's responsibility to make sure we behave in a way that contributes to an injury free and healthy workplace. '

The organisation's arrangements for health and safety set out clear line management responsibilities, with managers being supported by a team of eight professional health and safety advisors led by an assistant director of health and safety.

The challenge – complying with the *Sharps regulations 2013*

NHSBT's blood donation teams collect approximately 1.7 million units of blood each year. They have always focused on the safety of needles and the avoidance of needlestick injuries, they have done this by introducing needle guards over 15 years ago. Other activities include the banning of glassware in laboratories and setting up a national needlestick helpline open 24 hours a day, seven days a week.

NHSBT quickly identified that not all laboratory activities and processes in blood donation had safer needles or needle guards. The first step was to inform managers and risk assessors of the changes with the forthcoming regulations, so that they could identify and consider safer needles and guards as part of their local risk assessments.

Getting people on board

The regulations and their implications were discussed at their health and safety policy group which consists of the senior health and safety team and an assistant director for each directorate.

An action plan was approved by the group and then consulted on with staff side at their national health and safety committee, which is chaired by an executive director. Their accident and risk assessment procedures were updated and agreed in partnership with recognised unions to ensure all policies were in line with the requirements of the regulations. The health and safety policy group and national health and safety committee also receive quarterly reports on accidents and incidents to ensure these are regularly monitored.

Regular reviews take place between the health and safety department and third party occupational health providers to ensure all needlestick and blood exposure incidents are recorded. Departmental managers also investigate incidents examining their root cause.

The process

Laboratory areas were given a model risk assessment to review against their local activities and identify activities that had not been adequately risk assessed. By April 2013 all areas had reported back to the policy group that their risk assessments were up to date and in place. Since then NHSBT has been successful in obtaining accreditation to the occupational health and safety assessment series 18001 standard with no non-conformances or observations identified in this area.

In blood collection the only process that required further control was the anaesthetic given to donors before the blood collection process is started. A project group was formed locally consisting of managers, nurses and staff side representatives that identified, trialled and implemented a needle guard solution. The project took six months and was implemented in April 2013, with only trained staff being allowed to administer the anaesthetic.

As part of the monitoring to measure the success of this project, a new sub category of incident was included into their accident recording system, 'local anaesthetic needle'. Before this time the source of this type of needlestick injury had not been recorded. Current data shows that no dirty needlestick injuries have been reported for this source to date (June 2014).

Top tips

- Early identification of the need to change, with the implementation of OHSAS18001 and its requirement to identify legal and other requirements on an organisation this is built into our system.
- Ensure that managers and staff side representatives are involved in the process so that it can be seen as transparent and aimed at making the work place safer.
- Involve staff representatives as part of your lean processes to gain good engagement and ownership of problems and solutions.
- Identify a realistic plan that has consideration of how success can be measured.
- Carry out the plan ensuring everyone is aware of the process and any training required.
- Don't forget to monitor and review.

NHS Dumfries and Galloway Health Board

Background

NHS Dumfries and Galloway is a health board in the south west of Scotland employing 4,600 staff and serving a population of 150,000 spread over a vast area. Its services include acute, primary care, mental health, theatres and community or cottage hospitals.

First steps

Over a period of ten years between 2002 and 2011, there were a total of 641 dirty or contaminated sharps injuries. Throughout this period, the main stakeholders (managers, staff and their trade union representatives, occupational health, the board's health and safety manager and senior management) all worked on a number of initiatives to bring this figure down, these included:

- awareness at health assessment appointment
- awareness raised at infection control and occupational health and safety inspections
- poster and electronic campaigns
- training at induction and various sessions
- risk assessment both organisational and local
- incident reviews including follow up on site if necessary
- review of sharp waste management to include point of use disposal equipment and portable waste containers
- establishing the sharps safety group (consisting of nursing staff, occupational health and safety staff, supplies/procurement department staff, blood-borne virus nurse and infection control staff). The group explored where injuries were happening, why, the equipment involved and whether there was any safety devices available that would prevent needlestick injuries.
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"Between 2002 and 2011, there were a total of 641 dirty or contaminated sharps injuries."

Despite all these initiatives, the figure remained high – starting with an annual figure of 67 injuries in 2002, and an average of 64 incidents for the next ten years.

How we did it

The sharps safety group adopted a risk management approach that was consistent with the principles of risk prevention, these are:

- avoid the risks where possible
- combat the risks at source
- provide appropriate training and instructions for staff
- replace the dangerous with the less dangerous
- implement a coherent overall prevention policy (safe systems of work)
- evaluate the risks that cannot be avoided.

The process to adopt these products included:

- source products and follow the tendering process
- test products with user groups
- trial in specific clinical settings
- collate feedback
- decide on the best product
- communicate the changes
- roll out new products which include training and catch up sessions
- remove non safety products from their stock and ordering system
- continuously monitor and review.

The barriers

The group proposed the introduction of a range of safety devices, however, in order to gain support they had to convince the senior management team that the cost of the devices was a worthwhile investment. The initial implementation costs to introduce one device (safety cannula) were less than £10,000.

The group developed a cost-benefit study to support their proposal, they estimated:

- an injury involving a known patient that posed a low risk of cross infection cost the organisation between £330 and £404
- an injury from an unknown source cost the organisation between £1,142 and £1,762
- an injury from a known BBV source cost the organisation between £11,599 and £14,169.

Therefore 57 injuries in 2011 would potentially cost the organisation a minimum of £18,810 per year.

"57 injuries in 2011 would potentially cost the organisation a minimum of £18,810 per year."

Outcomes

With the input of the unions within the board and the sharps safety group, the group were able to make the case that introducing new safety devices made good business sense. In 2011/12 to 2013/14 the average was 42 incidents and for the period prior to this the average was 64 incidents, this equates to a 34 per cent reduction in the past three years.

Safety products introduced, include:

- safety cannula
- blood gas collection without needle
- safety multifly needle
- safety monovette needle
- urine monovette
- insulin pen needle
- arterial blood gas with needle
- blood culture products.

In the past three years the trust has seen a 34 per cent reduction in incidents from sharps.

Top tips

- Present an economic as well as legal and moral case.
- Use a common sense approach to risk management.
- Work closely with partners including senior management, medical staff, nursing staff, supplies staff and trade unions.
- Prepare for the changeover by carrying out a full trial of products.
- Develop a communication program.
- Plan the move to safety devices leaving nothing to chance.
- Continually review the products in place and also products that are becoming available.

Peterborough and Stamford Hospitals NHS Foundation Trust

Background

Peterborough and Stamford Hospitals NHS Foundation Trust is an acute hospital with 3,500 employees and 600 beds.

In April 2010 the non-clinical risk manager of the trust looked at how the organisation might meet the full requirements of the directive ready for when it became law in 2013. The investigation began by interrogating the adverse events reporting system to assess which devices were causing the majority of the sharps injuries. These were identified as cannula's and sharps bins.

How they did it

Phase one

Samples of the available safety cannulas were received and assessed by the non-clinical risk manager and a member of the infection control team. Two devices were identified as being economical and easy to use and were evaluated prior to being rolled out across the trust.

Phase two

The trust were actively looking for a solution to reduce the number of adverse events involving sharps bins, the main issue being overfilling. A recycling system was identified that would meet the needs from a safety point of view and would also reduce costs and the trusts carbon footprint. The new Sharpsmart bin was rolled out in June 2012.

In 2012 the job description of the IV specialist nurse was also formally changed to include the requirement to investigate the clinical aspects of sharps injuries alongside the non-clinical risk manager, to meet the requirements of the EU directive.

Phase three

In May 2012 the trust started working with the East of England Hub (EOE Hub) looking at safety devices. A sharps safety group was set up that brought together finance, stores, infection control, diabetic specialist nurse team, safety and occupational health working alongside the EOE Hub. At each bi-monthly meeting, adverse events, risk assessments and new products were reviewed.

The group developed an action plan and continued investigations into the main causes of sharps injuries to staff, these were identified as insulin pens and hypodermic needles.

Following investigation, to change to safety devices for insulin pens and hypodermic needles there would be an annual increase in expenditure of approximately £50,000.

A successful business case was put to the trusts board and these products were rolled out following selective evaluation.

The products were launched with the instructions that if the new product was not suitable for clinical reasons, then a risk assessment should be completed and returned to the sharps safety group for assessment. If authorised they would then be provided with the non-safety product.

Phase four

Since February 2013 the sharps safety group has been overseeing the anomalies following the launch.

The main departments unable to use the new device were those carrying out specific tasks. Those departments included radiology, angiography, theatres and pain management. The main issue that they had was that the product was too bulky for use in very precise tasks.

It was expected that sharps injuries involving insulin pens would drop, however, this did not happen. An investigation found that diabetic patients were bringing their own (non-safety) equipment into hospital with them creating two issues.

1 Staff were expected by the patient to use their personal equipment.

2 Patient's administering their own insulin did not dispose of their sharps appropriately.

A new protocol was rolled out by the diabetic specialist nurses advising that when staff were required to administer insulin, a safety device would be used. Only a patient self-administering should use their own equipment and each of these patients would be given a sharps bin. Since this change the number of insulin pen incidents has dramatically decreased.

In 2013 the phlebotomy team moved to a safety device for venepuncture. Unfortunately while looking very similar to the safety hypodermic needle already rolled out the activation of the device is hard surface rather than thumb. This caused confusion with some staff and the trust has therefore limited the use of the new safety venepuncture to phlebotomy until they find a solution.

Learning points

Throughout the process the trust has noted that the most important part of the process has been investigation and education.

The trust now has a robust follow up system following an adverse event to gain as much information as possible. This includes follow up by occupational health, a questionnaire sent out by health and safety and input by the IV specialist nurse when required.

In addition, the occupational health department have created an e-learning package that is currently mandatory for all junior medical staff and is being rolled out to all clinical staff, as soon as the trust's IT services are able to support it efficiently.

They have also noted the importance of keeping control of 'who is implementing what', as roll out of a safety product may have the contra-indication of increasing the current risk rather than reducing it.

The current situation

- The trust is aware that some individuals are removing the safety device from the hypodermic needle, these issues are being managed with the full support of the director of nursing and medical director.
- Policies are currently being reviewed to ensure they reflect the ongoing changes.
- The trust is evaluating an alternative product that is table top activated and less bulky. Changing to this product will allow the trust to roll out the safety venepuncture needles across the organisation.
- The trust has yet to see the dramatic fall in the number of adverse events they projected, but are confident the new financial year will show better results.

Top tips

- Prioritise investigation and education in your planning.
- Have a robust follow up plan following an incident to gain as much information as possible.
- Keep control of who is implementing what, as the roll out of a safety product may have the opposite effect of increasing the current risk rather than reducing it.

Musgrove Park Hospital, Taunton, an NHS acute hospital

Background

Musgrove Park Hospital is part of Taunton and Somerset NHS Foundation Trust which is based in the South West of England. Employing over 4,000 staff, it is a busy acute general hospital serving a population of over 340,000.

The sharps safety project group (SSPG)

In the early 1990s a sharps group was formed to monitor sharps injuries and look at risk reduction solutions, including changing to safe sharps devices.

In 2009 the trust became aware of the EU social partners agreement on the prevention of sharps injuries in hospitals and healthcare, and subsequently the EU Directive in 2010. During 2011, representatives from the governance, infection prevention and control (IP&C) and procurement departments attended the sharps safety conferences. These conferences provided an overview of the requirements of the EU directive and how the HSE planned to implement the directive.

In August 2011, the sharps group refocused and became the sharps safety project group (SSPG) with an aim to implement the 2010 EU directive. The SSPG reports to the infection control committee and provides information to relevant meetings within the health and safety committee structure.

The SSPG is chaired by one of the operational governance teams, who is responsible for ensuring governance and health and safety policies are embedded in practice. The health and safety advisor and senior infection control nurse work very closely with the group chair, setting the agenda and ensuring the group members are involved in product selection, trials, decision making, policy approval and monitoring. Procurement, learning and development, union representatives, practice, development and theatres are represented on the group and are seen as valuable members.

The challenge – complying with the Sharps regulations 2013

Part of the function of the group is to continuously monitor contamination / sharps incident reports and receive policy monitoring / audit reports. They analyse the data provided and make recommendations on how any areas of concern could be addressed either corporately or at a local level.

Also members of the group used opportunities to 'tap in to' a range of study days and meetings that were already in place across the trust to raise awareness of the requirements of the legislation and how the trust was taking this forward. Examples of these included IP&C link practitioners study day, ward sister's development days, COSHH assessors course and update and medical education (foundation doctors programme directors).

Occupational health

The occupational health provision is outsourced with specialist advice being provided through relevant trust meetings. For sharps safety, this is achieved in association with the trust health and safety and infection, prevention and control meetings that they attend.

Union involvement

The trust has always worked very closely with union colleagues in taking safety forward, resolving issues as they arrive and involving them in policy development and review. Union representatives sit on meetings within the health and safety

structure of the trust and take an active role within these. They receive regular updates on the activity of the SSPG, share this information with their members and other union colleagues. This encourages a two-way system for their suggestions and feedback.

All staff

To ensure all staff had access to information about sharps safety and safety devices, an intranet page was set up linked to COSHH. This included information on safety sharps available, along with ordering details from procurement, specific risk assessment guidance and associated documentation, relevant policies and legislation.

When new safety devices have been introduced, the weekly staff bulletin and learning and development team have been utilised to notify of the changeover and how to access associated training.

The process

The SSPG undertook a detailed gap analysis against the directive's clauses. This identified some areas that required further work.

- Assessment of risks – identifying if a sharp device was high risk or not and inconsistencies in the availability of safer devices.
- Elimination, prevention and protection – staff using safety and non-safety alternatives for the same procedure.
- Information and training – while this was in place for sharps awareness it was not consistent across the trust on specific devices.
- Reporting and follow up – improved data available to the trust from the occupational health service to generate a more detailed analysis of reported sharps injuries.

From this analysis various action plans were implemented, although cost was a factor the trust felt that any cost increase would have to be significant to not consider safer alternatives. Additionally, the trust was keen to ensure staff safety and reduce sharps related work absences.

Assessment of risks

While much of the work could be done centrally, local managers were identified as key to the implementation of the new legislation and were asked to localise risk assessments. To support this, the trust considered what similar risk assessment processes were already in place and gained approval to integrate this in to the Control of Substances Hazardous to Health Regulations (COSHH) management and assessment processes.

A risk classification system was developed to classify sharps as high, medium or low risk using principles and guidance from the RCN, European Biosafety Network and other external bodies.

Alongside this, the trust adapted the COSHH assessment tool including pre-populating some of the fields within this to support the COSHH assessors eg information about the devices, list of known sharps used and associated procedures and controls in place.

The assessment tool was then circulated with clear guidance. It was recognised that once the assessment had been completed it may identify non-safety devices still in use, either due to non-safety devices not being available or where there

were strong clinical reasons why safety devices could not be used. If the continued use of non-safety devices was identified, an escalation process was agreed for local managers and a form devised to complete that stated a clear rationale to support their outcome.

Elimination, prevention and protection

In departments where safer sharps had already been implemented, the procurement team were asked to visit and remove any non-safety devices – where appropriate.

The next stage was to look at sharps devices being used and classify commonly used ones against the types of procedures they were being used for. From this suitable safer alternatives were identified.

The SSPG group also identified some areas that have proved harder to resolve due to the specialist activity in their area eg theatres' use of surgical instruments, paediatrics and neonatal units and further work is on-going to reduce risks.

Information and training

Sharps safety is integral to the trusts mandatory training needs analysis. The existing training was reviewed and assessed to see if it was suitable and sufficient from two perspectives.

1 General sharps safety awareness, covering all aspects identified in the sharps regulations.

2 Training on sharps devices, this included a full review of junior medical staff training following two incidents.

There was also some specific detailed training provided in certain areas, for example the vacutainer safety needle. Some of the group worked with the supplier, who offered to provide training as part of the implementation.

Communicating with staff

To ensure all staff had access to information about sharps safety and safety devices, an intranet page was set up linked to COSHH. This included information on safety sharps available, along with ordering details from procurement, specific risk assessment guidance and associated documentation, relevant policies and legislation.

When new safety devices have been introduced, the weekly staff bulletin and learning and development team were utilised to notify of the changeover and how to access associated training.

Outcomes

One of the most significant benefits from the implementation of safer sharps has been a reduction of incidents. Known incidents relating to butterfly needles have decreased from approximately eight a year to one in 2013 and similarly for cannulas from nine a year to one in 2013.

Unfortunately, incidents do sometimes occur. In August 2013, the Health and Safety Executive (HSE) visited the trust to follow up on an injury to a staff member from a known high risk source patient. The trust were able to provide assurances to the HSE that the appropriate steps to instruct and supervise the member of staff in the use of sharps had been taken and that the individual involved had received treatment and follow up.

"Known incidents relating to butterfly needles have decreased from approximately eight a year to one in 2013 and similarly for cannulas from nine a year to one in 2013."

Additionally, the HSE visit enabled the trust to reflect on all the work that had been progressively undertaken on sharps safety over the last few years.

This was a positive experience for all involved and we were able to demonstrate to HSE the processes and safety practices that had been put in place to meet the EU directive – Health and Safety (sharps instruments) in Healthcare Regulation 2013.

The incident investigation identified that the instrument used was a safety device which had not been deployed correctly by the user. This emphasised the importance of staff training and further work is being undertaken with our trainers to ensure staff have the opportunity to become competent in using the safety devices.

Next steps

- An audit of compliance against the requirements of the COSHH sharps risk assessment has recently taken place. This identified some misinterpretation of the assessment tool and the requirements around safe systems of work and training. As a recommendation, the assessment tool is being reviewed and further work is being undertaken with this COSHH assessors.
- The second part of the risk assessment process to be embedded, is the use of the escalation forms to identify further devices for consideration to change to safety devices.
- To ensure the continued safety of staff, the SSPG, will periodically review the market for new safety devices that could further reduce the risk of sharps injuries.
- Policy monitoring will continue to be undertaken in line with the health and safety/IP&C reporting schedules and an assurance report of compliance provided to the quality assurance committee for the board.

Top tips

- Have a devolved culture that encourages managers to own their risks and involve their staff in decision making.
- Build on systems already in place that are working successfully and staff are familiar with, avoid developing a new system if possible.
- Get people on board early and ensure they understand why it needs to happen.
- Involve a range of staff and departments in trials and selection of safer sharps devices.

4. MANAGING BLOOD EXPOSURE INCIDENTS

All healthcare employers must provide immediate access to medical advice and offer preventive treatments. In the case of healthcare staff working out of hours and/or on premises where such advice and treatment is not immediately available, employers must ensure they have arrangements that will allow staff to access treatment in a timely manner.

The Control of Substances Hazardous to Health Regulations (COSHH) say that health surveillance is required in any workplace where each of the following is met:

- the work is known to harm health in some way
- there are valid ways of detecting the disease or condition
- there is a reasonable likelihood that damage to health may occur under the particular conditions at work
- the surveillance is less likely to benefit the employee
- the technique of investigation is of low risk to the employee.

The purpose of health surveillance is to:

- protect employees' health
- collect data to evaluate health hazards
- prevent serious disease from developing
- check current control measures are working properly
- identify any further steps or action to be taken.

It encompasses measures such as vaccination and procedures for monitoring and treating workers should an injury occur.

Vaccination (against any vaccine preventable disease) is recommended for all healthcare workers (including students and trainees) who may have direct contact with patients' blood, blood-stained body fluids or tissues.[17] This includes any staff who are at risk of injury from blood-contaminated sharp instruments. At the time of writing there is no vaccine against HIV or hepatitis C, but one is available for hepatitis B.

Further information on managing blood exposure incident can found on the Public Health England website.[18]

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NHS Employers

The NHS Employers organisation is the voice of employers in the NHS, supporting them to put patients first. Our vision is to be the authoritative voice of workforce leaders, experts in HR, negotiating fairly to get the best deal for patients.

We help employers make sense of current and emerging healthcare issues to ensure that their voice is front and centre of health policy and practice. We keep them up to date with the latest workforce thinking and expert opinion, providing practical advice and information, and generating opportunities to network and share knowledge and best practice.

We work with employers in the NHS to reflect their views and act on their behalf in four priority areas:

- pay and negotiations
- recruitment and planning the workforce
- healthy and productive workplaces
- employment policy and practice.

The NHS Employers organisation is part of the NHS Confederation.

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This publication was produced by the NHS Confederation publications team:
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This document is available in pdf format at www.nhsemployers.org/publications
Published 2015.
The NHS Confederation Company Ltd. Registered in England.
Company limited by guarantee: number 5252407
Ref: EGUI26701