PWYLLGOR IECHYD A DIOGELWCH
HEALTH & SAFETY COMMITTEE

DYDDIAD Y CYFARFOD: DATE OF MEETING:	12 November 2024
TEITL YR ADRODDIAD: TITLE OF REPORT:	Analysis of sharps incidents in financial year 2023-24 and financial year 2024-25 (up to 31/08/24).
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	James Severs, Executive Director of Allied Health Professions and Health Science
SWYDDOG ADRODD: REPORTING OFFICER:	Karen Ryan, Head of Occupational Health Service

Pwrpas yr Adroddiad (dewiswch fel yn addas) **Purpose of the Report** (select as appropriate)
Er Sicrwydd/For Assurance

ADRODDIAD SCAA
SBAR REPORT

Sefyllfa / Situation

This report provides an update regarding Hywel Dda University Health Board's (HDUHB) compliance with the **Health and Safety (Sharp Instruments in Healthcare) Regulations 2013**.

This paper is intended to provide assurance regarding the processes that exist to manage and learn from sharps incidents.

This report contains an analysis of sharps incident data for FY2023/2025 until end October 2024. The report aims to demonstrate the existing tools for management of sharps injuries are appropriate, and HDdUHB can demonstrate compliance with relevant Regulations.

There is consistency between the number of incidents being reported on Datix and the number of injured staff followed up by Occupational Health.

This report also identifies measures for improvement regarding further reduction of the likelihood and severity of sharps injuries.

Cefndir / Background

The **Health and Safety (Sharp Instruments in Healthcare) Regulations 2013** places duties on employers to control exposures to hazardous substances and biological agents that arise from the use and disposal of medical sharps. To avoid repetition, the general requirements of the Regulations are reproduced in "*Assessment*" under the heading "C*ompliance with standards*," together with a description of how HDdUHB is meeting each general requirement.

The *Health and Safety Executive (HSE)* document '**hsis7**' (HSE guidance for the above Regulations) summarises the regulations and advises the content of a typical review of procedures:

- the degree of compliance with procedures
- areas where procedures are not available or are not sufficient.
- consultation with relevant staff and their representatives

- injury and incident data

This report aims to cover these aspects, as well as specific information requested by the Executive Lead.

Medical sharps include needles and blades as well as glass medication ampoules and medical devices fitted with/possessing sharp points. These devices have widespread use in healthcare, are used by a wide range of healthcare professionals, often in challenging circumstances (e.g. work pressures, fatigue, patient movement, distraction).

There are also a wide range of devices, many with safety features – either manually or automatically activated – while some devices do not have safety features due to technical/ manufacturing reasons, the potential for safety features to impact effective use, or they may compromise patient safety. As a result, training and familiarisation are key to safe, effective use.

Where possible, HDdUHB use safety devices and the Health Board has support from the NHS Wales Shared Services Partnership (NWSSP) Procurement Nurse in selecting safer alternatives to non-safe sharps when they become available.

The Health Board can also be impacted by enforcement action relating to legal compliance, e.g:

- Health and Safety at Work etc. Act 1974
- Management of Health and Safety at Work Regulations 1999
- Health and Safety (Sharp Instruments in Healthcare) Regulations 2013
- Other relevant regulations (e.g. PUWER, MDR) covering the use of medical devices.
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

The initial management of the employee is the responsibility of relevant Emergency Departments and Minor Injuries Units depending on which site the injury occurs. Evidence suggests the recipient should be seen within an hour wherever possible to optimise efficacy of post exposure prophylaxis (PEP).

The role of the Occupational Health Service is to minimise the risk of blood borne virus transmission at work by providing a robust vaccination programme to health care workers in accordance with the UK Health Security Agency Green Book Guidance Immunisation against infectious diseases (Green Book Chapter (publishing.service.gov.uk)).

The Occupational Health Service is responsible for managing recipient follow up care including, follow up immunisation as required and signposting to additional support e.g. counselling.

The Occupational Health Service will also manage source and recipient blood results, ensure all needlestick injuries are reported via Datix, and manage any potential risk to patients/others by providing advice on safe working practices and personal/public risk factors whilst the recipient is awaiting results (BBVs in healthcare workers: health clearance and management - GOV.UK (www.gov.uk)).

Personal injury claims from sharps injuries are less common than for other staff incidents but have potential to incur costs to the Health Board in the future. Aside from legal and financial risks, there is an impact on staff from sharps injuries especially where staff are undergoing Post-Exposure Prophylaxis treatment and blood monitoring over several months.

Asesiad / Assessment

The Health, Safety, and Security team have been logging reported sharps incidents since the inception of the RL Datix system in April 2021 to capture data, process information and gain relevant knowledge. This report covers the period from the beginning of financial year 2023-24 to the end of October 2024.

The data being captured cannot be generated using the Datix reporting function, therefore a Health, Safety and Security Officer has conducted a detailed study every incident report submitted to the RL Datix system since its introduction in March 2021 (an upgrade of the previous Datix reporting system).

General medical sharps incident data for periods FY2023/24 and FY2024/25 (to end October)

Source	FY 23/24	FY 24/25 to end October
Used (post use with a patient i.e. contaminated)	86	62
Clean (unused/uncontaminated, prior to use with patient)	5	1
Sharp found, inappropriate disposal (no injury sustained)	3	0
Sharp found, inappropriate disposal (injury sustained)	10	8
Unused sharp contaminated with a hazardous substance (i.e. cytotoxic medication)	0	2
TOTAL	104	73

Severity of incidents at the time of reporting:

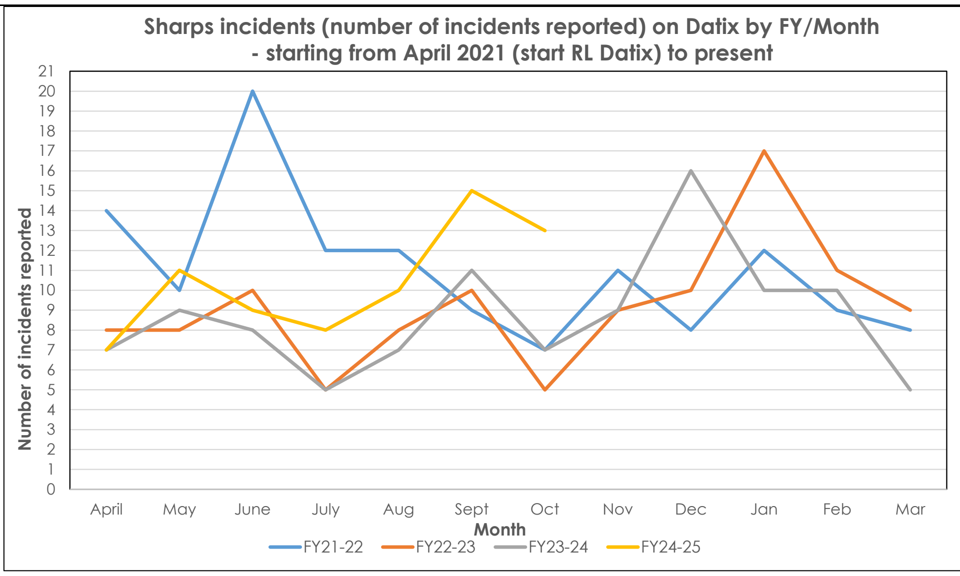
Incident severity on initial reporting	FY 23/24	FY 24/25 to end October
None	5	3
Low	90	63
Moderate	7	7
Severe	2	0

In the above table, two incidents were graded as “Severe”. This was incorrect; both were re-graded as “low” by the Investigators, which is appropriate for a single point of failure of a work process and low risk patient source. For one of these incidents, the item that caused the injury was not determined and at present there is no justification to apply a higher severity.

The incidents initially graded as “moderate” are consistent with “low” severity incidents due to single points of failure (of work processes). In these incidents, Investigators have downgraded the risk accordingly.

During this period, no RIDDOR reports have been required for incidents relating to medical sharps. A RIDDOR report would be submitted to HSE if an injury was sustained from a sharp that was previously used with a high-risk patient (known to be infected with a Blood Borne Virus e.g. Hepatitis B). This would be classed as a “*Dangerous Occurrence*”. A new RIDDOR would be submitted if the injured staff member “seroconverted” after exposure i.e. developed the same disease as determined by blood test; this would be classed as an “*Occupational Disease*”.

Number of incidents plotted against the incident date (month) for all FY periods since the inception of the new RL Datix system (FY2024/25 runs to end October):



The chart above contains data outside the current study period (FY23-24 and FY24-25 to date) to facilitate wider comparison and for completeness.

Sharps injury incidence based on type of task being undertaken: common healthcare tasks

Task undertaken at time of injury	FY 23/24	FY 24/25 to end October
Venipuncture	8	16
Disposal of sharps	10	4
Insulin administration	14	6
Waste Disposal	5	8
Medication administration	9	6
Heparin administration (Tinzaparin, Clexane, Enoxaparin)	4	6
Procedure (medical)	12	6
Surgery	7	6
Cannulation	8	1

As context, the figures represent ~80% of the total number of incidents in the study period; other data is available (but not presented) for other tasks representing low incidence rates. Due to these low incidence rates, data analysis is less reliable therefore the data has not been shown.

The above incidents are routine healthcare tasks. Since venipuncture is a common healthcare intervention, this is expected to be reflected in the injury incidence data. As every sharp handling operation requires disposal, this is also expected to feature in injury data. The above data shows the incidence (based on the type of task) is consistent with reasonable expectations.

Incidents/ thematic review

From April 2023 to the end of October 2024, there were 177 reported sharps incidents:

- 119 out of 177 incidents reported during this period occurred in *Unscheduled Care*. This is not considered unusual given the nature of the work undertaken in that Directorate.
- 59 incidents have been logged as being due to “Handling”, where sharp injuries occurred in connection with the handling of the device or where exact causation was not identified.
- There were 22 incidents of inappropriate disposal resulting in injury, and 3 incidents where sharps were found and then disposed of without injury.

- This is an incident type where there is continued incidence, and which could result in enforcement action in the future.
- Every incident was followed up by the Health, Safety, and Security team at the time to identify causation and thus preventative measures.
- Some inappropriate disposals occur at the bedside.
- Disposal of sharps in waste bags is still occurring.
- Contaminated sharps are being placed on surfaces by staff (e.g. procedure trays) or patients (at the bedside), causing injury when those surfaces/trays are cleaned if sharps are obscured. Insulin needles are a common source of this type of injury.

Sharps are periodically returned to Hospital Sterilisation and Decontamination Unit (HSDU), but HSDU have good procedures for handling these items safely. In the period covered by this report, there were 14 instances of sharps being returned to HSDU, all resulting in safe disposal. Work has been undertaken to reduce the number of sharps returns, primarily supporting Podiatry as this department is the source of sharps in most instances.

Compliance with standards

The Health Board has good compliance with the **Health and Safety (Sharp Instruments in Healthcare) Regulations 2013** – this report outlines (below) the main elements of how HDdUHB meets its duties under the Regulations:

- *Avoidance of un-necessary use of medical sharps*
  - blunt-fill needles are routinely used for drawing up medication.
  - needle-free bags and closed systems are used in *Systemic Anti-Cancer Therapy* (SACT) units where possible, to reduce risk of injury to staff, exposure to hazardous substances, and to maintain aseptic conditions.
- *Avoidance of non-safe sharps where this is reasonably practicable*
  - sharps have been replaced with safety versions where there is a product available.
  - some products cannot be replaced – e.g. Intravenous (IV) catheters, spinal needles, paediatric cannulas, scalpels – either due to quality (safety devices may affect patient care), because no product exists, or the cost of safety devices is prohibitive when balanced against risk.
  - Non-safety sharps are risk assessed using a standard template; risk assessments are scrutinised by the Sharps Safety Group.
- *Avoidance of re-sheathing/re-capping sharps*
  - staff are trained to dispose of sharps directly into sharps bins at Point of Care (POC).
  - re-capping is performed in mass vaccination campaigns with clean sharps, due to task division.
  - re-capping is performed in Pharmacy *Aseptic Units* handling cytotoxic medication but is performed using safe procedures and equipment intended for this purpose.
- *Provision of disposal containers and procedures close to the work area.*
  - staff are trained to dispose of sharps directly into sharps bins taken to the point of care (POC). Patients are supported in this regard when self-administering medication at the bedside and at home.
- *Provide suitable Information, Training, Instruction, and Supervision.*
  - *appropriate clinical skills training is provided to staff based on role, as well as training in "exposure management" (response to sharps incidents).*
- *Report incidents involving sharps (reported by employees to their employers).*
  - HDdUHB Policy/Procedure 187 "*Exposure Management including Needlestick (Sharps) Injuries*" promotes the reporting of sharps injuries to the affected person's line manager, presentation of the injured person to the Emergency Department, and reporting via Datix.
  - The above Policy/Procedure promotes the investigation of causation and identification of preventative measures by the Datix Investigator/s.
- *Treatment and follow-up post-incident including incident investigation.*

- sharps incidents are investigated alongside other types of staff and patient incidents.
- there is consistency between reported incidents and staff receiving Occupational Health follow-up consultations.

- *Regular reviews of procedures*
    - reviews are led by the Sharps Safety Group.

Learning from experience

A total of 177 incidents were reported during the study period:

- The majority of incidents occur during clinical application, when a safety device would not have prevented the injury. These incidents require more detailed investigation to identify the mechanism of injury and therefore any reasonable preventative measures.
- Insulin pen needles require further proportionate consideration:
    - There were 20 incidents related to insulin pen needles, including inappropriate disposal.
    - Insulin pen needles are often found by staff in the vicinity of patient beds. The device may not be recognised by domestic staff as a needle, especially as the fine gauge needle is not clearly visible on some products. Guidance in this regard can be shared with Hotel Services staff to aid recognition of this risk.
    - Staff may have access to safety devices but patients using their own devices (prior to discharge or during short stays in hospital) may have non-safety devices.
- Pre-filled syringes have been employed with the intention of reducing the incidence of sharps injuries. These are primarily heparin products (Clexane/Tinzaparin/Enoxaparin). There were 13 incidents in the study period involving pre-filled syringes.
    - Clinical Skills currently do not provide training in these devices, however NWSSP Procurement are involved with this aspect and will be consulted for further information on current practices.
    - Device malfunction appears to be a factor in incident causation; it is currently understood that pre-filled syringes are to be managed primarily as Medicines rather than Medical Devices; device malfunction may require reporting via the MHRA Yellow Card scheme or to the manufacturer, where there is an incident trend.
    - As these devices are intended to reduce injury, injuries sustained during their use will therefore require proportionate remedial action.

<u>Quality of sharps incident reporting</u>

- The narratives in incident reports are often insufficient to promote an initial understanding of causation. This is sometimes addressed in the Investigation, but it is very useful to have a reflective account about how the incident occurred recorded as close to the time of incident as possible but without unduly delaying the submission of the incident report.
- Documenting the device that was involved is important to understanding the incident and identifying any follow-up actions. For example, for *venipuncture* there are two devices available (one with a butterfly to withdraw the needle, and one with a folding safety cover). As device design is a factor in the mechanism of injury, knowledge of the specific device is important.
- Out of 177 incidents in this study period:
- Coding of incidents within Datix (incident type): 123 incidents were deemed to be correctly coded, 32 were incorrectly coded, and 22 incidents could not be judged due to insufficient information on incident causation.
  - guidance can be provided in this regard, especially when recording the finding of sharps where there was no injury.
- 18 incidents provide details of the device (i.e. Manufacturer/Model) with sufficient information to identify the specific device involved.

Quality of sharps incident investigation

Every investigation has been examined and data captured to assess the two main aims of any investigation – identification of causation and preventative measures:

- 61 out of 177 incidents identified an immediate cause of the incident.
- 38 incidents identified a preventative measure, with either the intention to carry this out or where the measure had already been actioned.
- Focussed Reviews were completed in 38 incidents, not completed in 139 incidents.
- Sharps Investigation Checklists:
    - During the study period, 7 were completed and uploaded to the associated Datix Incident Report.
    - As this is an additional work process external to Datix, it is preferable that the Focussed Review be adapted to capture this relevant information. It would help Investigators to complete the information (by making the process easier) and can be used to generate reports, reducing the workload for the data logging carried out by the Health, Safety, and Security Officer.
    - The Focussed Review section can be improved by bringing its data fields closer to those of the Sharps Investigation Checklist; this requires a change to the Datix system at an All-Wales level.
    - At present, the Focussed Review must be manually activated by the Investigator in the Investigation panel of the Datix Incident Report. It is preferable to have this section automatically raised when a sharps incident is coded; this requires a change to the Datix system at an All-Wales level.

Initial actions

The following actions are advised for completion over the remaining duration of FY2024/25:

- The Health, Safety, and Security (HSS) team will issue guidance regarding the completion of a sharps Incident Reports on Datix, to help staff record information that supports effective investigation and the data logging process. This can be promoted further at ward level during routine site visits, and at relevant governance meetings.
- The above guidance can be included in the review of the HDdUHB *Exposure Management Policy/Procedure* that is due in April 2025.
- Actions to support a reduction in the number of inappropriate disposals by staff and patients: reinforcing the existing policy/procedure, liaising with Ward managers to ensure sharps bins are taken to the patients. Guidance is required to ensure consistent and appropriate actions are taken when sharps are found without injury, to ensure safe and responsible disposal of sharps/sharps-containing waste.
- Review of the use of insulin pen needles in hospital settings and patients' homes (during Community nurse visits) to reduce the injury, including inappropriate disposal at POC.
- Further proportionate attention will be paid to pre-filled syringes - provision of training, training records, disposal, and actions to take in the event of a malfunction – e.g. ensuring unfamiliar/inexperienced staff do not re-sheath the device after use.
- Sharps Safety 7-minute brief:
    - Condensed guidance regarding the *Exposure Management Policy/Procedure*, incident reporting and investigation.
- Local Safety Notice:
    - Recognition of insulin pen needles aimed at Domestic Assistants, as these are often seen as plastic items but have a very fine needle that can cause injury. Such incidents have been reported.

Annual plan for improvement

- Actions (described above) to continually improve the quality of sharps incident reporting and investigation, using the same model the H&S team have used for promotion of

RIDDOR guidance. These will be reviewed annually as part of the data analysis/ thematic review of sharps injuries and fed back to staff via the Sharps Safety Group, Governance/Quality & Safety, and Staff Partnership meetings in order to "close the loop".

- Ongoing use of the sharps incident database to enable quarterly reports to be generated for evaluation by the Sharps Safety Group.
- Continued support for departments in completing Non-Safe Sharps Risk Assessments and review by the Sharps Safety Group.

Argymhelliad / Recommendation

For the Health and Safety Committee to RECEIVE ASSURANCE that where sharps incidents occur, investigations and follow up actions are undertaken. That affected persons are treated appropriately at Emergency Departments and Occupational Health.

Amcanion: (rhaid cwblhau) Objectives: (must be completed)	
Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor:	3.7 Provide assurance that robust and effective safety management systems are in place operationally to deliver the Health Board's health, safety and security objectives and fulfil its statutory duties.
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	Not Applicable
Parthau Ansawdd: Domains of Quality Quality and Engagement Act (sharepoint.com)	1. Safe 3. Effective 2. Timely
Galluogwyr Ansawdd: Enablers of Quality: Quality and Engagement Act (sharepoint.com)	3. Data to knowledge
Amcanion Strategol y BIP: UHB Strategic Objectives:	4. The best health and wellbeing for our individuals, families and communities 1. Putting people at the heart of everything we do
Amcanion Cynllunio Planning Objectives	Not Applicable
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2021-2022	9. All HDdUHB Well-being Objectives apply

Gwybodaeth Ychwanegol: **Further Information:**	
Ar sail tystiolaeth: Evidence Base:	Contained within the body of the report.
Rhestr Termau: Glossary of Terms:	Contained within the body of the report.
Partïon / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Ansawdd Iechyd a Diogelwch: Parties / Committees consulted prior to Health and Safety Assurance Committee:	No consultation to date.

Effaith: (rhaid cwblhau) **Impact: (must be completed)**	
Ariannol / Gwerth am Arian: **Financial / Service:**	There may be financial implications if the issues identified require monetary rectification, associated sickness absence and/or related claims.
Ansawdd / Gofal Claf: **Quality / Patient Care:**	There may be an impact on quality/patient care when the recipient attends for an initial assessment.
Gweithlu: **Workforce:**	Potential for adverse future staffing impacts if the relevant legislation is not complied with as it relates to employee safety.
Risg: **Risk:**	Risk to health and safety management. Risk of Blood Bourne Virus Transmission. Risk of claims.
Cyfreithiol: **Legal:**	Potential for enforcement action including Improvement Notices/Prosecutions and claims due to breaches in legislation.
Enw Da: **Reputational:**	Potential for enforcement action including Improvement Notices/Prosecutions and claims due to breaches in legislation.
Gyfrinachedd: **Privacy:**	Not Applicable

Cydraddoldeb: **Equality:**	Has EqIA screening been undertaken? No