Medical Device Reprocessing Education: Identification and Management of Non-Reprocessable Single-Use Medical Devices

Purpose

This document establishes standardized education requirements for Medical Device Reprocessing Technicians (MDRTs) on the identification and safe management of non-reprocessable Single-Use Medical Devices (SUMDs). The primary focus is to support MDRTs in recognizing and preventing SUMDs from entering reprocessing streams and act as a final checkpoint to remove them from circulation in accordance with Alberta Health standards, AHS policies, and manufacturer instructions, supporting patient safety and device traceability.

Scope

The materials in this education guide are designed specifically for MDRTs. They provide the knowledge and skills necessary to:

- Differentiate between single-use and reusable medical devices.
- Recognize manufacturer labeling and the single-use symbol.

Recommendations

1. Education Content Checklist

Training content

a) Identification & labeling

To distinguish SUMDs from reusable devices, always start by checking the labeling and physical characteristics:

- Look for the Single-Use Symbol: The globally recognized symbol is a “2” with a slash through it, or wording such as “Do Not Reuse,” “Single Use Only,” or “Disposable.”
- Manufacturer Instructions: The packaging and Manufacturer’s Instructions for Use (MIFU) will clearly state if the device is intended for one-time use. Single-use devices will not include cleaning or sterilization instructions. Ensure MIFUs are followed.
- Material & Build Quality:
    - *Single-Use*: Typically made from lightweight plastics or thin metals, these items are lighter, shinier, and often have sharper edges. They frequently feature glued joints or components that cannot endure sterilization.
    - *Reusable*: Constructed from durable materials like stainless steel or high-grade polymers, these items are heavier, less shiny, and built to withstand repeated cleaning and sterilization.

b) Risk of reuse

- Infection transmission and cross-contamination.
    - Reusing medical devices without proper sterilization can spread pathogens between patients, leading to healthcare-associated infections.

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Version	Date (YYYY-MM-DD)
Created	2025-12-16
Revised	2026-05-27

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- Device failure or malfunction due to material degradation.
    - Repeated cleaning or exposure to harsh chemicals can weaken device components, causing cracks, leaks, or loss of functionality, which may compromise patient safety.

c) Safe storage & disposal

- Adhere to facility protocols to prevent accidental reuse.
    - Follow established guidelines for handling SUMDs to ensure they are not mistakenly reintroduced into clinical use.
- Ensure SUMDs are segregated from reusable instruments.

d) Reporting protocols

- Know how to report device faults, near misses, or adverse events.
    - Use the Reporting & Learning System (RLS) to document any device-related issues, including faults, near misses, or adverse events. This ensures timely, standardized reporting and supports system-wide learning.
- Escalate issues to supervisors or designated quality personnel.
    - Notify your supervisor and submit a Medical Device Incident Process (MDIP) report for further investigation and follow-up. This helps drive corrective actions, supports traceability, and prevents recurrence.

Delivery methods

- Face-to-face in-service sessions: Classroom or small group teaching.
- Hands-on demonstrations: By device reps, educators, or senior MDRTs.
- Competency assessments: Practical checklists to verify skills.
- Refresher materials: Posters, quick-reference guides, and laminated cheat-sheets in clinical areas.

Documentation & record keeping

- Maintain accurate attendance logs for all staff training sessions to ensure timely follow-up and support.
- Record orientation checklist and competency assessments in each staff member's individual training file, ensuring all files are maintained.
- Conduct annual audits of training and documentation records to verify ongoing compliance and identify areas for improvement.

Evaluation & continuous improvement

- Review incident reports to identify gaps or emerging risks.
- Update training materials to reflect:
    - Introduction of new devices or equipment into the facility.
    - Changes in manufacturer guidance or best practices.
    - Updates to facility policies, procedures, or regulatory requirements.

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2. Education & In-Service Training Schedule

Situation	Minimum Frequency	Recommended Content	Notes
New staff or students	At orientation	• Overview of SUMDs used at the site • Organizational policy on single-use items (CRITICAL AND SEMI-CRITICAL SINGLE-USE MEDICAL DEVICES Policy PS-07) • Who to contact for device queries or replacements	Must be documented in orientation checklist
Departments actively using SUMDs	Every 6 months or when a new device is introduced	• Device overview and intended use • Manufacturer's instructions • Safe handling and disposal • Risks of reuse or improper use • Reporting adverse events	Include practical demonstration and competency check. Display posters in the department highlighting key SUMD handling, disposal, and infection prevention steps.
Departments not actively using SUMDs	Every yearly	• General overview of SUMDs • Infection control principles • Storage and disposal protocols • Updates on any new devices or policy changes	May be delivered as refresher.
During Competency Assessment	Annually	• Review of SUMD identification and differentiation from reusable devices • Manufacturer labelling and single-use symbol recognition • Correct handling, segregation, and disposal procedures • Infection prevention and patient safety considerations	Incorporate into existing competency evaluation, document completion.
After incident or near miss	Immediately following review	• Root cause discussion • Reinforcement of safe practices • Re-training on specific devices involved	Document in quality/improvement system. Use posters to highlight lessons learned and reinforce correct procedures.

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Definitions

None (as applicable)

Sources/References

- Alberta Health Services governance documents (as applicable)
- Non-Alberta Health Services Documents (as applicable)

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Version	Date (YYYY-MM-DD)
Created	2025-12-16
Revised	2026-05-27

Version history

IPC Document no./ID (file name) **If-ipc-mdr-single-use-med-device-edu-guide** **Version**	**Revision date** (YYYY-MM-DD)	**Revision Description/Comment**
V2	2026-05-27	Minor update

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