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**Medical Device Reprocessing of  
Reusable Critical and Semi-critical  
Medical Devices:**

**Review Criteria and Supporting Standards**

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standard

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**Medical Device Reprocessing of Reusable Critical and Semi-critical Medical  
Devices: Review Criteria and Supporting Standard**

**Table of Contents**

POLICIES AND PROCEDURES .....	1
EDUCATION AND TRAINING .....	51
WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS .....	59
MDR AREA DESIGN .....	68
ENVIRONMENTAL CLEANING .....	81
CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES.....	85
THERMAL HIGH-LEVEL DISINFECTION.....	110
CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES) .....	123
REPROCESSING ENDOSCOPY DEVICES .....	157
STERILIZATION OF REUSABLE MEDICAL DEVICES .....	203
STEAM STERILIZATION .....	220
IMMEDIATE USE STEAM STERILIZATION (IUSS).....	239
UNWRAPPED STEAM STERILIZATION .....	260
CHEMICAL STERILIZATION METHODS (Steris System 1) .....	265
LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro).....	288
ETHYLENE OXIDE (ETO) .....	308
STORAGE AND USE OF REPROCESSED MEDICAL DEVICES.....	328
INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION .....	348
SINGLE-USE MEDICAL DEVICES .....	368
Provincial Policies and Procedures .....	368

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## **POLICIES AND PROCEDURES**

### **Provincial Policies and Procedures**

**There are current written provincial policies and procedures for all steps of reprocessing (e.g, medical devices, reprocessing equipment) based on current recognized standards and validated manufacturer's instructions.**

### **Additional Information**

If the site is using the provincial set of policies and procedures, all items in the *Site-Specific Policies and Procedures* sub-section are marked N/A.

If the site is using site-specific policies, mark this as N/A and complete *Site-Specific Policies and Procedures* sub-section.

### **Recommended Corrective Actions**

Use provincial set of policies, complete customization of applicable policies for site-specific information.

### **Reference**

AH, Clauses: 6.4, 11.1.1, 11.2

CSA Z314-18: Clause 5

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Provincial Policies and Procedures

**Site-specific customization of provincial policies and procedures is completed.**

#### Additional Information

The following policies from the provincial set require customization:

- Quarantine of implantable medical devices pending biological indicator
- Positive biological indicator or failed sterilization load
- Routine Monitoring of automated cleaning/disinfection equipment used in reprocessing.
- Steam sterilizers-daily routine biological monitoring
- Routine and preventive maintenance of automated equipment used in reprocessing

The provincial AHS policy on Creutzfeldt-Jakob disease requires a site-specific policy: "All sites will develop, and adhere to, approved procedures for the quarantine and decontamination of instruments and equipment used for High-Risk Patients".

AHS Prion Disease (Creutzfeldt-Jacob Disease) Precautions for the Surgical Patient (Adult or Child) Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-creutzfeldt-jacob-disease-ps-03-policy.pdf#search=cjd%20policy>

#### Recommended Corrective Actions

Ensure all the customizable policies contain information specific to the site.

#### Reference

AH, Clauses: 11.1.1, 11.9  
CSA Z314-18: Clause 5

**POLICIES AND PROCEDURES**  
**Site-Specific Policies and Procedures**

**A1.1 Hand Hygiene**

**Additional Information**

There is a documented policy or standard operating procedure for hand hygiene that includes when and how hand hygiene must be performed.

Hand hygiene must be performed:

- before beginning work (e.g, before clean procedures or donning personal protective equipment),
- before breaks (e.g, after handling patient care items or a risk of blood or body fluid exposure) and
- upon completion of their work duties (e.g, after handling patient care items or a risk of blood or body fluid exposure).

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure regarding hand hygiene practices.

AHS Hand Hygiene Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-hand-hygiene-ps-02-policy.pdf>

AHS Hand Hygiene Procedure

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-hand-hygiene-ps-02-01-procedure.pdf>

**Reference**

AC, Clause: 8

AH, Clause: 11.4.2

CSA Z314-18: 6.7.1.2(b)

Health Canada. Hand Washing, Cleaning, Disinfection and Sterilization in Health Care.

Canada Communicable Disease Report, December, 1998.

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.2 Personal Protective Equipment (PPE)**

##### **Additional Information**

There is a documented policy or standard operating procedure for personal protective equipment (PPE) that indicates the requirement to wear PPE when working in the decontamination area and PPE that is to be worn.

Must include details on:

- Selection of PPE for each reprocessing area. For example, PPE in decontamination work area includes:
  - gloves appropriate to the task
  - a protective gown or garment
  - full face shield, or high-filtration, fluid-impervious face mask and protective eyewear

*Note: Prescription eye glasses are not appropriate eye protection.*

- Maintenance of reusable PPE (e.g, daily cleaning, changing of soiled garments, etc.)
- Performing hand hygiene before putting on and after taking off PPE

*Note: Remove torn gloves immediately, follow with hand hygiene and don a new pair of gloves.*

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure indicating the requirement to wear PPE that should include:

- Selection of PPE for each reprocessing area. For example, PPE in decontamination work area includes:
  - gloves appropriate to the task
  - a protective gown or garment
  - full face shield, or high-filtration, fluid-impervious face mask and protective eyewear

*Note: Prescription eye glasses are not acceptable for eye protection*

- Maintenance of reusable PPE (e.g, daily cleaning, changing of soiled garments, etc.)
- Performing hand hygiene before putting on and after taking off PPE

##### **Reference**

AC, Clause: 8.5, 8.8

AH, Clause: 11.4.1

CSA Z314-18: 6.7.1.2(e), 6.7.2.2

Health Canada. Hand Washing, Cleaning, Disinfection and Sterilization in Health Care. Canada Communicable Disease Report, December, 1998.

ORNAC, Section 2: Infection prevention and control, clause 2.9, 2.11 & 2.12.10

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.3 Staff Hepatitis B immunization and other applicable immunizations.**

**Additional Information**

There is a documented policy or standard operating procedure for staff Hepatitis B immunization and other applicable immunizations. All staff are offered Hepatitis B immunization and other applicable immunizations.

*Note: This does not have to be specific to MDR.*

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that offers Hepatitis B immunization and other applicable immunizations.

Workplace Health and Safety Communicable Disease Assessment

**Reference**

AH, Clause: 11.4.1

CSA Z314-18: 6.3, 6.7.1.1

ORNAC, Section 2: Infection prevention and control, clause 2.2.3, 4.10.15



**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.4 Environmental cleaning of the reprocessing area.**

**Additional Information**

There is a documented policy or standard operating procedure for environmental cleaning of the reprocessing area, including sterile storage.

Must indicate frequency and requirement for documentation:

- cleaning of walls, ceilings, vents, light fixtures at least every six months
- cleaning of floors, horizontal work surfaces and counters at least daily

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure indicating frequency and documentation of environmental cleaning that includes:

- cleaning of walls, ceilings, vents, light fixtures at least every six months
- cleaning of floors, horizontal work surfaces and counters at least daily

**Reference**

AC, Clause: 3.7

AH, Clause 2.3.4, 11.4.2

CSA Z314-18:-18: 6.7.1.2(g), 10.2.1, 10.5 Table 10.2

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.5 Dress code for staff in the reprocessing area.**

**Additional Information**

There is a documented policy or standard operating procedure for dress code for staff in the reprocessing area.

Dress code includes the following:

- clean attire
- clean hair-cover
- clean, unpolished nails
- no artificial nails
- no jewelry
- clean, sturdy footwear

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for a dress code that includes:

- clean attire
- clean hair-cover
- clean, unpolished nails
- no artificial nails
- no jewelry
- clean, sturdy footwear

**Reference**

AC, Clause: 8.7

AH, Clause: 11.4.1

CSA Z314-18: 6.3, 6.7.2.1

ORNAC, Section 2: Infection prevention and control, Clause: 2.9

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.6 Prevention of staff exposure to blood and body fluids (e.g, splashes or sharps injuries).

##### Additional Information

There is a documented policy or standard operating procedure for prevention of staff exposure to blood and body fluids (e.g, splashes or sharps injuries).

Includes:

- removing and disposing of single-use sharps, at point of use
- safe work practices (e.g, never reaching blindly into instrument sets)
- handling glass or fragile objects with care
- wearing personal protective equipment appropriate to the task

##### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure for the prevention of staff exposures to blood and body fluids (e.g, splashes or sharps injuries) that should include:

- removing and disposing of single-use sharps at point of use
- safe work practices (e.g, never reaching blindly into instrument sets)
- handling glass or fragile objects with care
- wearing personal protective equipment appropriate to the task

AHS Policy for Occupational Exposure to Blood and Body Fluids

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-ahs-pol-occupational-exposure.pdf>

##### Reference

AH, Clause: 11.4.1

CSA Z314-18: 6.7.3, 11.2.3,

ORNAC, Section 4: Risk Management and Occupational Health and Safety, clause 4.12

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.7 Follow-up of staff exposure to blood and body fluids (e.g, splashes or sharps injuries).**

**Additional Information**

There is a documented policy or standard operating procedure for follow-up of staff exposure to blood and body fluids (e.g, splashes or sharps injuries).

Includes:

- immediate first aid
- notification of supervisor
- where to find instructions on follow-up

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that describes procedures that are followed after staff exposures to blood and body fluids (e.g, splashes or sharps injuries) that includes:

- immediate first aid
- notification of supervisor
- where to find instructions on follow-up

AHS Occupational Exposure to Blood and Body Fluids Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-ahs-pol-occupational-exposure.pdf>

**Reference**

AH, Clause: 11.4.1

CSA Z314-18: 6.7.1, 6.7.2, 6.7.4

ORNAC, Section 4: Risk Management and Occupational Health and Safety, clause 4.12

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.8 Management of health status of staff to prevent contamination of devices and to protect workers.**

**Additional Information**

There is a documented policy or standard operating procedure for management of health status of staff to prevent contamination of devices and to protect workers.

Addresses the following issues:

- Symptomatic for communicable disease (acute gastrointestinal, respiratory infections, and exudative skin lesions).

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for the management of staff health status that should include management of:

Staff who are symptomatic for communicable disease (acute gastrointestinal, respiratory infections, and exudative skin lesions).

**Reference**

AH, Clause: 11.4.1

CSA 314-18: 6.7.1.1 (b) (v, vii), 6.7.1.3

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.9 Waste management including disposal of contaminated sharps and biomedical wastes.

##### Additional Information

There is a documented policy or standard operating procedure for waste management including disposal of contaminated sharps and biomedical wastes.

Must include instructions on how staff dispose of sharps and biomedical waste.

##### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure for the management of sharps and biomedical wastes disposal. This must include instructions on how staff disposes of sharps and biomedical wastes.

##### Reference

AHS Biomedical Waste Procedure

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-prov-esm-biomedical-waste-procedure-esm-01-01.pdf>

AH, Clauses: 5.1.1, 11.4.2

CSA Z314-18: 4.2, 6.6.2, 6.7.1, 6.7.4

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.10 Prohibiting activities such as eating, drinking, storing food, smoking, and applying cosmetics or handling of contact lenses in work areas.**

**Additional Information**

There is a documented policy or standard operating procedure for prohibiting activities such as eating, drinking, storing food, smoking, applying cosmetics or handling of contact lenses in work areas.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that prohibits activities that put patients or staff in reprocessing areas at risk of exposure to communicable diseases. These activities include, but are not limited to:

- eating
- drinking
- storing food
- applying cosmetics
- handling of contact lenses

**Reference**

AC, Clause: 8.6

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.11 Reprocessing (cleaning and sterilization) of reusable critical medical devices.

##### Additional Information

There are documented policies or standard operating procedures for reprocessing (cleaning and sterilization) of reusable critical medical devices, including a statement that:

- Newly purchased devices shall be reprocessed before initial use, unless packaged and sterilized by the manufacturer.
- Devices that come from an opened or compromised package shall be reprocessed prior to use.

Indicates that reusable critical medical devices must be cleaned and sterilized in accordance with manufacturer's written instructions before each use.

*Note to Reviewer: examples of critical devices include, but are not limited to:*

- *surgical instruments*
- *dental devices that penetrate soft tissue or bone (e.g, bone chisels, forceps, scalpels, scalers, burs)*
- *hand pieces, including dental*
- *endoscopes that penetrate sterile tissue (e.g, arthroscopes, cystoscopes, laparoscopes)*
- *reusable accessories (endoscopic or other) that penetrate sterile tissue (e.g, cytology brushes, biopsy forceps, cutting devices)*
- *multi-client reusable foot care devices*

All areas that *use* critical devices *must* have this policy or standard operating procedure.

This item is N/A if the area is *neither*:

- using critical devices
- reprocessing critical devices

##### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure that reusable critical medical devices must be cleaned and sterilized in accordance with manufacturer's written instructions before each use.

Examples of critical devices include, but are not limited to:

- surgical instruments
- dental devices that penetrate soft tissue or bone (e.g, bone chisels, forceps, scalpels, scalers, burs)
- hand pieces, including dental
- endoscopes that penetrate sterile tissue (e.g, arthroscopes, cystoscopes, laparoscopes)
- reusable accessories (endoscopic or other) that penetrate sterile tissue (e.g, cytology brushes, biopsy forceps, cutting devices)
- multi-client reusable foot care devices

##### Reference

AC, Clause: 9.0 and 10.0

AH, Clauses: 4.2; 4.3, 8.1, 11.2.1.1

CSA Z314-18: 4.1, 7.1; 8.1.6; 17.5.3.1



## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.12 Reprocessing (cleaning and high-level disinfection) of reusable semi-critical medical devices.**

##### **Additional Information**

There is a documented policy or standard operating procedure for reprocessing (cleaning and high-level disinfection) of reusable semi-critical medical devices. Indicates that reusable semi-critical medical devices must be cleaned and at a minimum high-level disinfected in accordance with manufacturer's written instructions before each use.

Examples of semi-critical devices include, but are not limited to:

- respiratory devices
- anaesthetic circuit components
- endovaginal, transesophageal echocardiogram (TEE) probes
- dental devices that are not intended to penetrate oral soft tissue or bone but may come into contact with oral tissues (e.g, amalgam condensers, air-water syringes)
- diagnostic lenses in Ophthalmology Clinic areas

All areas who *use* semi-critical devices *must* have this policy or standard operating procedure.

This item is N/A if the area is *neither*:

- using semi-critical devices
- reprocessing semi-critical devices

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure stating that reusable semi-critical medical devices must be cleaned and at least high-level disinfected in accordance with manufacturer's written instructions before each use.

Examples of semi-critical devices include, but are not limited to:

- respiratory devices
- anesthetic circuit components
- endovaginal, transesophageal echocardiogram (TEE) probes
- dental devices that are not intended to penetrate oral soft tissue or bone but may come into contact with oral tissues (e.g, amalgam condensers, air-water syringes)
- diagnostic lenses in Ophthalmology Clinic areas

##### **Reference**

AH, Clause: 7.1, 11.2.1.1

CSA Z314-18: 4.1, 7.1

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.13 Record and document retention.**

**Additional Information**

There is a documented policy or standard operating procedure for record and document retention. The organizational, regional or site policy or standard operating procedure applies. Indicate in “Observed Deficiency” the time frame for record and document retention.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that describes the organization’s, region’s or site’s document retention process.

AHS Record Management Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-ahs-pol-records-management.pdf>

AHS Records Retention Schedule (1133-01)

<http://www.albertahealthservices.ca/assets/info/hp/him/if-hp-him-records-retention-schedule.pdf>

**Reference**

AC, Clause: 13.3

AH, Clause 11.6

CSA Z314-18: 5.7.1

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.14 Evaluation and purchasing of reusable medical devices, reprocessing equipment, and supplies or consumables.

##### Additional Information

There is a documented policy or standard operating procedure for evaluation and purchasing of reusable medical devices, reprocessing equipment, and supplies or consumables.

Should include:

- Manager/purchaser consults appropriate personnel before purchase. This includes, as applicable to the purchase: MDR, Infection Prevention and Control, Workplace Health and Safety, End user department, Patient Services, Support Services (Environmental Services, Linen Services, etc.) and Biomedical Engineering or Facilities Maintenance and Engineering.
- Review of validated manufacturer's written instructions. They must match the processes in the MDR area and have the following components:
  - reprocessing before initial use, unless packaged and sterilized by the manufacturer
  - manufacturer's instructions for use for the methods used
  - disassembly (if required)
  - cleaning (ensure method used is compatible with the manufacturer's instructions for use)
  - inspection
  - reassembly
  - disinfection (ensure method used is compatible with the manufacturer's instructions)
  - sterilization (ensure method used is compatible with the manufacturer's instructions)
  - reusable components, number of reprocessing cycles, and tracking method (if indicated)
  - list of single-use components
- consideration of limiting purchase of reusable difficult to clean devices, where possible

Examples are: surgical instruments, non-sterile critical and semi-critical medical devices (e.g, dental burs), endoscopes, reprocessing equipment (e.g, washer/disinfectors, sterilizers, etc.), wrapping/packaging materials, sterilization indicators and process challenge devices, disinfectants, detergents /enzymatic cleaners.

##### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure that applies to evaluation and purchasing of reusable medical devices, reprocessing equipment, and supplies or consumables. This should include the requirement for:

- Manager/purchaser consults appropriate personnel before purchase. This includes, as applicable to the purchase: MDR, Infection Prevention and Control, Workplace Health and Safety, End user department, Patient Services, Support Services (Environmental Services, Linen Services, etc.), Biomedical Engineering or Facilities Maintenance and Engineering
- review of validated manufacturer's written instructions
- consideration of limiting purchase of reusable difficult to clean devices, where possible

##### Reference

AC, Clause: 4.2, 7.1

AH, Clauses: 3.1, 3.6

CSA Z314-18: 7.1; 7.2; 8

CSA Z17664: 3.1

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.15 Contingency plans for emergency situations for sterilizer shutdown.**

**Additional Information**

There is a documented policy or standard operating procedure for contingency plans for emergency situations for sterilizer shutdown.

Must include information on:

- who is notified,
- how to get the problem fixed,
- measures taken in the interim such as
  - cancelling affected procedures,
  - transferring reprocessing to another department,
  - preparing devices for transport, etc.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure (contingency plan) for emergency situations for sterilizer shutdown (e.g. backup sterilization arrangement with outside facility, surgery shutdown, etc.).

**Reference**

AC, Clause: 7.5

AH, Clause 11.4.6

CSA Z314-18: 18.1.1

CSA Z314.23-16, Clause: 13.2

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.16 Contingency plans for emergency situations for automated equipment shutdowns.**

**Additional Information**

There is a documented policy or standard operating procedure for contingency plans for emergency situations for automated equipment shutdowns.

Must include information on:

- who is notified,
- how to get the problem fixed, and
- measures taken in the interim such as
  - cancelling affected procedures,
  - transferring reprocessing to another department,
  - preparing devices for transport, etc.

Examples of automated equipment include washer or disinfectors, ultrasonic cleaners, pasteurizer, GUS, DI probe reprocessing units, etc.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure (contingency plan) for shutdown of automated equipment (e.g, manual cleaning).

Examples of automated equipment are: washer/disinfectors, ultrasonic cleaners, pasteurizers, automated endoscope reprocessors (AER), etc.

**Reference**

AH, Clause 11.4.6  
CSA Z314-18: 18.1.1

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.17 Contingency plans for emergency situations as a result of steam, water or other utility interruptions.**

**Additional Information**

There is a documented policy or standard operating procedure for contingency plans for emergency situations as a result of steam, water or other utility interruptions.

Must include information on:

- who is notified,
- how to get the problem fixed,
- measures taken in the interim such as
  - cancelling affected procedures,
  - transferring reprocessing to another department,
  - preparing devices for transport, etc.

Examples of utility interruptions include heating, ventilation, air conditioning (HVAC) failure, boil water advisory, etc.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure (contingency plan) for steam, water or other utility interruptions.

Examples of utility interruptions include heating, ventilation, air conditioning (HVAC) failure, boil water advisory, etc.

**Reference**

AC, Clause: 7.5

AH, Clause 11.4.6

CSA Z314-18: 18.1.1

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.18 Contingency plans for large scale inventory loss (e.g, situations involving excessive humidity in sterile storage areas).**

**Additional Information**

There is a documented policy or standard operating procedure for contingency plans for large scale inventory loss (e.g, situations involving excessive humidity in sterile storage areas).

Must include information on:

- who is notified,
- how to get the problem fixed,
- measures taken in the interim such as
  - cancelling affected procedures,
  - transferring reprocessing to another department,
  - preparing devices for transport, etc.

Examples of large scale inventory loss include:

- sterile storage conditions resulting in condensation in packs (extremes of temperature or humidity),
- discarding of devices due to Creutzfeldt-Jakob disease cases,
- flooding, fire or other natural disaster and
- other source of contamination to majority of devices.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure (contingency plan) for large scale inventory loss.

**Reference**

AH, Clause 11.4.6

CSA Z314-18: Table A.1, 4.2.1

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.19 Handling and management of loaned, shared or leased (e.g, clinician or vendor supplied) critical and semi-critical medical devices.

##### Additional Information

There is a documented policy or standard operating procedure for handling and management of loaned, shared or leased (e.g, clinician or vendor supplied) critical and semi-critical medical devices.

Includes:

- Receiving and following written manufacturer's reprocessing instructions
- Receiving devices in a timely manner to allow for reprocessing at the site before use
- Inspection of received devices

If an area does not routinely accept loaned, shared or leased devices, they must have a policy or standard operating procedure that states this.

*Note: devices that travel with physicians or other clinicians are clinician supplied devices and are applicable to this item. Vendor supplied devices for trials or evaluations are also applicable to this item*

##### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure that applies to the transportation, receiving, handling and processing of loaned, shared or leased medical devices that should include:

- Receiving and following written manufacturer's reprocessing instructions
- Receiving devices in a timely manner to allow for reprocessing at the site before use

AHS Management of Loaned and Reusable Medical Devices Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-management-loaned-reusable-medical-devices-policy-ps-91.pdf>

##### Reference

AC, Clause: 7.3

AH, Clause: 11.2.1.8, 11.6.3

CSA-Z314-18: 9



## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.20 Transporting contaminated items to the reprocessing area.**

##### **Additional Information**

There is a documented policy or standard operating procedure for transporting contaminated items to the reprocessing area.

Must:

- removing of gross soil (e.g, blood clots, feces, etc.) at point of use
- removing of disposable sharps at point of use
- ensuring soil does not harden (e.g, cover instruments with a moist towel or use appropriate anti-drying product)
- containing items in a protective, covered, leak-proof container
- procedures to minimize contamination of environment and personnel
- labelling or coding of transport containers to indicate contaminated contents

*Note: Labelling must be cleanable. Manufacturer's labels or stickers should be removed before first use.*

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for contaminated devices/equipment transport to the reprocessing area.

Standard operating procedure must include:

- removing of gross soil (e.g, blood clots, feces, etc.) at point of use
- removing of disposable sharps at point of use
- ensuring soil does not harden (e.g, cover instruments with a moist towel or use appropriate anti-drying product)
- containing items in a protective, covered, leak-proof container
- procedures to minimize contamination of environment and personnel
- labeling or coding of containers to indicate contaminated contents

##### **Reference**

AH, Clause: 5.2, 5.3

CSA Z314-18: 11.2, 11.37

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

#### A1.21 Inspection, identification and disposal of damaged/defective devices.

##### **Additional Information**

There is a documented policy or standard operating procedure for inspection, identification, and disposal of damaged or defective devices that includes labelling, repair, disposal, etc. Inspection of returned repaired items also occurs.

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for inspection, identification and disposal of damaged equipment that includes labeling, repair, disposal, etc.

##### **Reference**

AH, Clauses: 4.2, 4.4

CSA Z314-18: 5.7.6.2, 14.3.3

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.22 Specifying management and staff responsibilities specific to MDR, including endoscope reprocessing.**

**Additional Information**

There is a documented policy or standard operating procedure for specifying management and staff responsibilities specific to MDR.

Must indicate who is responsible for various functions within the area, for all steps of reprocessing, including endoscopes.

- Management
- Staff

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that specifies management and staff responsibilities specific to MDR.

**Reference**

AC, Clause: 2.4; 5.0; 7.1

AH, Clauses: 10.1; 11.5.2

CSA Z314-18: 6.4, 6.5

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.23 Specifying management and staff qualifications, education and training specific to MDR, including endoscope reprocessing.**

##### **Additional Information**

There is a documented policy or standard operating procedure for specifying management and staff qualifications, education and training specific to MDR.

Indicates education, certification and training qualifications of staff involved in MDR, for all steps of reprocessing, including endoscopes.

Policy states

- Personnel in a developmental role and are not yet certified must be directly supervised by an individual who is certified in one of the recognized certification programs.
- Personnel who have not been fully trained and/or competency tested shall not reprocess critical and semi-critical medical devices unless under the direct supervision of fully trained and/or competency tested personnel.

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that specifies management and staff qualifications, education and training specific to MDR.

##### **Reference**

AC, Clause: 5.0; 7.1

AH, Clause: 10.1

CSA Z314-18: 6.2; 6.4, 6.5, 6.6

**POLICIES AND PROCEDURES  
SITE-SPECIFIC POLICIES AND PROCEDURES**

**A1.24 Identification and handling of devices that are known to be difficult to clean.**

**Additional Information**

There is a documented policy or standard operating procedure for identification and handling of devices that are known to be difficult to clean.

Includes:

- identification of items that are difficult to clean or
- characteristics that make items difficult to clean (lumens, ridges, hinges, ribbing, grooves, etc.)
- procedures to clean them that follow manufacturer's instructions
- having device specific reprocessing procedures available for staff

*Note: Difficult to clean devices should be manually cleaned unless automated methods have been proven to be more effective.*

Examples of difficult to clean devices are:

- minimally invasive surgical instruments (laparoscopes, etc.)
- biopsy forceps
- reamers
- devices with lumens, etc.

**Recommended Corrective Actions**

Develop, update or obtain a written policy for identification and handling of devices that are known to be difficult to clean. This must include:

- identification of items that are difficult to clean or
- characteristics that make items difficult to clean (lumens, ridges, hinges, ribbing, grooves, etc.)
- procedures to clean these items that follow manufacturer's instructions
- having device-specific reprocessing instructions available for staff

Examples of difficult to clean devices are:

- minimally invasive surgical instruments (laparoscopes, etc.)
- biopsy forceps
- reamers
- devices with lumens, etc.

**Reference**

AH, Clause: 11.2.1.2

CSA Z314-18: 11.6.5.2.3, 8.1.5, 8.2.3

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.25 Cleaning of medical devices, including endoscopes, according to manufacturer's written instructions.**

##### **Additional Information**

There is a documented policy or standard operating procedure for cleaning of medical devices, according to manufacturer's written instructions.

The policy contains a statement that medical devices shall be cleaned using an automated process whenever possible.

Steps include:

- pre-cleaning
- disassembly (where applicable)
- sorting and soaking
- cleaning
- physical removal of soil
- rinsing
- drying
- lubricating
- inspecting of devices for cleanliness and functionality (e.g, wear, damage and mechanical defect)
- reassembly, if required by manufacturer's instructions for use

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for cleaning of medical devices according to the manufacturer's written instructions, including:

- pre-cleaning
- disassembly (where applicable)
- sorting and soaking
- cleaning
- rinsing
- drying
- lubrication
- inspection of devices for cleanliness and functionality (e.g, wear, damage and mechanical defect)
- reassembly, if required by manufacturer's instructions for use, in a clean and dry area

##### **Reference**

AC, Clause: 7.0; 9.0

AH, Clauses: 6.4, 6.9, 6.12, 11.2.1.1, 11.2.1.2

CSA Z314-18: 11

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

**A1.26 Each method of sterilization used, according to manufacturer's written instructions.**

#### Additional Information

There is a documented policy or standard operating procedure for each method of sterilization used, according to manufacturer's written instructions. Policy or standard operating procedure for each method of sterilization used in the area. This may include:

- steam
- ethylene oxide (ETO)
- hydrogen peroxide gas plasma
- liquid chemical (Steris System 1®)
- other approved methods of sterilization (as indicated on page one)

This may be one general standard operating procedure for all methods that indicates that manufacturer's instructions for use are followed.

#### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure stating that each sterilization process used is in accordance with the manufacturer's written instructions.

Develop, update or obtain a policy or standard operating procedure for each method of sterilization used in the area; examples include:

- steam
- ethylene oxide (ETO)
- hydrogen peroxide gas plasma
- liquid chemical (Steris System 1®)
- other approved methods of sterilization (as indicated on page one)

#### Reference

AC, Clause: 10.0

AH, Clauses: 8.4.1, 8.4.2

CSA Z314-18: 16.1

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.27 Packaging of reusable critical medical devices according to manufacturer's written instructions.**

**Additional Information**

There is a documented policy or standard operating procedure for packaging of reusable critical medical devices according to manufacturer's written instructions.

Must include:

- use of packaging appropriate to the sterilization method
- inclusion of chemical indicators before sealing package
- correct sealing and labelling practice

Chemical integrators (Type 5) and emulators (Type 6) are types of chemical indicators. If a package is released based on monitored physical parameters and internal chemical indicator results, the internal chemical indicator shall be Type 5 or Type 6.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for packaging of critical medical devices before sterilization that includes:

- use of packaging appropriate to the sterilization method
- inclusion of chemical indicators before sealing package
- correct sealing and labeling practice

**Reference**

AH, Clause 8.13, 8.22, 11.2.1.1, 11.4.4

CSA Z314-18: 15.1.1, 15.1.2, 15.5.1, 15.5.2, 15.6, 15.8.3.4



**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.28 Use of rigid sterilization container systems.**

**Additional Information**

There is a documented policy or standard operating procedure for use of rigid sterilization container systems.

Includes details on:

- arrangement of devices within the container
- placement of filter(s)
- ensuring gaskets are intact and free of debris
- properly latching lid
- placement of tamper evident devices
- labelling
- decontamination of containers
- storage

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for rigid sterilization container systems. Standard operating procedure includes:

- arrangement of devices within the container
- placement of filter(s)
- ensuring gaskets are intact and free of debris
- properly latching lid
- placement of tamper evident devices
- labeling
- decontamination of containers
- storage

**Reference**

AH, Clause 8.13, 11.2.1.1

CSA Z314-18: 15.9

## **POLICIES AND PROCEDURES**

### **Site-specific Policies and Procedures**

#### **A1.29 Quarantine of implantable medical devices pending biological indicator results.**

##### **Additional Information**

There is a documented policy or standard operating procedure for quarantine of implantable medical devices pending biological indicator results.

Policy includes:

- Early release of implants shall not be used to compensate for inventory shortages or scheduling problems.
- Early release of implants shall only be done in situations where there is an urgent, unplanned need (e.g., trauma-related devices) and if an implant must be released before the biological indicator test results are available, the following shall apply:
  - Evaluation of a Type 5 or Type 6 chemical indicator in the biological indicator PCD, the specific cycle physical parameters, and any visible chemical indicators shall be assessed and the results documented.
  - Information identifying the implant and the client it was used on shall be documented.
  - A report shall be prepared, reviewed, and maintained according to the organization's risk management policy and shall contain the:
    - client's identifier;
    - implant identification number;
    - surgeon's name;
    - time and date of the procedure;
    - results of any physical or chemical indicators used in the sterilization process; and
    - results of the biological indicator once they are known.
  - For steam sterilization, if a Type 5 or 6 chemical indicator is also used to monitor an implant load, the results shall be interpreted before a load is released.

If a package is released based on monitored physical parameters and internal chemical indicator results, the internal chemical indicator shall be Type 5 or Type 6.

*Note: Type 5 and Type 6 internal chemical indicators measure all critical parameters for steam sterilization and provide additional quality assurance for monitoring medical devices. Other types of internal chemical indicators might not be designed to measure all critical parameters, so deviations in critical variables might go undetected.*

##### **Recommended Corrective Actions**

Packages containing implantable devices are not released until the biological indicator result is obtained (e.g. is negative).

##### **Reference**

AC, Clause: 9.15

AH, Clauses: 8.19.5, 8.22

CSA Z314-18: 16.6.6, 16.6.11.1

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.30 Positive biological indicator or failed sterilization load.**

##### **Additional Information**

There are documented policies or standard operating procedures for positive biological indicator or failed sterilization load.

Must include:

- the person responsible to notify the manager or designate
- notification of IPC personnel or designate
- the process to recall and isolate all loads done since the last negative biological indicator

Possible sterilization failures may include:

- wet load
- failed mechanical parameters
- failed chemical indicators
- equipment failure
- human error

##### **Recommended Corrective Actions**

Develop, update or obtain written policies or standard operating procedure for positive biological indicator or failed sterilization load that includes:

- the person responsible to notify the manager or designate,
- notification of IPC personnel or designate and
- the process to recall and isolate all loads done since the last negative biological indicator.

##### **Reference**

AC, Clause: 14.4; 14.5; 14.6, 14.7

AH, Clauses: 8.25, 11.2.1.5, 11.2.1.7

CSA Z314-18: 5.7.7.1, 16.6.12, 16.6.13

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.31 Immediate use steam sterilization (IUSS)**

##### **Additional Information**

There are documented policies or standard operating procedures for immediate use steam sterilization (IUSS).

Must:

- include the requirement for cleaning of device before immediate use steam sterilization
- outline the steps to be taken for immediate use steam sterilization
- include documentation requirements for immediate use steam sterilization

Documentation for immediate use steam sterilization includes:

- sterilizer identifier
- load number
- date and time of cycle
- results of chemical indicators and mechanical indicators of physical parameters (e.g, time, temp, etc.)
- load contents
- identification of person responsible for indicators and load release
- patient name and ID number
- surgeon's name
- reason for immediate use steam sterilization

Immediate use steam sterilization must not be used for routinely scheduled procedures or to compensate for lack of inventory, and is never performed for implantable devices.

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure stating immediate use steam sterilization (IUSS) must not be used for routinely scheduled procedures or to compensate for lack of inventory and is never performed on implantable devices.

Develop, update or obtain a written policy or standard operating procedure for immediate use steam sterilization (IUSS) that includes the requirement for cleaning of devices before IUSS and outlines the steps to be taken for IUSS, including documentation requirements.

##### **Reference**

AC, Clause: 7.4

AH, Clause: 8.26-28

CSA Z314-18: 16.7

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.32 Use and maintenance of containers designed for immediate use steam sterilization according to manufacturer's written instructions.**

**Additional Information**

There is a documented policy or standard operating procedure for use and maintenance of containers designed for immediate use steam sterilization according to manufacturer's written instructions.

Includes proper use and maintenance of containers (e.g, Flashpak®).

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that include proper use and maintenance of containers used for immediate use steam sterilization (e.g, Flashpak®).

**Reference**

AH, Clause: 11.2.1.1

CSA Z314-18: 16.7.5.2

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.33 Chemical high-level disinfection of semi-critical medical devices, including endoscopes.**

**Additional Information**

There is a documented policy or standard operating procedure for chemical high-level disinfection.

Includes:

- cleaning and rinsing of devices (including endoscopes) before disinfection
- using appropriate product with a Health Canada Medical Device License, Class II
- manufacturer's written instructions, including current Safety Data Sheet (SDS)
- monitoring (including a statement that high-level disinfectant is not used beyond any expiry date or a failed minimum effective concentration test)
- documentation

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for chemical high-level disinfection that includes:

- cleaning and rinsing of devices (including endoscopes) before disinfection
- using appropriate product with a Health Canada Medical Device License, Class II
- manufacturer's written instructions, including current Safety Data Sheet (SDS)
- monitoring
- documentation

**Reference**

AH, Clauses: 7.1-4, 7.7.4, 11.2.1.1

CSA Z314-18: 11.7.2

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.34 Thermal high-level disinfection (e.g, pasteurizer or washer/disinfector with validated thermal disinfection cycle).**

**Additional Information**

There is a documented policy or standard operating procedure for thermal high-level disinfection (e.g, washer/disinfector with validated thermal disinfection cycle).

Should include:

- cleaning and rinsing of devices before disinfection
- manufacturer's written instructions
- monitoring
- documentation

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for thermal high-level disinfection (e.g, washer/disinfector with validated thermal disinfection cycle) that includes:

- cleaning and rinsing of devices before disinfection
- manufacturer's written instructions
- monitoring
- documentation

**Reference**

AH, Clauses: 7.14-20, 11.2.1.1

CSA Z314-18: 11.8.1, 11.8.2, 11.8.3, 11.8.4

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

**A1.35 Routine monitoring of automated cleaning or disinfecting equipment used in reprocessing (e.g, lumen cleaners, ultrasonic cleaners, washer or disinfectors, pasteurizers, AER, BI incubators, sterilizers).**

#### **Additional Information**

There is a documented policy or standard operating procedure for routine monitoring of automated cleaning/disinfection equipment used in reprocessing. Includes information on routine (e.g, every shift, daily, weekly, monthly, etc.) monitoring or testing of the equipment.

Examples include:

- testing ultrasonic cleaners at least weekly
- testing of washer/disinfectors daily
- testing of washer/disinfector as per manufacturer's written instructions, or using indicator such as the Test Object Surgical Instrument (TOSI)
- testing routine monitoring of AER (e.g, verifying cycle time and temperature settings are appropriate to the load contents before starting, checking fluid levels at regular intervals [daily, every shift, etc.]

#### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure that includes information on routine (e.g, every shift, daily, weekly, monthly, etc.) monitoring or testing of the equipment.

Examples include:

- testing ultrasonic cleaners at least weekly
- testing of washer/disinfectors daily
- testing of washer/disinfector as per manufacturer's written instructions, or using indicator such as the Test Object Surgical Instrument (TOSI)
- testing routine monitoring of AER (e.g, verifying cycle time and temperature settings are appropriate to the load contents before starting, checking fluid levels at regular intervals [daily, every shift, etc.]

#### **Reference**

AH, Clauses: 6.8-9. 11.2.1.4

CSA Z314-18: 11.6.5.3.4, 11.6.6.6



**POLICIES AND PROCEDURES**  
**Site-Specific Policies and Procedures**

**A1.36 Sterility assurance monitoring.**

**Additional Information**

There is a documented policy or standard operating procedure for sterility assurance monitoring.

Includes:

- monitoring of each package that is sterilized with chemical indicators:
  - external
  - internal
- testing the sterilizer with biological indicator each day the sterilizer is in use and for each type of cycle used
- including a biological indicator in each load containing implantable devices
- monitoring of mechanical indicators (e.g, time, temperature, pressure)
- testing dynamic air removal sterilizers with a Bowie Dick test each day the sterilizer is in use
- instructions on performance qualification and requalification for device sets used in the facility and documentation of results.

Examples of cycle types include dynamic air removal (prevac), gravity, extended cycles, standard cycles, etc.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for sterility assurance monitoring that includes:

- monitoring of each package that is sterilized with external and internal chemical indicators
- testing the sterilizer with a biological indicator each day the sterilizer is in use and for each type of cycle used
- including a biological indicator in each load containing implantable devices
- monitoring of mechanical indicators (e.g, time, temperature, pressure)
- testing dynamic air removal sterilizers with a Bowie Dick test each day the sterilizer is in use
- instructions on performance qualification and requalification for device sets used in the facility and documentation of results.

**Reference**

AH, Clause: 8.10; 8.19, 8.21  
CSA Z314-18: 16.5.4.1; 16.6

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.37 Routine monitoring of reusable chemical high-level disinfectant minimum effective concentration at least daily.**

**Additional Information**

There is a documented policy or standard operating procedure for routine monitoring of reusable chemical high-level disinfectant minimum effective concentration at least daily.

Minimum effective concentration testing of **reusable** chemical high-level disinfectant should include:

- frequency (minimum each day the disinfectant is used)
- method of testing
- documentation requirement

**This is N/A for single-shot disinfectant from an individual container or large container source (Tropon, Innova, some Medivators, etc.)**

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for routine monitoring of reusable chemical high-level disinfectant that includes:

- frequency (e.g. minimum each day the disinfectant is used)
- method of testing minimum effective concentration
- documentation requirement

**Reference**

AC, Clause: 9.7

AH, Clause: 7.7

CSA Z314-18: 11.7.2.4.2

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

**A1.38 Routine maintenance of automated equipment used in reprocessing (e.g, lumen cleaners, ultrasonic cleaners, washer or disinfectors, pasteurizers, air handling systems, AER, probe reprocessors, BI incubators, sterilizers).**

#### Additional Information

There is a documented policy or standard operating procedure for routine maintenance of automated equipment used in reprocessing.

Includes information on:

- what routine (user provided) maintenance is required on each piece of equipment (e.g, cleaning, water level checks, descaling, etc.)
- frequency of routine maintenance (e.g, every shift, daily, weekly monthly, etc.)
- who performs routine maintenance
- documentation of routine maintenance

This applies to all automated equipment including, but not limited to: Steam Sterilizer(s), HP Gas Plasma Sterilizer(s), ETO Sterilizer(s), Steris System 1, Steam BI Incubator, HP Gas Plasma BI Incubator, ETO BI Incubator, Steris System 1 BI Incubator, Washer Disinfectors, Pasteurizer, Ultrasonic cleaner, Air handling Systems (e.g, GUS), Automated Lumen Cleaners, DI probe reprocessing unit, Fume Hoods, and Automated Endoscope Reprocessors (AER).

Routine maintenance may include:

- cleaning or wiping external surfaces of automated equipment at regular intervals
- maintaining water reservoir in table top steam sterilizers
- regular bleaching cycles of lumen cleaners
- regular inspection of filters, gaskets, etc.
- descaling of sterilizer chamber
- inspection of chamber drain

#### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure for routine maintenance of automated equipment used in reprocessing, including information on user provided maintenance such as routine (e.g, every shift, daily, weekly, and monthly, etc.) maintenance.

Examples include:

- cleaning or wiping external surfaces of automated equipment at regular intervals
- maintaining water reservoir in table top steam sterilizers
- routine bleach cycle of automated lumen cleaners

#### Reference

AC, Clause: 4.5; 4.6

AH, Clause: 11.2.1.4

CSA Z314-18: 18

## POLICIES AND PROCEDURES

### Site-Specific Policies and Procedures

**A1.39 Preventive maintenance of all automated equipment used in reprocessing (e.g, lumen cleaners, ultrasonic cleaners, washer or disinfectors, pasteurizers, air handling systems, AER, probe reprocessors, BI incubators, sterilizers).**

#### Additional Information

There is a documented policy or standard operating procedure for preventive maintenance of all automated equipment used in reprocessing.

Includes information on:

- frequency of preventive maintenance
- who performs preventive maintenance
- documentation of preventive maintenance and any testing required

*Note: preventive maintenance is usually done annually or every six months.*

This applies to all automated equipment, including:

- Steam Sterilizer(s)
- HP Gas Plasma Sterilizer(s)
- ETO Sterilizer(s)
- Steris System 1
- Steam BI Incubator
- HP Gas Plasma BI Incubator
- ETO BI Incubator
- Trophon
- Washer Disinfectors
- Pasteurizer
- Ultrasonic cleaner
- Air handling System
- Automated Lumen Cleaners
- Fume Hoods
- Automated Endoscope Reprocessors (AER)

#### Recommended Corrective Actions

Develop, update or obtain a written policy or standard operating procedure for preventative maintenance of all automated equipment used in reprocessing that includes information on:

- frequency of preventive maintenance
- who performs preventive maintenance
- documentation of preventive maintenance and any testing required

#### Reference

AC, Clause: 4.5; 4.6

AH, Clauses: 11.6.1, 11.2.1.4

CSA Z314-18: 5.7.6.2

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**A1.40 Receiving, investigating and follow-up of customer concerns.**

**Additional Information**

There is a documented policy or standard operating procedure for receiving, investigating and follow-up of customer concerns.

This would include:

- methods that users of medical devices contact reprocessing department with concerns
- how concerns are addressed
- how concerns are documented

Customers include:

- end-user (OR, DI, Clinics, Units, etc.)
- patients

Customer concerns may include:

- reports by end user of:
  - dirty instrument
  - wet packs
- chemical indicator failure, etc.
- reports of patient injury such as: chemical burns

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure describing how users contact the MDR department with concerns, and how concerns are addressed and documented.

**Reference**

AC, Clause: 15.2; 15.3  
CSA Z314-18: 5.2.3

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.41 Periodic testing of water used for reprocessing of medical devices.**

##### **Additional Information**

There is a documented policy or standard operating procedure for periodic testing of water used for reprocessing of medical devices. This is required for all areas using ultrasonic cleaners, automated washer disinfectors or steam sterilizers. The policy or standard operating procedure emphasizes the importance of making sure the water source meets the equipment manufacturer's specifications for water and steam quality.

Testing of water **may** include:

- microorganisms
- endotoxins for:
  - RO
  - distilled
- total organic carbon
- pH for:
  - potable
  - softened
- hardness
- resistivity for:
  - deionized
  - RO
  - distillation
- chloride content
- iron content
- copper content
- manganese content
- colour and turbidity

Policy indicates:

- type of water used
- frequency of testing
- who performs testing

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for periodic testing, reporting and follow-up of the water supply to the MDR areas. Testing of potable (tap) water includes:

- hardness
- pH
- iron content, etc.

If treated water is used (e.g, reverse osmosis [RO] or de-ionized [DI]) manufacturer's written instructions for testing are followed.

##### **Reference**

AH, Clause: 2.2.8

CSA Z314-18: Annex G

## **POLICIES AND PROCEDURES**

### **Site-Specific Policies and Procedures**

#### **A1.42 Evaluation and response to incidents of temperature and humidity extremes in the sterile storage areas.**

##### **Additional Information**

There is a documented policy or standard operating procedure for evaluation and response to incidents of temperature and humidity extremes in the sterile storage areas.

Policy or standard operating procedure includes:

- Evaluation
  - measured and recorded daily
- Response to extremes. Acceptable ranges are:
  - Temperature: 18 – 23°C
  - Humidity: 30 – 60%

##### **Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for evaluation and response to incidents of temperature and humidity extremes in the sterile storage areas. Temperature (18 – 23°C) and humidity (30 – 60%) is measured and recorded daily.

##### **Reference**

AC, Clause: 3.5

AH, Clause: 11.4.3, 11.4.6

CSA Z314-18: Annex Q

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**E1.20 Shelf-life of semi-critical flexible endoscopes.**

**Additional Information**

There is a documented policy or standard operating procedure for shelf-life of semi-critical flexible endoscopes. Unused channeled flexible endoscopes should be reprocessed (cleaning plus high-level disinfection or unwrapped sterilization) before use after seven days storage.

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for shelf-life of semi-critical flexible endoscopes.

- unused gastrointestinal endoscopes shall be fully reprocessed after seven days of storage
- unused bronchoscopes, if sterilization is not possible, shall be reprocessed before patient-use if stored seven days or more since last being reprocessed

**Reference**

AH, Clause: 11.2.1.2

CSA Z314.8-14, Clause: 11.1.2; 11.7.12.5; 11.8.1; Table 2 (p. 52)

SGNA Storage p. 25, para 5, para 6 item e



**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**E1.24 Cleaning of endoscopes, as per manufacturer's written instructions.**

**Additional Information**

There is a documented policy or standard operating procedure for cleaning and storage of endoscopes, as per manufacturer's written instructions (high-level disinfection steps are addressed in another policy).

Steps include:

- point of use pre-cleaning
- disassembly
- leak testing
- cleaning
- sorting and soaking
- physical removal of soil
- rinsing
- drying
- inspection of devices for cleanliness and functionality (e.g, wear, damage and mechanical defect)
- seven day shelf-life and cabinet components

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for cleaning of endoscopes and accessories including:

- point of use pre-cleaning
- disassembly
- leak testing
- cleaning
- rinsing
- drying
- inspection of devices for cleanliness and functionality (e.g, wear, damage and mechanical defect)
- seven day shelf-life and cabinet components

**Reference**

AC, Clause: 7.0; 7.6; 7.7; 9.0, 9.2; 9.3; 9.4; 9.5; 9.7; 9.8; 9.9; 11.0; 11.4; 11.5; 11.6; 11.7

AH, Clause: 11.2.1.2

CSA Z314.8-14, Clause: 11.1.2; 11.1.3; 11.7.1.2

CSA Z314.0-13, Clause: 4.4.2; 5.3; 8.1.7; 8.2.1

SGNA, p.13-26

**POLICIES AND PROCEDURES**

**Site-Specific Policies and Procedures**

**E1.28 Ensuring traceability of flexible endoscopes and endocavity probes used on each patient.**

**Additional Information**

There is a documented policy or standard operating procedure for ensuring traceability of flexible endoscopes and endocavity probes used on each patient.

Includes keeping documentation of:

- date endoscope/probe was used
- patient identification
- the serial number or other identifier of the endoscope/probe used in procedure

**Recommended Corrective Actions**

Develop, update or obtain a written policy or standard operating procedure for traceability of flexible endoscopes used on each patient that includes the requirement for documentation of:

- date endoscope/probe was used
- patient identification
- the serial number or other identifier of the endoscope/probe used in procedure

**Reference**

AC, Clause: 11.9

AH, Clause: 11.6.4

CSA 314-18: 12.4.2 (endoscopes) and 13.3.2 (U/S Probes)

SGNA, (Quality Assurance para 1-3)

**POLICIES AND PROCEDURES**  
**General Policies and Procedures**

**Reprocessing policies and procedures are readily accessible for staff.**

**Additional Information**

The site demonstrates easy access to this set of policies and procedures.

**Recommended Corrective Actions**

Ensure easy access to this set of policies and procedures.

**Reference**

AH, Clause: 11.7

CSA Z314-18: Clause 5

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## **POLICIES AND PROCEDURES**

### **General Policies and Procedures**

Reprocessing policies and procedures are periodically reviewed, according to organizational requirements, and updated earlier when there is a change in practice.

### **Additional Information**

These policies and procedures are considered Practice Documents by AHS Policy Development, and as such, are reviewed and updated periodically according to organizational/department processes.

### **Recommended Corrective Actions**

Ensure policies and procedures are dated and reviewed periodically according to organizational/department processes.

### **Reference**

AH, Clause 11.5

CSA Z314-18: Clause 5

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## POLICIES AND PROCEDURES

### Manufacturer's Instructions for Use

Manufacturer's written instructions are available for reprocessing of medical devices (including endoscopes) being decontaminated, high-level disinfected or sterilized in the area.

#### Additional Information

Check manufacturer's instructions for two types of endoscopes (if used).

*Note: CSA reinforces that the manufacturer's instruction for use for some endoscope parts (e.g, caps, valves) require ultrasonic cleaning and sterilization (rather than high-level disinfection).*

Check manufacturer's instructions for two general medical devices such as:

- respiratory masks (CPAP, LMA, etc.) - watch for reusability, single-use parts
- lumened device
- devices processed by different methods (steam, Sterrad, high-level disinfection, etc.)

Detailed instructions must match the processes in the area and have the following components:

- validated manufacturer's instructions for use for the methods used
- disassembly (if required)
- cleaning (ensure method used is compatible with the validated manufacturer's instructions for use)
- inspection
- reassembly
- disinfection (ensure method used is compatible with the validated manufacturer's instructions for use)
- sterilization (ensure method used is compatible with the validated manufacturer's instructions for use)
- reusable components
  - number of reprocessing cycles
  - tracking method (if indicated)
- single-use components

Manufacturer's instructions include, if applicable, a statement that:

- newly purchased devices shall be reprocessed before initial use (unless they come packaged and sterilized by the manufacturer).
- devices that come from an opened or compromised package shall be reprocessed prior to use.

#### Recommended Corrective Actions

Obtain and file (electronically or on paper) validated manufacturer's written instructions.

#### Reference

AC, Clause: 7.6; 7.7; 7.10; 9.0

AH, Clauses: 4.2, 4.3, 6.4, 7.1, 8.4, 11.2.1.6, 11.4.4, 11.7

CSA Z314-18: 7.1

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## EDUCATION AND TRAINING

### Qualifications

**Managers directly accountable for reprocessing shall have proven knowledge of reprocessing practices and infection prevention and control principles as they relate to MDR in their area.**

### Additional Information

Documentation should indicate education and training of management involved in MDR, for all steps of reprocessing, including endoscopes (formal training in MDR and human resources, educational seminars, in services, and training in Workplace Health and Safety and IPC).

### Recommended Corrective Actions

Document all management training components.

### Reference

AH, Section 10  
CSA Z314-18: 6.4

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## EDUCATION AND TRAINING

### Qualifications

Personnel employed as MDR technicians shall be certified (CSA or IAHCSTMM) and maintain certification, having successfully completed a recognized medical device reprocessing technician educational program.

### Additional Information

Check that current certification is available.

### Recommended Corrective Actions

Ensure current certification of all MDR staff is maintained and available.

### Reference

AH, Clause 10.1.1.1

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## EDUCATION AND TRAINING

### Qualifications

In departments where MDR is NOT the primary function, any person involved in any aspect of reprocessing shall obtain education, orientation and training specific to the function they perform or medical device to be reprocessed (e.g, medical imaging technologists, respiratory/cardiac lab technicians, service workers).

### Additional Information and Recommended Corrective Actions

Infection prevention and control (IPC) training is documented with the following via Centralized MDR and Decentralized MDR videos available on MyLearningLink:

- Basic microbiology, including conditions that support microbial growth, how microorganisms are spread and cause disease.
- Risks of contact with or exposure to infectious agents, including chain of infection model.
- Risks to patients (e.g, infection, complications, death) from exposure to inadequately reprocessed medical devices due to:
  - malfunctioning equipment
  - lack of knowledge
  - not following manufacturer's written instructions
  - inadequate storage and handling procedures
- Personal hygiene and hand hygiene including:
  - importance of clean skin, hair and clothing
  - when and how to use alcohol-based hand rub
  - when to and how to wash hands with soap and water
  - why handwashing sinks are dedicated for hand hygiene
- Use of personal protective equipment (PPE), including donning, doffing, and hand hygiene
- IPC and work practices to prevent staff exposure to blood and body fluids and includes prevention of :
  - needle stick injuries
  - mucous membrane exposures, etc.
- Safe work practices such as:
  - handling of glass and fragile items with care
  - not blindly sticking hands into instrument sets
  - wearing appropriate PPE, etc.
- Handling of sharps and waste management, including:
  - appropriate use of PPE
  - use of sharps disposal containers at point of use
  - discarding gross debris (feces, blood clots, etc.) at point of use, etc.
- Procedures following staff exposure to blood and body fluids
- One-way workflow practices to prevent the contamination of clean items

### Reference

AC, Clause: 5.0

AH, Clause: 10.1.2, 10.1.2.1, 10.1.2.2

CSA Z314-18: 6.6



**EDUCATION AND TRAINING**

**Training Documentation**

**Staff are first employed (orientation checklist).**

**Additional Information**

Check that orientation documentation is available.

**Recommended Corrective Actions**

Ensure the initial orientation of staff responsible for reprocessing includes education by competent personnel on basic reprocessing principles and how to reprocess instruments, including endoscopes. Document all staff education and training.

**Reference**

AH, Clauses: 10.1.3, 10.1.3.1

CSA Z314-18: Clause 6.6

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## EDUCATION AND TRAINING Training Documentation

**Baseline and annual competency testing of staff members are completed.**

### **Additional Information**

Check that competency testing documentation is available.

### **Recommended Corrective Actions**

Ensure the manager and staff responsible for reprocessing can demonstrate reprocessing competencies initially and at specified intervals (at least annually). Document competency testing.

### **Reference**

AH, Clauses: 10.1.3, 10.1.3.1

CSA Z314-18: Clause 6.6

**EDUCATION AND TRAINING**  
**Training Documentation**

**There is an authorized change in process (policies, procedures, practices).**

**Additional Information**

Check that in service/educational session documentation is available.

**Recommended Corrective Actions**

Ensure authorized process changes are communicated to the manager and staff responsible for reprocessing. Provide education and training. Document all staff education and training.

**Reference**

AH, Clauses: 10.1.3, 10.1.3.1  
CSA Z314-18: Clause 6.6

**EDUCATION AND TRAINING**  
**Training Documentation**

**New or updated equipment, devices, products, and textiles are purchased.**

**Additional Information**

Check that in-service/educational session documentation is available.

**Recommended Corrective Actions**

Ensure manager and staff responsible for reprocessing receive education and training on all new equipment, devices, and textiles, including information on reprocessing. Document all staff education and training.

**Reference**

AH, Clauses: 10.1.3, 10.1.3.1

CSA Z314-18: Clause 6.6

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## EDUCATION AND TRAINING Training Documentation

**MDR practices are regularly monitored and any training associated with gaps is documented.**

### Additional Information

This includes managers or designates conducting:

- routine review of logs, printouts, etc.
- supervision of practice

Review documentation for manager's or designates signature/initials on items reviewed.

Ask what is done for practice improvement to address gaps, and request documentation.

### Recommended Corrective Actions

Ensure that reprocessing practices are monitored on a regular basis and a method of follow-up is in place to remedy non-compliance.

Document monitoring; examples of monitoring methods include managers or designates signature/initials indicating:

- routine review of logs, printouts, etc.
- supervision of practice

Document all measures to address knowledge gaps.

### Reference

AC, Clause: 2.4

AH, Clauses: 10.1.3, 10.1.3.1

CSA Z314-18, 5.3.6, 5.7.1

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Eating, drinking, storing food, smoking, or applying cosmetics or personal effects does not occur in the reprocessing area.**

**Additional Information**

**Recommended Corrective Actions**

Ensure that there is no eating, drinking, storing food, smoking, or applying cosmetics or personal effects occurring in the reprocessing area.

**Reference**

AC, Clause: 8.6

AH, Clause: 2.2.5

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Staff adhere to dress code that includes:**

- **clean attire**
- **clean hair-cover**
- **clean, unpolished nails**
- **no artificial nails**
- **no jewelry**
- **clean, sturdy footwear**

**Additional Information**

Hair cover must be changed between dirty and clean tasks.

**Recommended Corrective Actions**

Ensure staff adhere to a dress code that includes:

- clean attire
- clean hair-cover
- clean, unpolished nails
- no artificial nails
- no jewelry
- clean, sturdy footwear

**Reference**

CSA Z314-18: 6.7.2

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Hand hygiene stations are available.**

**Additional Information**

Hand hygiene stations include a sink with a soap dispenser and an adjacent enclosed, single-use towel dispenser or waterless alcohol-based hand rub dispenser.

Check each entrance/exit and ensure that hand hygiene stations are available.

Clean areas must have either alcohol-based hand rub dispensers or a hand hygiene sink.

**Recommended Corrective Actions**

Ensure there are dedicated alcohol-based hand rub dispensers in all areas.

Ensure there is a hand hygiene sink at entrance/exit to decontamination area.

Hand hygiene stations include a sink with soap and an adjacent enclosed single-use towel dispenser or waterless alcohol-based hand rub dispenser.

**Reference**

AH, Clauses: 2.2.3, 2.2.3.1

CSA Z314-18: 10.2.3.1



**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Hand hygiene sink is available on entrance or exit to decontamination.**

**Additional Information**

Decontamination areas must have a **dedicated hand hygiene sink** with associated soap dispenser, paper towel dispenser and waste receptacle.

Entrance or exit sink location must be within one metre of the door, on either side, ensuring no contact with the decontamination room environment.

**Recommended Corrective Actions**

Collaborate with Capital Management to have a hand hygiene sink installed at the decontamination room entrance/exit.

**Reference**

AH, Clause 2.2.3

CSA Z314-18: 10.2.3.1

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Staff perform hand hygiene at the appropriate times.**

**Additional Information**

Hand hygiene must be performed:

- before beginning work (e.g, before clean procedures or donning personal protective equipment (PPE))
- before breaks (e.g, after handling patient care items or a risk of blood or body fluid exposure)
- upon completion of their work duties (e.g, after handling patient care items or a risk of blood or body fluid exposure)
- before putting on and after removing personal protective equipment (PPE)

**Recommended Corrective Actions**

Ensure staff perform hand hygiene at appropriate times:

- before beginning work (e.g, before clean procedures or donning personal protective equipment (PPE))
- before breaks (e.g, after handling patient care items or a risk of blood or body fluid exposure)
- upon completion of their work duties (e.g, after handling patient care items or a risk of blood or body fluid exposure)
- before putting on and after removing personal protective equipment (PPE)

**Reference**

AC, Clause: 8.5

AH, Clause: 11.4.2

CSA Z314-18: 6.7.1.2(b); 6.7.2.2.1

Health Canada. Hand Washing, Cleaning, Disinfection and Sterilization in Health Care, pp. 6-7.

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS

### Workplace Health and Safety - IPC Considerations

Personal protective equipment (PPE), appropriate to the task, is worn when handling or reprocessing contaminated devices (e.g. gloves, mask, protective eye wear or face shield and waterproof gown).

#### Additional Information

- Observe for PPE donning and doffing, with hand hygiene practices.
- PPE is worn as per hazard assessment and SDS.
- Reusable PPE shall be cleaned at least daily.

*Note: Prescription eye glasses are not acceptable for eye protection.*

#### Recommended Corrective Actions

Ensure PPE (gown, gloves, mask and eye protection) is available and worn for cleaning/reprocessing activities.

PPE includes:

- gloves appropriate to the task
- protective gown or garment
- full face shield, or high-filtration, fluid-impervious face mask and protective eyewear

*Note: Prescription eye glasses are not acceptable for eye protection*

Reusable PPE shall be cleaned at least daily.

#### Reference

AC, Clause: 8.5

AH, Clause: 11.4.2

CSA Z314-18: 6.7.2.2

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Eyewash stations are readily available where staff are exposed to chemical or biological agents.**

**Additional Information**

These are in decontamination, high-level disinfection and chemical sterilization areas.

**Recommended Corrective Actions**

Ensure eyewash stations are readily available in areas where staff handle chemicals or biological contaminants, such as decontamination, and high-level disinfection and sterilization areas.

**Reference**

CSA Z314-18: 10.2.2.1

CSA Z8000-18: 10.7.4.8(p)

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**Eyewash stations are maintained as per manufacturer's written instructions.**

**Additional Information**

Ensure that disposable eyewash bottles are not expired.

Find out how plumbed-in eyewashes are flushed and verify procedure with manufacturer's instructions.

**Recommended Corrective Actions**

Ensure eyewash stations are maintained in areas where staff handle chemicals or biological contaminants and document maintenance activities for plumbed-in eyewash stations.

**Reference**

CSA Z314-18: 10.2.2.1

CSA Z8000-18: 10.7.4.8(p)

**WORKPLACE HEALTH AND SAFETY - IPC CONSIDERATIONS**  
**Workplace Health and Safety - IPC Considerations**

**There are methods in place to contain or remove toxic vapours emitted by or from disinfecting agents.**

**Additional Information**

Methods may include:

- fume hood
- dedicated ventilation system
- keeping the reservoir for disinfectant closed at all times

**Recommended Corrective Actions**

Ensure there are methods in place to contain or remove toxic vapours emitted from disinfecting agents.

**Reference**

AC, Clause: 3.7

CSA Z314-18: 6.7.4.1.2; 10.2.4.2.1; 10.2.4.2.2; 12.4.11.1b; 13.3.12.1 (U/S Probes)

**MDR AREA DESIGN**  
**MDR Area Design**

**There is a designated reprocessing area that is physically separate from areas where patient care is provided.**

**Additional Information**

Physical separation means there is a physical barrier between the MDR area and areas where patient care is provided.

**Recommended Corrective Actions**

Ensure that there is a designated reprocessing area that is physically separated by walls or partitions from areas where patient care is provided.

**Reference**

AC, Clause: 3.2; 3.3; 3.4  
AH, Clauses: 2.1, 2.2.7, 2.3.3  
CSA Z314-18: 10.1

**MDR AREA DESIGN**  
**MDR Area Design**

**Reprocessing work areas are separated by walls or partitions to control traffic and contain contaminants.**

**Additional Information**

Physical separation means there is a physical barrier between the decontamination area and the clean area.

**Recommended Corrective Actions**

Ensure the reprocessing work areas (e.g, cleaning and decontamination area) are separated by walls or partitions to control traffic and contain contaminants.

**Reference**

AC, Clause: 3.2; 3.3; 3.4

AH, Clause: 2.2.1, 2.2.5

CSA Z314-18: 10.1



**MDR AREA DESIGN**  
**MDR Area Design**

**There are designated clean and soiled areas within the reprocessing work area.**

**Additional Information**

Check to see that areas are separated spatially, with signage, walls or partitions.

**Recommended Corrective Actions**

Ensure areas are separated spatially, with signage, walls or partitions.

**Reference**

AC, Clause: 3.2; 3.3; 3.4

AH, Clause: 2.2.1

CSA Z314-18: 10.1

**MDR AREA DESIGN**  
**MDR Area Design**

**Area has restricted access (signage) for authorized personnel wearing appropriate attire.**

**Additional Information**

Check that signage is posted at all entry points indicating the area is restricted to authorized personnel only.

**Recommended Corrective Actions**

Ensure signage is posted at all entry points indicating the area is restricted to authorized personnel only.

**Reference**

AC, Clause: 3.3

AH, Clause: 2.2.5

CSA Z314-18: 10.2.1.1.1

**MDR AREA DESIGN**  
**MDR Area Design**

**One-way workflow occurs from dirty to clean to prevent cross-contamination.**

**Additional Information**

One-way workflow is the practice of performing duties from dirty to clean.

**Recommended Corrective Actions**

Ensure the reprocessing space has one-way workflow from dirty to clean to prevent cross-contamination.

**Reference**

AC, Clause: 3.1, 3.2; 3.3; 3.4

AH, Clause: 2.2.6

CSA Z314-18: 10.1

**MDR AREA DESIGN**  
**MDR Area Design**

**Surfaces (walls, ceilings and work surfaces) are composed of non-porous, non-shedding material that can withstand frequent cleaning.**

**Additional Information**

For both decontamination and clean areas, inspect walls and ceilings and work surfaces to ensure they are clean, intact and non-porous.

Examples of porous surfaces are:

- acoustic ceiling tiles
- unfinished or worn surfaces
- damaged walls (gouges, chipped paint, etc.)

**Recommended Corrective Actions**

Ensure all walls, ceilings and work surfaces are intact and composed of non-porous, non-shedding material capable of withstanding frequent cleaning.

**Reference**

AC, Clause: 3.6

AH, Clause: 2.2.4

CSA Z314-18: 10.2.1.4, 10.2.1.5

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## MDR AREA DESIGN MDR Area Design

There are no exposed pipes or duct work above work surfaces (i.e. inaccessible to frequent cleaning).

### Additional Information

Exposed pipes above work surfaces must be enclosed to facilitate cleaning. Above work surfaces refers to pipes or fixtures that are inaccessible to frequent cleaning or those that cannot be cleaned given the surface of pipe or fixture.

### Recommended Corrective Actions

Cover pipes or fixtures above work surfaces that are inaccessible to frequent cleaning or cannot be cleaned.

### Reference

AHS MDR Exposed Pipes Policy

AC, Clause: 3.6

CSA Z314.0-13, Clause: 7.2.9(b); 7.2.10.3

CSA Z8000-11, Clause: 10.7.4.8.3(b); 10.7.4.8.4(e)

**MDR AREA DESIGN**  
**MDR Area Design**

**Flooring can withstand frequent cleaning.**

**Additional Information**

For both decontamination and clean areas, inspect flooring to ensure it is clean, intact and non-porous.

**Recommended Corrective Actions**

Ensure floors are clean, intact and non-porous and capable of withstanding frequent cleaning.

**Reference**

AH, Clauses: 2.2.4

CSA Z314-18: 10.2.1.2

**MDR AREA DESIGN**  
**MDR Area Design**

**Reprocessing work areas have doors that are kept closed.**

**Additional Information**

Mark as deficient if there are no doors or if they are open.

**Recommended Corrective Actions**

Ensure reprocessing area has doors that are kept closed.

**Reference**

AC, Clause: 3.4

AH, Clause: 2.2.5

CSA Z314-18: 10.2.1.3

**MDR AREA DESIGN**  
**MDR Area Design**

**Clean, high-level disinfected or sterile medical devices are stored in a clean and secure area.**

**Additional Information**

There is no storage of clean, disinfected, or sterile devices in decontamination areas. Storage areas may be in a dedicated area on the clean side of MDR.

**Recommended Corrective Actions**

Ensure clean, high-level disinfected or sterile devices are not stored in decontamination areas.

**Reference**

AH, Clauses: 2.3, 9.1  
CSA Z314-18: 10.2.5.1



**MDR AREA DESIGN**  
**MDR Area Design**

**Functional work areas used for case cart assembly are separated from general storage or warehouse areas by walls or partitions.**

**Additional Information**

**Recommended Corrective Actions**

Ensure functional work areas used for case cart assembly are separated from general storage/warehouse areas by walls or partitions.

**Reference**

CSA Z314-18: 10.2.6.1.2

CSA Z8000-18: 10.7.3.1.1; 10.7.3.1.2

**MDR AREA DESIGN**  
**MDR Area Design**

**Portable fans are not used in the reprocessing area.**

**Additional Information**

Indicate where fan is located.

**Recommended Corrective Actions**

Ensure there are no portable fans used in the MDR area(s).

**Reference**

CSA Z314-18: 17.3.3.3.4

**MDR AREA DESIGN**  
**MDR Area Design**

**The area is free of external shipping containers.**

**Additional Information**

External shipping containers are external corrugated cardboard boxes or any container bearing a shipping label. Indicate location of any items found.

Inner boxes may be used for storage of single-use medical devices and supplies, but shall be discarded after empty, not be topped up.

**Recommended Corrective Actions**

Ensure the area is free of external shipping containers (e.g, external corrugated cardboard boxes or any container bearing a shipping label).

Inner boxes may be used for storage of single-use medical devices and supplies, but shall be discarded after empty, not be topped up.

**Reference**

CSA Z314-18: 10.2.5.9; 10.2.5.14; 17.2.2

**ENVIRONMENTAL CLEANING**  
**Environmental Cleaning**

Reprocessing equipment and environment appears clean and well maintained.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure reprocessing equipment and environment is clean and well maintained.

**Reference**

AH, Clause: 2.3.4

CSA Z314-18: 10.5.2; 10.5.5

**ENVIRONMENTAL CLEANING**  
**Environmental Cleaning**

**There is documentation that scheduled cleaning activities have been performed.**

**Additional Information**

For all spaces in the MDR, including sterile storage:

- Floors, horizontal working surfaces and counters are cleaned daily and documented.
- Walls, ceilings, vents, light fixtures are cleaned at least every six months and documented

**Recommended Corrective Actions**

For all spaces in the MDR, including sterile storage, ensure:

- Floors, horizontal working surfaces and counters are cleaned daily and documented.
- Walls, ceilings, vents, light fixtures are cleaned at least every six months and documented.

**Reference**

AH, Clause 2.3.4

CSA Z314-18: 10.2.5.12; 10.5.5

**ENVIRONMENTAL CLEANING**  
**Environmental Cleaning**

**Vacuum cleaning equipment is equipped with HEPA filter.**

**Additional Information**

If vacuum is not used, indicate N/A.

If a central vacuum system that does not vent into the room is used, indicate N/A.

**Recommended Corrective Actions**

Ensure the vacuum cleaning equipment is equipped with HEPA filter.

**Reference**

CSA Z314-18: 10.5.3

**ENVIRONMENTAL CLEANING**  
**Environmental Cleaning**

**Cleaning equipment used in the decontamination area is not used in any other area.**

**Additional Information**

Mop handles and buckets must be dedicated to the decontamination area.

The cleaning attachments of automated floor cleaning machines shall be designated for a specific area (e.g., reprocessing, clean/sterile area, within the MDRD) and should not be used in other areas. If automated floor cleaning machines are used in other areas, special care shall be taken to ensure that they are clean before and after use in the MDRD (from Z314-18, 10.5.4).

**Recommended Corrective Actions**

Ensure cleaning equipment used in the decontamination area is not used in any other area.

**Reference**

CSA Z314-18: 10.5.4

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**General**

**Gross soil is removed from devices at point of use before transport for reprocessing.**

**Additional Information**

Observe or ask staff if devices arrive free of gross soil (e.g, blood clots, feces, etc.)

**Recommended Corrective Actions**

Ensure that gross soil is removed from devices at point of use, before transport for reprocessing.

**Reference**

AH, Clauses: 5.1, 5.1.2

CSA Z314-18: 11.2.1

ORNAC: 2.5.26



# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES

### General

Contaminated medical devices used within a facility are placed in a labelled, covered, leak-proof container, and transported to the reprocessing area.

### Additional Information

Labelling must be cleanable (not paper).

Determine transport route to assess whether it avoids high traffic and patient care areas, and areas designated for clean or sterile storage of medical devices and supplies.

### Recommended Corrective Actions

Ensure contaminated devices are contained in labeled, leak-proof, covered containers during transport to the reprocessing area.

### Reference

AH, Clauses: 5.2, 5.3, 5.3.1

CSA Z314-18: 11.3.1.3; 11.3.2.2; 11.3.2.3

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**General**

**Transport containers are cleaned and disinfected between each use.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure transport containers are cleaned and disinfected between each use.

**Reference**

CSA Z314-18: 11.3.1.3

## **CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

### **Detergents**

**Detergents (including enzymatics), intended for medical devices, are prepared and used according to the manufacturer's instructions for use (e.g. concentration, temperature, and contact time).**

### **Additional Information**

Instructions should include:

- mixing/dilution
- rinsing
- shelf-life/expiry date(s)

Instructions are often on the bottle; if the product is decanted a copy of the instructions or package insert must be kept.

### **Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

### **Reference**

AC: Clause: 9.7

AH, Clauses 6.4; 6.6

CSA Z314-18: 11.1.3; 11.6.3

## **CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

### **Detergents**

**Detergents or enzymatic cleaners are compatible with the medical devices being cleaned.**

#### **Additional Information**

Check Device manufacturer's instructions for use if any question arises with an unfamiliar product.

Unacceptable cleaning agents include:

- hand soap or dish soap
- low-level disinfectant wipes (e.g, Cavi wipes, Sani cloths, OxiVir, etc.)
- surgical skin prep solutions (e.g, chlorhexidine gluconate, providone-iodine)
- other products not labelled as appropriate for medical instrument cleaning

Some devices require other procedures for cleaning according to manufacturer's instructions for use. For example, many ophthalmology devices require lumens only to be flushed with sterile water instead of brushing and flushing.

#### **Recommended Corrective Actions**

Ensure detergents and enzymatic cleaners are compatible with the medical device being cleaned.

#### **Reference**

AC, Clause: 9.7

AH, Clauses 6.4; 6.6

CSA Z314-18: 11.6.3.1.1

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Detergents**

Detergent or enzymatic cleaning solutions are discarded when visibly soiled, after each endoscope, or batch of respiratory equipment and at the end of each shift, and sink cleaned.

**Additional Information**

Sinks used for decontamination of instruments or devices shall be **cleaned** whenever the solution is changed. At the end of each day, all sinks shall be **emptied, cleaned, and disinfected**.

After each scope or batch of respiratory equipment has been cleaned, sinks shall be **cleaned and disinfected**.

**Recommended Corrective Actions**

Ensure that detergents and enzymatic cleaners are discarded and that the sink or container is cleaned after each use.

**Reference**

CSA Z314-18: 10.5.2; 11.8.3

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Detergents**

Containers for detergents or enzymatic cleaners are not topped up (i.e. new solution is never added to existing solution).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure containers for detergents or enzymatic cleaners are not topped up.

**Reference**

CSA Z314-18: 11.6.3.2.1

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Cleaning**

**Cleaning, including disassembly and lumen cleaning, always precedes high-level disinfection or sterilization processes.\***

**Additional Information**

This item combines several individual items from the tools from previous cycles. Make sure to check that appropriate disassembly and lumen cleaning is done.

Some devices require other procedures for cleaning according to manufacturer's instructions for use. For example, many ophthalmology devices require lumens only to be flushed with sterile water instead of brushing and flushing.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AC, Clause: 9.2; 9.5; 9.7; 9.8

AH, Clauses: 6.2, 6.3

CSA Z314-18: 4.1; 11.6.1.1

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Cleaning**

**If delay in reprocessing is anticipated, devices are treated with an approved process or product to prevent drying of soil.**

**Additional Information**

Approved methods:

- keeping devices moist in a transport container by adding a towel moistened with water (**not saline**)
- using a foam, spray, or gel product specifically intended for this use

**Recommended Corrective Actions**

Ensure devices are treated with an approved process or product to prevent hardening of bioburden if a delay in reprocessing is anticipated.

**Reference**

AH, Clause: 5.1.2

CSA Z314-18: 11.2.1; 11.3.2.1



**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Cleaning**

**When manually cleaning, devices are completely immersed whenever possible.**

**Additional Information**

Two adjacent sinks, large enough to immerse all submersible medical devices.

Non-submersible components must follow manufacturer's instructions.

**Recommended Corrective Actions**

Have at least two adjacent sinks, large enough to immerse all submersible medical devices for cleaning and rinsing.

Ensure devices are completely submerged beneath the surface of the cleaning solution during manual cleaning, or manufacturer's instructions are followed if device is non-submersible.

**Reference**

AH, Clauses: 2.2.2, 6.7

CSA Z314.8-18: 11.6.4.2; 11.6.4.3

## **CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

### **Cleaning**

**Medical device lubricant, if used, is medical grade and is used according to manufacturer's instructions for dispensing, shelf-life, and storage.**

### **Additional Information**

Instructions include:

- compatibility with sterilant
- dispensing
- dilution
- shelf-life
- storage

Instructions are often on the bottle; if the product is decanted a copy of the instructions or package insert must be kept.

### **Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

### **Reference**

AC, Clause: 9

CSA Z314-18: 7

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Cleaning**

**Devices are rinsed and excess water is removed after cleaning.**

**Additional Information**

Water quality for rinsing (potable, RO, DI) is determined by the medical device or automated cleaner manufacturer's instructions for use.

**Recommended Corrective Actions**

Ensure devices are thoroughly rinsed following cleaning.

**Reference**

AC, Clause: 9.8

AH, Clause: 6.10

CSA Z314-18: 11.6.4.2d

## **CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

### **Cleaning**

**Devices are visually inspected following cleaning to ensure no visible soil or defects are present and are functioning as required.**

#### **Additional Information**

Devices that have been cleaned should be:

- clean
- functional

Ask staff if they can adequately perform visual inspection (sufficient lighting or other factors).

#### **Recommended Corrective Actions**

Ensure devices are visually inspected to ensure no visible soil or defects are present and that they are functioning as required following cleaning.

#### **Reference**

AC, Clause: 9.9

AH, Clauses: 2.2.7, 6.13.1

CSA Z314-18: 10.2.2.3.1; 11.4.2

CSA Z8000-18: 7.6.4.4

CSA Z317.5-17: 4.5.2

**Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards**

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Cleaning**

**Devices that do not pass inspection for cleanliness are re-cleaned.\***

**Additional Information**

None.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause 6.13

CSA Z314-18: 11.4.2; 14.3.2.1

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES  
CLEANING**

**Damaged devices are labelled and removed from service.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure damaged devices are labelled and removed from service.

**Reference**

AH, Clause 6.13.2

CSA Z314-18: 14.3.3

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Ultrasonic Cleaning**

**Gross soil is removed before immersion in ultrasonic cleaner.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that gross soil is removed from devices before ultrasonic cleaning.

**Reference**

CSA Z314-18: 11.6.6.2

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Ultrasonic Cleaning**

**Following ultrasonic cleaning, the devices are rinsed per manufacturer's instructions for use.**

**Additional Information**

Rinsing not required if the device is placed directly into a washer-disinfector with a pre-rinse step.

**Recommended Corrective Actions**

Ensure that devices are thoroughly rinsed and inspected following ultrasonic cleaning before sterilization or high-level disinfection.

**Reference**

AH, Clause: 6.10

CSA Z314-18: 11.6.7.1



**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**  
**Ultrasonic Cleaning**

**The ultrasonic solution is discarded at least daily and whenever visibly soiled.**

**Additional Information**

New solution in an ultrasonic must be degassed before use, following the ultrasonic manufacturer's instructions.

**Recommended Corrective Actions**

Ensure solution in ultrasonic cleaner is changed at least daily and when visibly soiled.

**Reference**

AH, Clause 6.8.3

CSA Z314-18: 11.6.6.5

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Ultrasonic Cleaning**

**Ultrasonic cleaning equipment is used according to manufacturer's recommendations.**

**Additional Information**

Manufacturer indicates devices or materials validated for ultrasonic cleaning. Instructions should include:

- installation (check specifications for required water quality)
- operating instructions
- daily, routine, and preventive maintenance, and repairs
- weekly sonication testing (e.g, foil test, SonoCheck)

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

AC, Clause: 4.0; 7.7

AH, Clause: 6.8

CSA Z314-18: 7; 16.8.3.2; 18.6; and Annex G

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Ultrasonic Cleaning**

**Ultrasonic equipment is monitored weekly (e.g, SonoCheck, foil test) and documented.**

**Additional Information**

Check log or documentation that weekly testing is performed using test specified by manufacturer or foil test.

Some Washer-disinfectors have a sonification capacity, check manufacturer's instructions for use.

**Recommended Corrective Actions**

Ensure that weekly testing of ultrasonic cleaning equipment is performed and documented using test specified by manufacturer or foil test.

**Reference**

AH, Clause 6.8.2

CSA Z314-18: 11.6.6.6

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES  
Washer-Disinfectant**

**Washer-Disinfectants are used according to manufacturer's recommendations.**

**Additional Information**

Manufacturer indicates devices or materials validated for cleaning and, if applicable, validated thermal disinfection cycles. Include checking for appropriate detergents, racks and manifold systems for the medical devices being reprocessed.

Instructions include:

- installation (check specifications for required water quality)
- operating instructions
- daily, routine, and preventive maintenance, and repairs
- daily testing (e.g, TOSI testing)

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

AC, Clause: 4.0, 7.7

AH, Clause: 6.10

CSA Z314.8-18: 7; 16.8.3.2; 18.6; and Annex G

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES  
Washer-Disinfectors**

**Washer-Disinfectors are monitored daily (e.g, TOSI test) and documented.**

**Additional Information**

Check log or documentation that **daily** testing is performed, according to the manufacturer's written instructions or by another established method (e.g, TOSI test).

**Recommended Corrective Actions**

Ensure that daily testing and documentation of automated cleaning equipment is performed, according to the manufacturer's written instructions or by another established method (e.g, TOSI test).

**Reference**

AH, Clause: 6.8.1

CSA Z314-18: 11.6.5.3.5

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES  
Accessories**

**Cleaning accessories (e.g, brushes, sponges) are disposable or thoroughly cleaned, and disinfected or sterilized according to manufacturer's instructions.**

**Additional Information**

Check manufacturer's instructions for use for reprocessing instructions for reusable accessories.

Inspect accessories for damage and indicate a deficiency if any damage is present.

Indicate a deficiency if single-use accessories are reused.

**Recommended Corrective Actions**

Ensure single-use cleaning accessories (e.g, brushes, sponges) are disposed of following each use and reusable cleaning accessories are reprocessed, according to manufacturer's instructions.

**Reference**

AH, Clauses: 4.4-6

CSA Z314-18: 11.6.4.4; 12.7.1.6

**CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

**Accessories**

**Reusable cleaning accessories are thoroughly cleaned and disinfected or sterilized according to manufacturer's instructions after each endoscope or batch of respiratory equipment.**

**Additional Information**

Reusable and disposable accessories used for respiratory equipment or endoscopes must be reprocessed or discarded after each load/scope.

Inspect accessories for damage and indicate a deficiency if any damage is present.

**Recommended Corrective Actions**

Ensure single-use cleaning accessories (e.g, brushes, sponges) are disposed of following each use and reusable cleaning accessories are reprocessed following each respiratory load or endoscope.

**Reference**

AH, Clause: 4.5

CSA Z314-18: 11.6.4.4

## **CLEANING/DECONTAMINATION OF MEDICAL DEVICES AND ENDOSCOPES**

### **Cleaning**

**Devices are dried after final rinsing with a lint-free cloth or mechanical method, before high-level disinfection or sterilization.**

#### **Additional Information**

Examples of drying cloths that are **not** lint-free include:

- terry towel
- paper towel

Examples of **lint-free** drying cloths include:

- huck towels
- disposable lint-free cloths

Mechanical methods include instrument-grade air.

#### **Recommended Corrective Actions**

Ensure devices are dried after final rinsing with a lint-free cloth or mechanical method.

#### **Reference**

AC, Clause: 9.9; 11.6

AH, Clause: 6.11.1

CSA Z314-18: 11.6.8



**THERMAL HIGH-LEVEL DISINFECTION  
Manufacturer's Instructions for Use**

**Reprocessing equipment (pasteurizers and washer-disinfectors) is used according to manufacturer's specifications.**

**Additional Information**

Manufacturer indicates devices or materials validated for cleaning and, if applicable, validated thermal disinfection cycles. Include checking for appropriate detergents, racks and manifold systems for the medical devices being reprocessed.

Instructions should include:

- installation (check specifications for required water quality)
- daily, routine, and preventive maintenance, and repairs
- operating instructions
- cleaning indicators for washer-disinfectors (e.g, TOSI) done daily and documented

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

AC, Clause: 4.0, 7.7

AH, Clauses: 7.14, 7.17, 7.18, 7.19.1

CSA Z314-18: 7; 16.8.3.2; 18.6; and Annex G

**THERMAL HIGH-LEVEL DISINFECTION  
Pasteurization**

**Water temperature (minimum 71°C) and cycle time (30 minutes) within the pasteurizer is manually verified and recorded for each cycle.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the water temperature within the pasteurizer is, at a minimum 71°C and cycle time is 30 minutes. Manually verify and document for each cycle.

**Reference**

AH, Clause 7.19  
CSA Z314-18: 11.8.4.2

## **THERMAL HIGH-LEVEL DISINFECTION**

### **General**

**Following thermal high-level disinfection, devices are handled in a manner that prevents contamination during transfer to the dedicated dryer.**

### **Additional Information**

Staff remove personal protective equipment and wash hands before handling disinfected devices.

### **Recommended Corrective Actions**

Ensure that thermally disinfected devices are transported directly from the disinfectant to a clean area for drying, assembly and packaging, using a method that prevents contamination (e.g, areas to be equipped with clean, dry tables covered with clean absorbent cloth for holding clean baskets after removal from pasteurizer or washer/disinfectant and before being placed in drying cabinet).

### **Reference**

AH, Clause: 7.20

CSA Z314-18: 11.8.4.1.5

**THERMAL HIGH-LEVEL DISINFECTION**

**General**

There is a HEPA-filtered drying cabinet that is used exclusively for the drying of thermally disinfected devices.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the drying cabinet is HEPA filtered and used exclusively for drying disinfected devices.

**Reference**

AH, Clause: 7.20.1

CSA Z314-18: 11.8.4.1.8; 11.8.4.2.5; 11.8.5

**THERMAL HIGH-LEVEL DISINFECTION**

**General**

HEPA filters are changed according to manufacturer's instructions for use.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the HEPA filter for the drying cabinet is changed according to manufacturer's instructions.

**Reference**

AH, Clause: 7.20.1

CSA Z314-18: 11.8.4.1.8; 11.8.4.2.5; 11.8.5

**THERMAL HIGH-LEVEL DISINFECTION**

**General**

Following drying, devices are handled in a manner that prevents contamination.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure devices are handled in a manner that prevents contamination after drying.

**Reference**

AH, Clause: 7.20

CSA Z314-18: 11.8.4.1.5

## **THERMAL HIGH-LEVEL DISINFECTION**

### **General**

**For thermal high-level disinfection, there is a process in place that clearly identifies a non-reprocessed device from one that has been reprocessed.\***

### **Additional Information**

This is done to prevent use of a non-reprocessed device on a patient.

Examples include:

- labelling reprocessed devices with reprocessing date and reprocessing expiry date (if applicable)
- tracking of the device identifier at each step documenting the date and time that it has been received for cleaning, cleaned, received for disinfection, disinfected, etc.
- placing unwrapped, semi-critical devices in clean bags or containers labelled with reprocessing date and expiry date (if applicable)

### **Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### **Reference**

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1 & 13.3.14 (U/S Probes); 12.4.1.1 (endoscopes)

**THERMAL HIGH-LEVEL DISINFECTION  
Documentation**

Documentation includes identification of the devices being reprocessed.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each load of items receiving thermal high-level disinfection.

**Reference**

AH, Clause: 11.6

CSA Z314-18: 5.0; 11.8.4.2.4; 11.8.4.3; 11.8.4.1.9



**THERMAL HIGH-LEVEL DISINFECTION  
Documentation**

**Documentation includes date and time of disinfection.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each load of items receiving thermal high-level disinfection.

**Reference**

AH, Clause: 11.6

CSA Z314-18: 5.0; 11.8.4.2.4; 11.8.4.3; 11.8.4.1.9

**THERMAL HIGH-LEVEL DISINFECTION  
Documentation**

**Documentation includes contact time and temperature.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each load of items receiving thermal high-level disinfection.

**Reference**

AH, Clauses: 7.15, 11.6

CSA Z314-18: 5.0; 11.8.4.2.4; 11.8.4.3; 11.8.4.1.9

**THERMAL HIGH-LEVEL DISINFECTION  
Documentation**

Documentation includes reprocessing unit identification (e.g, make, model, serial number, etc.).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each load of items receiving thermal high-level disinfection.

**Reference**

AH, Clause: 11.6

CSA Z314-18: 5.0; 11.8.4.2.4; 11.8.4.3; 11.8.4.1.9

**THERMAL HIGH-LEVEL DISINFECTION  
Documentation**

Documentation includes identification of person responsible for ensuring all requirements for reprocessing and releasing the devices are met.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each load of items receiving thermal high-level disinfection.

**Reference**

AH, Clause: 11.6

CSA Z314-18: 5.0; 11.8.4.2.4; 11.8.4.3; 11.8.4.1.9

**Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards**

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
GENERAL**

**Semi-critical medical devices are high-level disinfected (at a minimum).\***

**Additional Information**

None.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 7.6

CSA Z314-18: 4.1; 11.6.1.1

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

**High-level disinfectant has a Class II medical device license from Health Canada.**

**Additional Information**

DIN has been replaced by medical device license number from Health Canada.

Check label for device license.

**Recommended Corrective Actions**

Ensure high-level disinfectant has a medical device license number from Health Canada.

**Reference**

AH, Clause: 7.2

CSA Z314-18: 11.7.2.1.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

High-level disinfectant is prepared and used according to the manufacturer's instructions for use.

**Additional Information**

Instructions include:

- shelf-life
- mixing (if required)
- expiry after opening/mixing
- expiry after decanting (if applicable)
- testing of minimum effective concentration
- contact time
- temperature
- rinsing
- disposal
- handling precautions

Instructions are often on the bottle; if the product decanted a copy of the instructions or package insert must be kept.

Some of the above steps may be not applicable (e.g, Sonex HL for the Trophon).

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

AH, Clauses: 7.1, 7.7

CSA Z314-18: 7

## **CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

### **General**

**High-level disinfectant is not used past the shelf-life expiry date or the open bottle expiry date.**

### **Additional Information**

The expiry date for an opened or mixed bottle or a portion that is poured-off into another container may be different than the lot number expiry date.

There are three important dates:

- Shelf-life expiry is for unopened, stored high-level disinfectant. The expiry is printed on the label by the manufacturer.
- Open bottle expiry is after the high-level disinfectant bottle has been opened, but contains high-level disinfectant that has not been used. Look for a handwritten date of opening/mixing on the bottle.
- In use expiry refers to high-level disinfectant that has been poured into a soaking container ready for a medical device. Look for a handwritten date on the container.

### **Recommended Corrective Actions**

Ensure containers of high-level disinfectant that have been mixed or opened are labelled with the date of mixing or opening and the date the solution expires.

This is required on the bottle as well as any container or reservoir that the disinfectant is stored in.

### **Reference**

AH, Clause: 7.3

CSA Z314-18: 11.7.2.3.3; 11.7.2.3.5



**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

The chemical test strips used to check the minimum effective concentration are specific to the type and concentration of the high-level disinfectant.\*

**Additional Information**

Review manufacturer's written instructions for test strips to determine they are appropriate.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clauses: 7.7, 7.7.2

CSA Z314-18: 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

**Test strips are dated when opened.**

**Additional Information**

Dating includes the opening date and open bottle expiry date (if applicable).

**Recommended Corrective Actions**

Ensure test strip bottles are dated when opened. This is required by manufacturer's instructions.

**Reference**

AH, Clause: 7.7.3

CSA Z314-18: 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

**Test strips are not used past the shelf-life expiry date or the open bottle expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure test strips are not used past the expiry date. This includes the lot number expiry date and the open bottle expiry date. This is required by manufacturer's instructions.

**Reference**

AH, Clause: 7.7.3

CSA Z314-18: 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

**The minimum effective concentration of reusable high-level disinfectant is tested at least daily when in use.\***

**Additional Information**

If concentration is tested in another manner (e.g, during AER cycle), concentration is documented and verified. Method of testing is validated by the manufacturer.

Frequency may be more often than daily if indicated by manufacturer.

If a method of testing concentration other than test strips is used that is validated by the manufacturer (e.g, concentration testing during an automated cycle, as in the Trophon), verify and document results.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 7.7.1

CSA Z314-18: 11.7.2.3.5

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)

### General

The soaking container is kept covered at all times, except when placing or removing a device or when the device is not completely immersible.

### Additional Information

Watch for containers with lids that do not close when devices are being disinfected. If this is observed, mark as a deficiency.

### Recommended Corrective Actions

Ensure containers with chemical disinfectant are covered at all times including during use.

### Reference

AH, Clause: 7.4.3

CSA Z314-18: 11.7.2.3.5

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

The soaking container is washed, rinsed and dried when the high-level disinfectant is changed.

**Additional Information**

Reservoirs include those in AER and manual disinfection systems.

**Recommended Corrective Actions**

Ensure that containers or reservoirs for storing disinfectant and detergent/enzymatic are cleaned and dried before refilling. Never add new solution to the existing solution in a container.

**Reference**

AH, Clause: 7.4.2

CSA Z314-18: 11.7.2.3.3

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)

#### General

Submersible components of devices are completely submerged and all internal channels or lumens are in contact with the disinfectant for the recommended contact time. (For reviews of only endoscope reprocessing, use Section 9, mark this item N/A.)

#### Additional Information

None.

#### Recommended Corrective Actions

Ensure that, during manual high-level disinfection, submersible components of devices are completely submerged and all internal channels/lumens are in complete contact with the disinfectant, and all air bubbles removed for the recommended contact time.

Ensure that non-submersible components are cleaned and disinfected according to device manufacturer's written instructions.

#### Reference

AH, Clause: 7.8

CSA Z314-18: 11.7.2.5.1

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)

#### General

Rinsing of medical devices using sterile or submicron filtered water following high-level disinfection is done with three separate rinses, unless otherwise specified by the high-level disinfectant manufacturer. Fresh rinse solution is used for each rinse. (For reviews of only endoscope reprocessing, use Section 9, mark this item N/A.)

#### Additional Information

None.

#### Recommended Corrective Actions

Ensure rinsing of medical devices following high-level disinfection is done with three (3) separate rinses, using sterile or submicron filtered water. Fresh rinse solution is used for each of the three (3) rinses.

#### Reference

AH, Clause: 7.11

CSA Z314-18: 11.7.2.6



## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)

#### General

During rinsing, submersible components of devices are fully immersed and all lumens or channels are flushed during each rinse. (For reviews of only endoscope reprocessing, use Section 9, mark this item N/A.)

#### Additional Information

Non-submersible components must follow manufacturer's instructions.

#### Recommended Corrective Actions

Ensure that submersible components of devices are fully immersed and all lumens or channels are flushed during each rinse.

Ensure that non-submersible components are rinsed according to device manufacturer's written instructions.

#### Reference

CSA Z314-18: 7.1

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

**Following rinsing, the device is thoroughly dried with a lint-free cloth. Lumens are completely dried according to device manufacturer's instructions e.g, flushed with alcohol, flushed with air. (For reviews of only endoscope reprocessing, use Section 9, mark this item N/A.)**

**Additional Information**

Examples of cloths that are **not** lint-free include:

- terry towel
- paper towel

Examples of **lint-free** cloths include:

- huck towels
- disposable lint-free cloths

**Recommended Corrective Actions**

Ensure devices are dried using a clean, soft, lint-free cloth following rinsing.

**Reference**

AH, Clause: 7.12

CSA Z314-18: 11.8.5; 13.3.13

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**General**

There is a process in place that clearly identifies a non-reprocessed device from one that has been reprocessed. (For reviews of only endoscope reprocessing, use Section 9, mark this item N/A.)\*

**Additional Information**

None.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1; 13.3.14; 12.4.1.1

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes product name.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.4.1, 7.13.1, 11.6

CSA Z314-18, 11.7.2.5.2(a)

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes lot number.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.4.1, 7.13.1, 11.6

CSA Z314-18, 11.7.2.5.2(a)

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.4.1, 7.13.1, 11.6

CSA Z314-18, 11.7.2.5.2(a)

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes in use expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.4.1, 7.13.1, 11.6

CSA Z314-18, 11.7.2.5.2(a)

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes date of solution change.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.13.1, 11.6  
CSA Z314-18, 11.7.2.5.2(a)



**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Solution Documentation**

**Solution documentation includes initials of staff doing preparation and documentation.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clauses: 7.13.1, 11.6  
CSA Z314-18, 11.7.2.5.2(a)

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

**Test strip documentation includes name of test strip.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

**Test strip documentation includes lot number.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

**Test strip documentation includes expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

Test strip documentation includes quality control test results (each time new test strip bottle is opened).

**Additional Information**

May be done through the high-level disinfection manufacturer website.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.7.2, 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

**Test strip documentation includes daily minimum effective concentration test strip result: Pass or Fail.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.3, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)**

**Test Strip Documentation**

Test strip documentation includes other chemical or process indicators, if applicable (e.g, Trophon)

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation of other applicable chemical or process indicators.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Test Strip Documentation**

Test strip documentation includes initials of staff doing the testing and documentation.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clauses: 7.13.2, 11.6

CSA Z314-18, 11.7.2.4.2



**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Device Documentation**

Device documentation includes identification of the devices being reprocessed.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

**Reference**

AH, Clauses: 7.10, 7.13.6, 11.6

CSA Z314-18, 11.7.2.5.2

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### **CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES) Device Documentation**

Device documentation includes patient identification, with date used, and serial number of probe (some or all these components of traceability may be done in another department).

#### **Additional Information**

None.

#### **Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

#### **Reference**

AH, Clauses: 7.10, 7.13.6, 11.6, 11.6.4  
CSA Z314-18, 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Device Documentation**

Device documentation includes date and time of disinfection.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

**Reference**

AH, Clauses: 7.10, 11.6  
CSA Z314-18, 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Device Documentation**

Device documentation includes contact time (exposure) of the high-level disinfectant.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

**Reference**

AH, Clauses: 7.8.2, 7.10, 7.13.4, 11.6, 11.6.4  
CSA Z314-18, 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Device Documentation**

Device documentation includes temperature of the high-level disinfectant (if applicable).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

**Reference**

AH, Clauses: 7.8.2, 7.10, 7.13.4, 11.6  
CSA Z314-18, 11.7.2.5.2

**CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES)  
Device Documentation**

Device documentation includes automated reprocessing unit identification (e.g, make, model, serial number, etc.).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

**Reference**

AH, Clauses: 7.10, 11.6

CSA Z314-18, 11.7.2.5.2

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### **CHEMICAL HIGH-LEVEL DISINFECTION (including ENDOSCOPES) Device Documentation**

Device documentation includes identification of person responsible for ensuring all requirements for reprocessing and releasing the devices are met.

#### **Additional Information**

None.

#### **Recommended Corrective Actions**

Ensure documentation is completed for each item (or load) receiving chemical high-level disinfection.

#### **Reference**

AH, Clauses: 7.10, 11.6

CSA Z314-18, 11.7.2.5.2

## **REPROCESSING ENDOSCOPY DEVICES**

### **General**

**The water bottle used to provide intra-procedural flush solution, and its connecting tube, should be sterilized at least daily (according to device manufacturer's instructions). If disposable, they are discarded daily.**

### **Additional Information**

For procedures other than ERCP, the water bottle, cap, and connecting tubing shall be removed and replaced with sterile supplies at the following times:

- at the beginning of each day, at minimum
- before any procedure that invades sterile tissue
- if the bottle becomes contaminated (i.e. has visible turbidity)

For ERCP, all components are replaced before each procedure.

### **Recommended Corrective Actions**

Ensure the water bottle used to provide intra-procedural flush solution and its connecting tube are changed at least daily (before each procedure for ERCP) and sterilized if reusable. If disposable, they are discarded daily.

### **Reference**

CSA Z314-18 12.7.2.1; 12.7.2.2



**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**Pre-cleaning of the endoscope is performed at point of use, immediately following clinical procedure.**

**Additional Information**

If unable to observe, ask if pre-cleaning of endoscopes is done at the point of use.

**Recommended Corrective Actions**

Ensure pre-cleaning of the endoscope is performed at point of use immediately following clinical procedure.

**Reference**

AH, Clause: 5.1

CSA Z314-18: 12.4.1.2

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**A leak test is performed before immersion according to the endoscope manufacturer's instructions for use.**

**Additional Information**

May be a dry or wet leak test or both.

**Recommended Corrective Actions**

Ensure a leak test is performed before or during immersion of the endoscope following manufacturer's written instructions.

**Reference**

CSA Z314-18: 12.4.6

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**Accessories (valves and removable parts) are disconnected, disassembled and completely immersed in the enzymatic detergent.**

**Additional Information**

Some accessories require sonification and sterilization, check manufacturer's instructions for use.

**Recommended Corrective Actions**

Ensure accessories are disconnected and disassembled as per manufacturer's written instructions. Devices are completely immersed in the enzymatic detergent.

**Reference**

AH, Clause: 6.2

CSA Z314-18: 12.4.8

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

The valves and removable parts are brushed and flushed until all debris is removed.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure valves and removable parts are brushed and flushed until all visible debris is removed. Parts are inspected for cleanliness.

**Reference**

CSA Z314-18: 12.4.7.2.2

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**The entire endoscope is completely immersed in the freshly prepared enzymatic solution.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure endoscope is entirely immersed during the entire cleaning process to prevent splashing or aerosolization.

**Reference**

CSA Z314-18: 12.4.7.2.1

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**The bending section is kept straight so brushing does not damage endoscope.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the bending section of the endoscope is kept straight so brushing does not damage the internal lumen of the endoscope.

**Reference**

CSA Z314-18: 12.4.7.2.3

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

The exterior of the endoscope is cleaned with a soft brush or lint-free cloth.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the exterior of the endoscope is cleaned with a soft brush or lint-free cloth.

**Reference**

CSA Z314-18: 12.4.7.2.2

## **REPROCESSING ENDOSCOPY DEVICES**

### **Cleaning Specific to Endoscopes**

**All ports, channels and lumens are cleaned with appropriately sized brushes until all debris is removed.**

#### **Additional Information**

To assure effective cleaning of gastrointestinal endoscope channels, it is important to note there are two channels that are accessed from the same valve/port, one that extends to the suction connector at the light source and the other to the distal tip. (The steps below are specific to one brand of endoscopes and are provided as an example.)

To access the channel extending to the distal tip (i.e. instrument/suction channel):

- Hold the tip of the channel cleaning brush at a 45° angle as it enters the suction port and advance the brush until it emerges from the distal tip of the endoscope.
- Clean the tip and withdraw the brush from the endoscope, then clean the tip again.
- Repeat these steps until the no debris is visible.

To access the channel extending to the suction connector at the light source:

- Insert the channel cleaning brush into the centre of the suction port and advance it until it emerges from the suction connector.
- Clean the tip and withdraw the brush from the endoscope, then clean the tip again.
- Repeat these steps until the no *debris is visible*.

It is also very important to clean all channel openings with a channel opening brush and flush all channels with detergent solution, followed by rinsing.

Example of a cleaning method: an appropriately sized channel cleaning brush is passed through a channel a minimum of three (3) times, or according to brush manufacturer's instructions for use, or until visibly clean.

Check manufacturer's instructions for use as some do not require brushing of ports.

Check ERCP scope manufacturer's instructions for use for specific cleaning requirements (e.g, elevator).

#### **Recommended Corrective Actions**

Ensure all ports and channels/lumens are cleaned as per manufacturer's written instructions until all visible debris is removed.

#### **Reference**

CSA Z314-18: 12.4.7.2.3



**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

The brush is cleaned in the enzymatic solution each time it is passed through a channel.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure cleaning brush is washed in the enzymatic or detergent solution following each pass through the channel.

**Reference**

CSA Z314-18: 12.4.7.2.3

**REPROCESSING ENDOSCOPY DEVICES**  
**Cleaning Specific to Endoscopes**

**Following device manufacturer's instructions, enzymatic solution is flushed and/or suctioned through all channels of the endoscope (either manually using a syringe or using an automated flushing and/or suction system).**

**Additional Information**

The syringe volume is as specified by the endoscope manufacturer.

All channels should be flushed as indicated in the endoscope manufacturer's instructions, including the biopsy port/channel.

**Recommended Corrective Actions**

Ensure a syringe is attached to the correct channel adapter and enzymatic or detergent solution is injected into all channels of the endoscope at least three times or equivalent cleaning is done by an approved automated system (e.g, Scope Buddy or EndoFlush).

**Reference**

CSA Z 314-18:12.4.7

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

During rinsing, endoscopes are fully immersed.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure endoscope is entirely immersed during the rinsing to prevent splashing or aerosolization.

**Reference**

CSA Z314-18: 12.4.8

## **REPROCESSING ENDOSCOPY DEVICES**

### **Cleaning Specific to Endoscopes**

**The accessories and endoscopes, including all channels are rinsed with clean tap water following cleaning. Channel rinses are performed using a syringe attached to the correct channel adapters or an approved automated system.**

#### **Additional Information**

The syringe volume is as specified by the endoscope manufacturer.

All channels should be rinsed as indicated in the endoscope manufacturer's instructions, including the biopsy port/channel. A general rule is that three times the volume of the lumen is rinsed (e.g, a colonoscope would require 300 mL).

#### **Recommended Corrective Actions**

Ensure the accessories and endoscope, including all channels, are rinsed with clean tap water following cleaning. Channel rinses are performed using a syringe attached to the correct channel adapters or an approved automated system (e.g, Scope Buddy or EndoFlush).

#### **Reference**

CSA Z314-18: 12.4.8

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**Channel rinses are followed by air purges using a syringe or an approved automated system.**

**Additional Information**

The syringe volume is as specified by the endoscope manufacturer.

**Recommended Corrective Actions**

Ensure that channel rinses are followed by air purges using a syringe or an approved automated system.

**Reference**

CSA Z314-18: 12.4.8

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**The outside of the endoscope is dried and inspected for cleanliness and integrity.**

**Additional Information**

If placing endoscope directly into AER with a washing function, drying is not required.

**Recommended Corrective Actions**

Ensure the exterior of the endoscope and all removable parts are thoroughly dried using a clean lint-free cloth and inspected for integrity.

**Reference**

CSA Z314-18: 12.4.8; 12.4.10

**REPROCESSING ENDOSCOPY DEVICES**

**Cleaning Specific to Endoscopes**

**Cleaning accessories (e.g, brushes, sponges) are disposable or thoroughly cleaned and high-level disinfected or sterilized between uses.**

**Additional Information**

Syringes are single-use, so are discarded after each endoscope.

**Recommended Corrective Actions**

Ensure single-use cleaning accessories (e.g, brushes, sponges, syringes, etc.) are disposed of following each use. Reusable cleaning accessories are cleaned and high-level disinfected or sterilized following each use.

**Reference**

AH, Clauses: 4.6, 4.7

CSA Z314-18 12.4.7.2.3

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**AER is operated according to manufacturer's instructions for use.**

**Additional Information**

Check manufacturer's instructions for use for:

- installation (check specifications for required water quality)
- daily (e.g, fluid levels, surface cleaning), routine, and preventive maintenance, and repairs
- operating instructions (e.g, testing)

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

CSA Z314-18: 7; 16.8.3.2; 18.6; and Annex G



**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**Endoscope and components are validated for reprocessing in the AER.**

**Additional Information**

Check manufacturer's instructions for use for validation information.

**Recommended Corrective Actions**

Ensure that endoscopes and their components are validated for reprocessing in the AER.

**Reference**

AC, Clause: 7.6; 7.7; 7.10; 9.0

CSA Z314-18: 7.1

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**Elevator channels of duodenoscopes are processed according to AER and endoscope manufacturer's instructions.**

**Additional Information**

Ask if updated instructions are in use.  
There was an E&P Advisory about this.

**Recommended Corrective Actions**

Ensure updated instructions are followed for reprocessing.

**Reference**

AC, Clause: 7.6; 7.7; 7.10; 9.0  
CSA Z314-18: 7.1

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

The device and accessories are positioned in the AER so that they will be completely immersed in high-level disinfectant.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the cleaned endoscope, valves, brushes and removable parts are placed in the AER so they are completely immersed.

**Reference**

CSA Z314-18: Table 12.1

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**All channels of the endoscope are attached to the AER using manufacturer's specified connectors and adapters.\***

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the AER channel adaptor attachments are appropriate to the scope being reprocessed.

**Reference**

CSA Z314-18: 12.4.12.4

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

On cycle completion, the printout is checked and signed to verify correct parameters were achieved.

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure the automated printout or electronic log from the AER is monitored and signed off by staff releasing the load.

**Reference**

AH, Clause: 7.9  
CSA Z314-18: 12.9.2.1

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**The endoscope is removed promptly after the final cycle has been completed.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure the endoscope is removed promptly from the Automated Endoscope Reprocessor (AER) after the final cycle has completed.

**Reference**

CSA Z314-18: 12.4.3; Table 12.1

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**A channel air purge followed by a 70% alcohol flush and a final air purge is performed.**

**Additional Information**

Some AER have an alcohol rinse cycle. If so, only the final air purge must be performed following removal from the AER.

Some AER include a drying cycle.

Alcohol flush is not necessary between cases if endoscope is used immediately.

**Recommended Corrective Actions**

Ensure all steps are followed, either manually or by the AER.

**Reference**

CSA Z314-18: Table 12.1; 12.4.13

**REPROCESSING ENDOSCOPY DEVICES**  
**Automatic Endoscope Reprocessor (AER)**

**The device is thoroughly dried with a lint-free cloth or mechanical method.**

**Additional Information**

Examples of cloths that are not lint-free include:

- terry towel
- paper towel

Examples of lint-free cloths include:

- huck towels
- disposable lint-free cloths

Mechanical methods include instrument-grade air.

**Recommended Corrective Actions**

Ensure endoscope is dried with a clean, lint-free cloth or mechanical method.

**Reference**

CSA Z314-18: Table 12.1



**REPROCESSING ENDOSCOPY DEVICES  
Automatic Endoscope Reprocessor (AER)**

**There is a process in place that clearly identifies a non-reprocessed device from one that has been reprocessed.\***

**Additional Information**

Examples of identification as reprocessed includes:

- labelling reprocessed devices with a label, tag, foam boot or other visual identifier. Adding the reprocessing date and expiry date helps to easily track the outdated scopes
- sign off of the endoscope serial number or identifier at every step of the process documenting the date and time that it has been received for cleaning, cleaned, received for disinfection, disinfected, etc.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 4.1.1  
CSA Z314-18: 12.4.1.1

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes product name.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes lot number.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes in use expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes date of solution change.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Solution Documentation**

**Solution documentation includes initials of staff doing preparation and documentation.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is documented when high-level disinfectant is changed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 11.7.2.5.2(a)

**REPROCESSING ENDOSCOPY DEVICES**

**Test Strip Documentation**

Test strip documentation includes name of test strip.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2



**REPROCESSING ENDOSCOPY DEVICES**

**Test Strip Documentation**

Test strip documentation includes lot number.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2

**REPROCESSING ENDOSCOPY DEVICES**

**Test Strip Documentation**

**Test strip documentation includes expiry date.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2

**REPROCESSING ENDOSCOPY DEVICES**

**Test Strip Documentation**

Test strip documentation includes quality control test results (each time new test strip bottle is opened).

**Additional Information**

May be done through the high-level disinfection manufacturer website.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2

## **REPROCESSING ENDOSCOPY DEVICES**

### **Test Strip Documentation**

**Test strip documentation includes daily minimum effective concentration test strip result: Pass or Fail.**

### **Additional Information**

Documentation may be paper or electronic.

### **Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

### **Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2

**REPROCESSING ENDOSCOPY DEVICES**

**Test Strip Documentation**

Test strip documentation includes initials of staff doing the testing and documentation.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure this is included in documentation when high-level disinfectant is tested for minimum effective concentration.

**Reference**

AC, Clause: 9.7

AH, Clause: 11.6

CSA Z314-18, 11.7.2.4.2

**REPROCESSING ENDOSCOPY DEVICES**

**Device Documentation**

Device documentation includes identification of the devices being reprocessed.

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 12.9.2

## **REPROCESSING ENDOSCOPY DEVICES**

### **Device Documentation**

Device documentation includes patient identification, with date used, and serial number of probe (some or all these components of traceability may be done in another department).

### **Additional Information**

Documentation may be paper or electronic.

### **Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

### **Reference**

AH, Clause: 11.6.4

CSA Z314-18, 12.9.2

**REPROCESSING ENDOSCOPY DEVICES**  
**Device Documentation**

**Device documentation includes date and time of disinfection.**

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 12.9.2



**REPROCESSING ENDOSCOPY DEVICES**  
**Device Documentation**

Device documentation includes contact time (exposure) of the high-level disinfectant.

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clauses: 7.9, 11.6

CSA Z314-18, 12.9.2

**REPROCESSING ENDOSCOPY DEVICES**  
**Device Documentation**

**Device documentation includes temperature of the high-level disinfectant (if applicable).**

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clauses: 7.9, 11.6

CSA Z314-18, 12.9.2

**REPROCESSING ENDOSCOPY DEVICES**

**Device Documentation**

Device documentation includes automated reprocessing unit identification (e.g, make, model, serial number, etc.).

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 12.9.2

**REPROCESSING ENDOSCOPY DEVICES**

**Device Documentation**

Device documentation includes identification of person responsible for ensuring all requirements for reprocessing and releasing the devices are met.

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clause: 11.6

CSA Z314-18, 12.9.2

**REPROCESSING ENDOSCOPY DEVICES**  
**Device Documentation**

**Device documentation includes results of leak test.**

**Additional Information**

Documentation may be paper or electronic.

**Recommended Corrective Actions**

Ensure documentation is completed for each endoscope being reprocessed.

**Reference**

AH, Clause: 11.6  
CSA Z314-18, 12.9.2

**STERILIZATION OF REUSABLE MEDICAL DEVICES**  
**Manufacturer's Instructions for Use**

**Sterilizer loading and operating instructions are available and followed by the staff.**

**Additional Information**

Are available for each sterilizer in use (Steam, SS1, Low Temp, ETO).

- install (check specifications for required water and steam quality, as applicable)
- preventative maintenance
- routine maintenance
- operating instructions

**Recommended Corrective Actions**

Obtain and file (electronically or on paper) manufacturer's written instructions.

**Reference**

AH, Clause 8.4.2

CSA Z314-18: 7; 16.8.3.2; 18.6; and Annex G

**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**General**

**Critical devices are sterilized by an approved sterilization process. (Unacceptable sterilization methods include boiling, glass bead sterilizers, microwaves and ultraviolet light.)\***

**Additional Information**

Ensure critical devices are being sterilized.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 8.1

## **STERILIZATION OF REUSABLE MEDICAL DEVICES**

### **General**

**Endoscopes and accessories (e.g., arthroscopes, cystoscopes, laparoscopes, reusable endoscopic accessories) that pass through normally sterile tissues are cleaned and sterilized before each use.\***

### **Additional Information**

Critical scopes examples include:

- arthroscopes
- cystoscopes
- laparoscopes

Endoscopic accessories include:

- biopsy forceps
- brushes
- other cutting devices

### **Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### **Reference**

AH, Spaulding Table, p. 7 and Clause: 8.1 and Clause: 8.1  
CSA Z314-18: 16.1.2.1



**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**Preparation and Packaging**

Devices are prepared in a manner that facilitates sterilization and aseptic presentation (e.g, disassembled, stop-cocks opened, standard wrapping methods, appropriate sized packaging materials validated for sterilization).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that packaging:

- is validated for the sterilization method
- permits aseptic presentation
- provides a barrier to contamination

**Reference**

AC, Clause: 9.11; 9.12

AH, Clauses: 8.13, 11.4.4

CSA Z314-18: 14.5.1; 15.4.2

**STERILIZATION OF REUSABLE MEDICAL DEVICES  
Manufacturer's Instructions for Use**

**Critical devices are packaged according to the device manufacturer's written instructions.**

**Additional Information**

Instructions may include that devices are opened, disassembled, etc.

Watch for items without manufacturer's instructions for reprocessing; these may include:

- gauze (most don't have instructions)
- sponges
- tensor bandages
- items packed with critical devices:
  - terry towel
  - flannel

Double pouching is not allowed unless validated by the manufacturer.

**Recommended Corrective Actions**

Ensure devices are packaged according to the device manufacturer's written instructions.

**Reference**

AC, Clause: 9.11; 9.12

AH, Clauses: 8.13, 11.4.4

CSA Z314-18: 15.2.3

**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**Preparation and Packaging**

**When woven or non-woven textiles are used as packaging materials, a square or envelope wrapping technique that covers the contents is used.**

**Additional Information**

Disposable wrappers are a non-woven textile.

**Recommended Corrective Actions**

Ensure when woven or non-woven textiles are used as packaging materials, a square or envelope wrapping technique is used. Contents are entirely contained within the wrapper. Envelope wrapping technique is given as an example.

**Reference**

CSA Z314-18: 15.8.3.3

## **STERILIZATION OF REUSABLE MEDICAL DEVICES**

### **Preparation and Packaging**

**Packages are closed with methods that have been validated by the manufacturer for use in sterilization.**

#### **Additional Information**

Methods may include:

- tape that has been validated for sterilization
- tamper evident devices, etc.

Pins, staples, string or rubber bands are not used to close bundles.

#### **Recommended Corrective Actions**

Ensure packages are closed with methods that have been validated by the manufacturer for use in sterilization.

#### **Reference**

AH, Clauses: 8.13, 11.4.4

CSA Z314-18: 15.7.1d; 15.8.3.4c

**STERILIZATION OF REUSABLE MEDICAL DEVICES**  
**Preparation and Packaging**

**Banding material, if used, is validated for the sterilization method.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure banding material is validated for the sterilization method.

**Reference**

AH, Clause 8.13  
CSA Z314-18: 15.8.3.4c

**STERILIZATION OF REUSABLE MEDICAL DEVICES  
Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches are used for small, lightweight items (e.g, one or two clamps).**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure sterilization pouches are used for small, lightweight items (e.g, one or two clamps).

**Reference**

AH, Clause 8.13

CSA Z314-18: 15.7.1a

**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches are sized to adequately contain the device (i.e. the device does not touch the pouch seams).**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure sterilization pouches are sized to adequately contain the device (i.e. the device does not touch the pouch seams).

**Reference**

AH, Clause 8.13

CSA Z314-18: 15.7.1a

**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches, if double pouched, the smaller pouch fits inside larger pouch without folding or touching outer pouch seams and paper surfaces are touching.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that when sterilization pouches are double pouched, the smaller pouch fits inside larger pouch without folding or touching outer pouch seams and that paper surfaces are touching.

**Reference**

CSA Z314-18: 15.7.1c



**STERILIZATION OF REUSABLE MEDICAL DEVICES  
Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches have seals that are smooth and airtight (e.g, without folds, bubbles or wrinkles).**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure sterilization pouches have seals that are smooth and airtight (e.g, without folds, bubbles or wrinkles).

**Reference**

AH, Clause: 11.4.4

CSA Z314-18: 15.7.1d&e

**STERILIZATION OF REUSABLE MEDICAL DEVICES  
Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches if heat sealed, have one seal with a minimum width of three millimeters or two rows of seals.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure sterilization pouches that are heat sealed have one seal with a minimum width of three millimeters or two rows of seals.

**Reference**

CSA Z314-18: 15.7.5.2

**STERILIZATION OF REUSABLE MEDICAL DEVICES**

**Preparation and Packaging - Sterilization Pouches**

**Sterilization pouches if labelled in writing, only a permanent, soft-tipped marker validated for this purpose is used and writing is on the plastic (not paper) side of the pouch.**

**Additional Information**

Writing with pen will perforate the package. Ink used in non-validated marking pens can be toxic and can leach through the packaging and damage devices.

*Note: Black Sharpie #13601 and #13801 pens are validated for this purpose.*

Pre-printed paper labels must be validated for sterilization.

**Recommended Corrective Actions**

Ensure that when labeling in writing on sterilization pouches, only a permanent, soft-tipped marker validated for this purpose is used and writing is on the plastic (not paper) side of the pouch.

**Reference**

AH, Clause: 8.14.1, 8.14.2

CSA Z314-18: 15.6.2a, g

**STERILIZATION OF REUSABLE MEDICAL DEVICES**  
**Preparation and Packaging**

Rigid sterilization containers are assembled, according to manufacturer's instructions, and checked to ensure:

- placement of filter(s)
- gaskets are intact and free of debris
- properly latching lid
- placement of tamper evident devices
- load and contents labels are in place

**Additional Information**

Some tamper evident devices have a chemical process indicator on them.

**Recommended Corrective Actions**

Ensure rigid sterilization containers are assembled appropriately.

**Reference**

AH, Clause: 8.13

CSA Z314-18: 15.9.1; 15.9.4.3.1

## **STERILIZATION OF REUSABLE MEDICAL DEVICES**

### **Preparation and Packaging**

Packs or containers are clearly labelled indicating:

- **identification of package contents (e.g, package code and name)**
- **identity of person assembling the package**
- **sterilizer number**
- **load number**
- **sterilization date**
- **“Product is not sterile if packaging is open, damaged or wet. Check before using” or equivalent wording**

### **Additional Information**

Labelling (included printed labels) must be validated for sterilization.

For wrapped packages, writing is on the closure tape, not directly on the wrappers.

This item is N/A to immediate use steam sterilization and unwrapped sterilization.

### **Recommended Corrective Actions**

Ensure packs or containers are clearly labeled.

### **Reference**

AH, Clauses: 8.14.1, 8.14.3

CSA Z314-18: 15.6.2; 15.6.3.1; 15.6.3.2

## **STERILIZATION OF REUSABLE MEDICAL DEVICES**

### **General**

**If the mechanical, biological or chemical indicators suggest inadequate processing the item(s) are not used.\***

### **Additional Information**

Ask staff what action is taken if biological, mechanical or chemical indicators do not pass.

Answer must include that items are reprocessed. For sterilization failure, loads are recalled and investigated according to their standard operating procedure.

Chemical integrators and emulators are types of chemical indicators.

This item is N/A to unwrapped sterilization.

### **Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### **Reference**

AH, Clause: 8.25

CSA Z314-18: 16.2.5.2; 16.6.13

**STEAM STERILIZATION**

**General**

**Consumables in use (e.g, biological indicator and chemical indicator strips and tape) are used before the expiry date.**

**Additional Information**

Check the expiry date of all types of biological and chemical indicators.

**Recommended Corrective Actions**

Ensure that all biological and chemical indicators are discarded when their expiry date is reached.

**Reference**

AH, Clause 8.19.1

CSA Z314-18: 16.6.2.4

**STEAM STERILIZATION**

**General**

**There is a process in place that clearly identifies a non-reprocessed package from one that has been sterilized.\***

**Additional Information**

Observe that steam sterilized items have an external chemical indicator that distinguishes sterilized from non-sterilized packages.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AC, Clause: 10.8

AH, Clause: 4.1.1, 8.19.2

CSA Z314-18: 16.6.5



**STEAM STERILIZATION**  
**Loading and Unloading**

Packaged items are loaded in a manner that facilitates sterilization (e.g, Not overcrowded, away from chamber walls, peel pouches on edge).

**Additional Information**  
None.

**Recommended Corrective Actions**  
Ensure package items are loaded in a manner that facilitates sterilization.

**Reference**  
AH, Clauses: 8.15, 11.4.4  
CSA Z314-18: 16.2

**STEAM STERILIZATION**

**Loading and Unloading**

**During unloading, each package is inspected. Inspection includes checking external chemical indicators and ensuring dryness.**

**Additional Information**

Observe staff unloading. If unable to view unloading, ask what steps are taken when unloading the sterilizer.

**Recommended Corrective Actions**

Ensure each package is inspected during unloading to verify that the external chemical process indicator is acceptable and that the packages are dry.

**Reference**

AC, Clause: 10.6

AH, Clauses: 8.18, 8.19.2, 8.21

CSA Z314-18: 16.2.5.2

## **STEAM STERILIZATION**

### **Loading and Unloading**

**Packages are removed from the sterilizer when dry and allowed to cool in a low traffic area before handling. Cooling time is monitored.**

### **Additional Information**

Packages are “cool” when they have reached room temperature. This usually takes at least 30 minutes to occur.

Packages must not be touched before they are cool as microorganisms from the hands will wick into warm packages and contaminate them.

Touching packages is not an appropriate method to monitor cooling time.

### **Recommended Corrective Actions**

Ensure packages are removed from the sterilizer when dry and allowed to cool in a low traffic area before handling. Ensure cooling time is monitored according to sterilizer and medical device manufacturer’s instructions.

### **Reference**

AH, Clause: 8.16

CSA Z314-18: 16.2.5.6

**STEAM STERILIZATION  
Load Documentation**

**Load documentation includes sterilizer identifier.**

**Additional Information**

Sterilizer identifier may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**STEAM STERILIZATION  
Load Documentation**

**Load documentation includes load number.**

**Additional Information**

Sterilizer load number may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

## **STEAM STERILIZATION**

### **Load Documentation**

**Load documentation includes date and time of cycle.**

### **Additional Information**

Date and time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

### **Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

### **Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**STEAM STERILIZATION  
Load Documentation**

**Load documentation includes mechanical indicators of physical parameters (e.g, time, temperature, pressure).**

**Additional Information**

Mechanical indicators may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 8.20, 11.6

CSA Z314-18: 16.6.10

**STEAM STERILIZATION**  
**Load Documentation**

**Load documentation includes load contents.**

**Additional Information**

Includes type of items and quantity of each type.

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10



**STEAM STERILIZATION  
Load Documentation**

**Load documentation includes identification of person responsible for load release.**

**Additional Information**

Sign-off may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

Consumables in use (e.g, biological indicator and chemical indicator strips and tape) are appropriate for the sterilization method to be used.

**Additional Information**  
None.

**Recommended Corrective Actions**

Ensure that the consumables used for steam sterilization method is validated for use in that sterilizer.

**Reference**

AH, Clause: 8.19

CSA Z314-18: 16.6.4; 16.6.8

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

**An internal chemical indicator is placed inside each package.**

**Additional Information**

Watch for incorrect location (e.g, on the top of the pack) or position (e.g, extender handle inside and indicator outside). Correct location is an area of the pack least susceptible to sterilization. Multi-level packs require a chemical indicator at each level.

Chemical integrators and emulators are types of chemical indicators.

**Recommended Corrective Actions**

Ensure a chemical indicator is included on the inside of each wrapped package in the location where penetration of sterilant is of greatest concern.

**Reference**

AC, Clause: 9.14

AH, Clauses: 8.19, 8.19.2, 8.19.2.1

CSA Z314-18: 16.6.6

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

The printout is reviewed and initialed for critical elements on cycle completion (e.g, exposure time, temperature, and pressure).

**Additional Information**  
None.

**Recommended Corrective Actions**

Ensure that staff unloading sterilizer review mechanical and chemical indicators and sign off if all indicators pass.

**Reference**

AH, Clauses: 8.20, 8.21  
CSA Z314-18: 16.6.3

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

**Bowie Dick/DART air removal test (pre-vacuum sterilizers only) is done daily and documented.**

**Additional Information**

Dynamic air removal sterilizers include prevac sterilizers.

**Recommended Corrective Actions**

Ensure an air removal test (e.g, Bowie Dick) is conducted each day the sterilizer is in use and results documented.

**Reference**

AH, Clause: 8.19.3

CSA Z314-18: 16.6.7.1

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

**A biological indicator, contained within a process challenge device, is run each day (at a minimum) the sterilizer is used and is documented.**

**Additional Information**

Should be done for each cycle used (pre-vacuum and gravity).

**Recommended Corrective Actions**

Ensure that biological indicator contained within a process challenge device are tested each day the sterilizer is in use and for each type of cycle that will be used during the day. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clause: 8.19.4

CSA Z314-18: 16.6.8

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### STEAM STERILIZATION Quality Assurance Monitoring

Biological indicators are used for every load containing implantable medical devices and packages containing implantable devices are quarantined until a negative biological indicator result is obtained.

#### Additional Information

If early release occurs (due to urgent, unplanned need), a report must be generated stating:

- patient's name
- surgeon's name
- date and time
- results of the physical and chemical monitors used in the sterilization process, plus the results of the biological indicator once known

If all of these are present in the early release report and the reason for early release is valid (e.g. urgent unplanned need), from a quality assurance function, answer yes.

A copy of report is stored in the reprocessing area.

If a package is released based on monitored physical parameters and internal chemical indicator results, the internal chemical indicator shall be Type 5 or Type 6.

*Note: Type 5 and Type 6 internal chemical indicators measure all critical parameters for steam sterilization and provide additional quality assurance for monitoring medical devices. Other types of internal chemical indicators might not be designed to measure all critical parameters, so deviations in critical variables might go undetected.*

#### Recommended Corrective Actions

Ensure that every load containing implantable devices is monitored with a biological indicator and packages containing implantable devices are quarantined until a negative biological indicator result is obtained.

#### Reference

AC, Clause: 9.15

AH, Clauses: 8.19.5, 8.22

CSA Z314-18: 16.6.6; 16.6.8.2; 16.6.11.1

**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

**At a minimum, a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.**

**Additional Information**

*Note: control biological indicators are not subjected to the sterilization process.*

**Recommended Corrective Actions**

Ensure that a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.

**Reference**

CSA Z14-18: 16.6.8



**STEAM STERILIZATION**  
**Quality Assurance Monitoring**

**Time and temperature are verified and results documented for all biological indicator incubation or reading equipment. Verification is performed according to manufacturer's written instructions.**

**Additional Information**

Review documentation of biological indicator incubator or reader routine monitoring.

*Note: The 3M Attest Auto-reader Model 290 or newer is an exception to this item and is not applicable.*

**Recommended Corrective Actions**

Ensure that time and temperature are verified, and results documented, for each biological indicator incubator or reader used. Verification is performed as per manufacturer's written instructions.

**Reference**

AH, Clause: 8.21

CSA Z314-18: 7, 16.6.8

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**General**

The immediate use steam sterilization area is located in a restricted area, adjacent to the area where the sterilized items will be used.

**Additional Information**

The sterilizer should not be located in the patient care room or operating theatre.

**Recommended Corrective Actions**

Ensure the immediate use steam sterilization area is located in a restricted area, adjacent to the area where the sterilized items will be used. The sterilizer should not be located in the patient care room, operating theater, near any potential source of contamination, or adjacent to sterile storage.

**Reference**

CSA Z8000-18: Clause: 9.3.4.1.9; 9.9.3.4.5, Table 9.2 (9); Table 9.5 (7)

CSA Z314-18: 16.7.2.1; 16.7.2.2

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Preparation and Packaging**

**Containers designed for immediate use steam sterilization are used and maintained according to manufacturer's written instructions.**

**Additional Information**

A Flashpak® and One Tray are examples of this type of container. Instructions for use/should be readily available to staff.

**Recommended Corrective Actions**

Ensure containers designed for immediate use steam sterilization are used and maintained according to manufacturer's written instructions.

**Reference**

CSA Z314-18: 16.7.4.2c

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**General**

**Immediate use steam sterilization is only used in emergency situations.**

**Additional Information**

Immediate use steam sterilization must not be used for routinely scheduled procedures or to compensate for lack of inventory. Observe if possible. If not possible, ask staff when they would perform immediate use steam sterilization.

**Recommended Corrective Actions**

Ensure that immediate use steam sterilization is only used in emergency situations.

**Reference**

AH, Clause: 8.27

CSA Z314-18: 16.7.1.3

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**General**

**Implantable devices are not sterilized by immediate use steam sterilization.**

**Additional Information**

Other than for unavoidable, emergency situations (urgent, unplanned need, with no other options available, or the medical device can only be sterilized with an immediate-use cycle), IUSS shall not be used to sterilize:

- implants or
- organic materials (e.g., cranial bone flaps).

**Recommended Corrective Actions**

Ensure implantable devices never undergo immediate use steam sterilization.

**Reference**

AH, Clause: 8.27

CSA Z314-18: 16.7.1.4

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**General**

**Complete sets are not sterilized by immediate use steam sterilization.**

**Additional Information**

Observe if possible. If not possible, ask staff if they immediate use steam sterilize complete sets of instruments.

**Recommended Corrective Actions**

Ensure that complete sets are never immediate use steam sterilized.

**Reference**

CSA Z314-18: 16.7.1.4

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Loading and Unloading**

**Sterility of critical devices is maintained during removal from the sterilizer and transport to the point of use. Devices are used immediately.**

**Additional Information**

Observe if possible. If not, ask staff to explain how devices are removed and transported from the sterilizer to point of use.

**Recommended Corrective Actions**

Ensure sterility of critical devices that are immediate use steam sterilized is maintained during removal from the sterilizer and transport to the point of use. Devices are used immediately and not stored.

**Reference**

AH, Clause: 8.28, 11.4.4

CSA Z314-18: 16.7.5.3; 16.7.6

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Load Documentation**

**Load documentation includes sterilizer identifier.**

**Additional Information**

Sterilizer identifier may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10



**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Load Documentation**

**Load documentation includes date and time of cycle.**

**Additional Information**

Date and time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Load Documentation**

**Load documentation includes device sterilized.**

**Additional Information**

Includes identification of item being reprocessed.

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Load Documentation**

Load documentation includes mechanical indicators of physical parameters (e.g, time, temperature, pressure).

**Additional Information**

Mechanical indicators may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.21, 11.6

CSA Z314-18: 16.6.10

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Load Documentation**

**Load documentation includes results of chemical indicator and biological indicator.**

**Additional Information**

Results may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.21; 11.6

CSA Z314-18: 16.6.10

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Load Documentation**

**Load documentation includes reason for immediate use steam sterilization.**

**Additional Information**

Rationale for IUSS may be recorded in a log, printout, database or recording

chart. Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**IMMEDIATE USE STEAM STERILIZATION (IUSS)**

**Load Documentation**

**Load documentation includes patient identification.**

**Additional Information**

Patient information may be recorded in a log, printout, database or recording chart.

This information may be retrieved from the patient chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### IMMEDIATE USE STEAM STERILIZATION (IUSS)

#### Load Documentation

Load documentation includes name of surgeon.

#### Additional Information

Surgeon name may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

#### Recommended Corrective Actions

Ensure documentation is completed for each item being reprocessed.

#### Reference

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### IMMEDIATE USE STEAM STERILIZATION (IUSS)

#### Load Documentation

Load documentation includes identification of person responsible for indicators and load release.

#### Additional Information

Sign-off may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

#### Recommended Corrective Actions

Ensure documentation is completed for each item being reprocessed.

#### Reference

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10



**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

**Consumables in use (e.g, biological indicator and chemical indicator strips) are appropriate for IUSS.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that the consumables used for IUSS is validated for use in that sterilizer.

**Reference**

AH, Clause: 8.19

CSA Z314-18: 16.6.4; 16.6.8

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

**An internal chemical indicator is placed inside each tray holding device(s) being sterilized.**

**Additional Information**

Watch for incorrect location (e.g, on the top of the pack) or position (e.g, extender handle inside and indicator outside). Correct location is an area of the pack least susceptible to sterilization. Multi-level packs require a chemical indicator at each level.

**Recommended Corrective Actions**

Ensure each immediate use steam sterilization cycle is monitored with mechanical and chemical indicators.

**Reference**

AH, Clause: 8.19

CSA Z314-18: 15.5.2.2; 16.7.3.1

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

The printout is reviewed and initialed for critical elements on cycle completion (e.g, exposure time, temperature, and pressure).

**Additional Information**

If unable to observe, ask staff what the protocol requires for verifying the load.

**Recommended Corrective Actions**

Ensure that staff unloading immediate use steam sterilizer review mechanical and chemical indicators and sign off if all indicators pass.

**Reference**

AH, Clauses: 8.20, 11.6  
CSA Z314-18: 16.6.3.1

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

**Bowie Dick/DART air removal test (pre-vacuum sterilizers only) is done daily and documented.**

**Additional Information**

Dynamic air removal sterilizers include prevac sterilizers.

**Recommended Corrective Actions**

Ensure an air removal test (e.g, Bowie Dick) is conducted each day the sterilizer is in use and results documented.

**Reference**

AH, Clauses: 8.19.3, 11.6  
CSA Z314-18: 16.6.7.1

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

**Biological indicator test is run each day (at a minimum) that the sterilizer is used and is documented.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that a biological indicator test is run each day the sterilizer is in use. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clauses: 11.6, 8.19.4

CSA Z314-18: 16.6.8

**IMMEDIATE USE STEAM STERILIZATION (IUSS)  
Quality Assurance Monitoring**

**At a minimum, a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.**

**Additional Information**

*Note: control biological indicators are **not** subjected to the sterilization process.*

**Recommended Corrective Actions**

Ensure that a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.

**Reference**

CSA Z14-18: 16.6.8

**UNWRAPPED STEAM STERILIZATION  
Quality Assurance Monitoring**

**An internal chemical indicator is placed with the unwrapped devices being sterilized.**

**Additional Information**

Watch for incorrect location (e.g, on the top of the devices) or position (e.g, extender handle inside and indicator outside). Correct location is in an area least susceptible to sterilization.

**Recommended Corrective Actions**

Ensure each unwrapped steam sterilization cycle is monitored with a chemical indicator.

**Reference**

AH, Clause: 8.19

CSA Z314-18: 15.5.2.2; 16.7.3.1

**UNWRAPPED STEAM STERILIZATION  
Quality Assurance Monitoring**

The printout is reviewed and initialed for critical elements on cycle completion (e.g, exposure time, temperature, and pressure).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that staff unloading sterilizer with unwrapped devices review mechanical and chemical indicators and sign off if all indicators pass.

**Reference**

AH, Clause: 11.6

CSA Z314-18: 16.2.5.4



**UNWRAPPED STEAM STERILIZATION**

**General**

Devices that are sterilized unwrapped are allowed to dry in the sterilizer and are left to cool before they are used.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure devices are allowed to dry in the sterilizer and are left to cool before they are used.

**Reference**

AH, Clause: 8.16

CSA Z314-18: 16.2.4.2.2

**UNWRAPPED STEAM STERILIZATION**

**General**

**Semi-critical devices (e.g, speculum) that are sterilized unwrapped are stored in a clean, dry, protected area until use.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure semi-critical devices (e.g, speculum) that are sterilized unwrapped are stored in a clean, dry, protected area until use. Storage in an exam-table drawer is not acceptable, as this is not a protected area.

**Reference**

CSA Z314-18: 17.5.1.3

## **UNWRAPPED STEAM STERILIZATION**

### **General**

**For devices that are sterilized unwrapped, there is a process in place that clearly identifies a non-reprocessed device from one that has been reprocessed.\***

### **Additional Information**

This is done to prevent use of a non-reprocessed device on a patient.

Examples include:

- labelling reprocessed devices with reprocessing date and reprocessing expiry date (if applicable)
- tracking of the device identifier at each step documenting the date and time that it has been: received for cleaning, cleaned, received for disinfection, disinfected, etc.
- placing unwrapped, semi-critical devices in clean bags or containers labelled with reprocessing date and expiry date (if applicable)

### **Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### **Reference**

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1; 13.3.14; 12.4.1.1

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Manufacturer's Instructions for Use**

**Medical devices reprocessed in the SS1 have been validated.**

**Additional Information**

Check manufacturer's instructions for use for validation information.

**Recommended Corrective Actions**

Ensure that medical devices validated for reprocessing in the Steris System 1.

**Reference**

AC, Clause: 7.6; 7.7; 7.10; 9.0

AH, Clause: 8.4.2

CSA Z314-18: 7.1

**CHEMICAL STERILIZATION METHODS (Steris System 1)**

**General**

**Critical devices that are sterilized in the SS1 are used immediately.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure critical devices processed in Steris System 1 are used immediately following processing and are not stored.

**Reference**

CSA Z314-18: 16.2.4.4.3; 16.2.4.4.4

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
General**

**Semi-critical devices are completely dried before storage.**

**Additional Information**

Examples of cloths that are not lint-free include:

- terry towel
- paper towel

Examples of lint-free cloths include:

- huck towels
- disposable lint-free cloths

**Recommended Corrective Actions**

Ensure devices are dried using a clean, soft, lint-free cloth following rinsing.

**Reference**

CSA Z314-18: 11.8.5; 13.3.13

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Manufacturer's Instructions for Use**

**Devices are connected to the correct tray and attachment tubing and arranged in the SS1, according to manufacturer's instructions.\***

**Additional Information**

Tray and attachment must be validated for use with the specific devices.

Ensure devices, including endoscopes, are connected with the correct tray and attachment tubing and arranged in the Steris System 1 tray as per the sterilizer manufacturer's written instructions.

**Recommended Corrective Actions**

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

**Reference**

AH, Clause: 8.4.2

CSA Z314-18: 16.2.4.3.2

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Quality Assurance Monitoring**

**A diagnostic cycle is performed as the first cycle of each day that the sterilizer is used. Results are documented and initialed.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure a diagnostic test is performed as the first cycle of each day the sterilizer is in use.

**Reference**

AH, Clause: 8.19.4.2

CSA Z314-18:16.5.1



# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## CHEMICAL STERILIZATION METHODS (Steris System 1)

### General

Consumables in use (e.g, biological indicator, chemical indicator strips and sterilant) are appropriate for the sterilization method to be used.

### Additional Information

For the sterilant, DIN has been replaced by medical device license number from Health Canada. Check label for device license.

### Recommended Corrective Actions

Ensure that the biological indicator, chemical indicator strips and sterilant used for Steris System 1 are validated for use in the sterilizer.

### Reference

AH, Clauses: 8.11, 8.19

CSA Z314-18: 16.2.4.3.1; 16.6.4; 16.6.8

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Quality Assurance Monitoring**

**A biological indicator is tested each day the sterilizer is in use and results documented.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure a biological indicator is tested each day the sterilizer is in use. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clause: 8.19.4

CSA Z314-18: 16.6.8

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Quality Assurance Monitoring**

**Consumables in use (e.g, biological indicator, chemical indicator strips, and sterilant) are used before the expiry date.**

**Additional Information**

Check the expiry date of all types of biological indicators, chemical indicators and sterilant.

**Recommended Corrective Actions**

Ensure that all biological indicator, chemical indicator and sterilant are discarded when their expiry date is reached.

**Reference**

AH, Clause 8.19.1

CSA Z314-18: 16.6.2.4

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Quality Assurance Monitoring**

**Mechanical indicators are reviewed by the individual responsible for releasing the load and signed after each sterilization cycle.**

**Additional Information**

If unable to observe, ask staff what the protocol requires for verifying the load.

**Recommended Corrective Actions**

Ensure that staff unloading Steris System 1 review mechanical indicators and sign off if all indicators pass.

**Reference**

CSA Z314-18: 16.6.3.1

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### CHEMICAL STERILIZATION METHODS (Steris System 1)

#### General

**There is a process in place that clearly identifies a non-reprocessed device from one that has been sterilized.\***

#### Additional Information

This is done to prevent use of a non-reprocessed device on a patient.

Examples include:

- labelling reprocessed devices with reprocessing date and reprocessing expiry date (if applicable)
- tracking of the device identifier at each step documenting the date and time that it has been: received for cleaning, cleaned, received for disinfection, disinfected, etc.
- placing unwrapped, semi-critical devices in clean bags or containers labelled with reprocessing date and expiry date (if applicable)

#### Recommended Corrective Actions

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

#### Reference

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1; 13.3.14; 12.4.1.1

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes sterilizer identifier.**

**Additional Information**

Sterilizer identifier may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes load number.**

**Additional Information**

Sterilizer load number may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes date and time of cycle.**

**Additional Information**

Date and time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10



**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes sterilant lot number and expiry date.**

**Additional Information**

Sterilant lot number and expiry date may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

Load documentation includes mechanical indicators of physical parameters (time, temperature, etc.).

**Additional Information**

Mechanical indicators may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.24, 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes chemical indicator test result.**

**Additional Information**

Results may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes biological indicator test result.**

**Additional Information**

Check with manufacturer's instructions for cycles to test.

Results may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.19.4.2, 11.6

CSA Z314-18: 16.6.8.1; 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes contact time of the sterilant (printout).**

**Additional Information**

Contact time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.20, 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)**

**Load Documentation**

**Load documentation includes temperature of the sterilant (printout).**

**Additional Information**

Temperature may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.20, 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Load Documentation**

**Load documentation includes identification of person responsible for load release.**

**Additional Information**

Sign-off may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Quality Assurance Monitoring**

**At a minimum, a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.**

**Additional Information**

Control biological indicators are **NOT** subjected to the sterilization process.

**Recommended Corrective Actions**

Ensure that a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.

**Reference**

CSA Z14-18: 16.6.8



**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Device Documentation**

**Device documentation includes identification of the devices being reprocessed.**

**Additional Information**

Load contents may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**CHEMICAL STERILIZATION METHODS (Steris System 1)  
Device Documentation**

**Device documentation includes patient identification, with date used, and serial number of probe (some or all these components of traceability may be done in another department).**

**Additional Information**

Patient information may be recorded in a log, printout, database or recording chart.

This information may be retrieved from the patient chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each item being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6.4

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Manufacturer's Instructions for Use**

**Medical devices being reprocessed in a low temperature sterilizer are validated.**

**Additional Information**

Check manufacturer's instructions for use for validation information.

**Recommended Corrective Actions**

Ensure that medical devices validated for reprocessing in a low temperature sterilizer.

**Reference**

AC, Clause: 7.6; 7.7; 7.10; 9.0

AH, Clause: 8.4.2

CSA Z314-18: 7.1

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)

#### General

Consumables in use (e.g, biological indicator, chemical indicator strips, sterilant and tape) are appropriate for the sterilization method to be used.

#### Additional Information

For the sterilant, DIN has been replaced by medical device license number from Health Canada. Check label for device license.

#### Recommended Corrective Actions

Ensure that the biological indicator, chemical indicator, sterilant and tape used in low temperature sterilization are validated for use in the sterilizer.

#### Reference

AH, Clause: 8.11, 8.19

CSA Z314-18: 16.2.4.3.1; 16.6.4; 16.6.8

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)

#### General

Consumables in use (e.g, biological indicator, chemical indicator strips, sterilant and tape) are used before the expiry date.

#### Additional Information

Check the expiry date of all types of biological indicators and chemical indicators, plus the tape and sterilant.

#### Recommended Corrective Actions

Ensure that all biological and chemical indicators, sterilant and tape are discarded when their expiry date is reached.

#### Reference

AH, Clause 8.19.1

CSA Z314-18: 16.6.2.4

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)

#### General

There is a process in place that clearly identifies a non-reprocessed package from one that has been sterilized.\*

#### Additional Information

This is done to prevent use of a non-reprocessed device on a patient.

Examples include:

- labelling reprocessed devices with reprocessing date and reprocessing expiry date (if applicable)
- tracking of the device identifier at each step documenting the date and time that it has been: received for cleaning, cleaned, received for disinfection, disinfected, etc.
- placing unwrapped, semi-critical devices in clean bags or containers labelled with reprocessing date and expiry date (if applicable)

#### Recommended Corrective Actions

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

#### Reference

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1; 13.3.14; 12.4.1.1

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Loading and Unloading**

**Packaged items are loaded in a manner that facilitates sterilization (e.g, Trays are flat, not overcrowded, away from chamber walls, peel pouches on edge, paper to plastic).**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure package items are loaded in a manner that facilitates sterilization.

**Reference**

AH, Clause: 8.15

CSA Z314-18: 16.2

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Loading and Unloading**

**Correct cycle is used for each load.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure correct cycle is used for each load.

**Reference**

CSA Z314-18: 16.2.4



**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Loading and Unloading**

**During unloading, each package is inspected. Inspection includes checking external chemical indicators and ensuring dryness.**

**Additional Information**

Observe staff unloading. If unable to view unloading, ask what steps are taken when unloading the sterilizer.

**Recommended Corrective Actions**

Ensure each package is inspected during unloading to verify that the external chemical process indicator is acceptable and that the packages are dry.

**Reference**

AC, Clause: 10.6

AH, Clauses: 8.18, 8.19.2, 8.21

CSA Z314-18: 16.2.5.2

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes sterilizer identifier.**

**Additional Information**

Sterilizer identifier may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes load number.**

**Additional Information**

Sterilizer load number may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes date and time of cycle.**

**Additional Information**

Date and time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes mechanical indicators of physical parameters (e.g, time, temperature, pressure).**

**Additional Information**

Mechanical indicators may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.24, 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes load contents.**

**Additional Information**

Load contents may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Load Documentation**

**Load documentation includes identification of person responsible for load release.**

**Additional Information**

Sign-off may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Quality Assurance Monitoring**

**An internal chemical indicator is placed inside each package.**

**Additional Information**

Watch for incorrect location (e.g, on the top of the pack) or position (e.g, extender handle inside and indicator outside). Correct location is an area of the pack least susceptible to sterilization. Multi-level packs require a chemical indicator at each level.

**Recommended Corrective Actions**

Ensure each low temperature sterilization cycle is monitored with a chemical indicator.

**Reference**

AH, Clause: 8.19.2.1

CSA Z314-18: 15.5.2.2; 16.7.3.1



## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro) Quality Assurance Monitoring

The printout is reviewed and initialed for critical elements on cycle completion.

#### **Additional Information**

If unable to observe, ask staff what the protocol requires for verifying the load.

#### **Recommended Corrective Actions**

Ensure that staff unloading review mechanical indicators and sign off if all indicators pass.

#### **Reference**

AH, Clause: 8.21

CSA Z314-18: 16.6.3.1

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Quality Assurance Monitoring**

**Biological indicator test is run each day (at a minimum) that the sterilizer is used and is documented.**

**Additional Information**

Check with manufacturer's instructions for cycles to test.

**Recommended Corrective Actions**

Ensure that a biological indicator test is run each day the sterilizer is in use. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clauses: 8.19.4, 8.19.4.2

CSA Z314-18: 16.6.8

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Quality Assurance Monitoring**

**Each type of cycle to be used is monitored with a biological indicator.**

**Additional Information**

Should be done for each cycle used.

**Recommended Corrective Actions**

Ensure that biological indicators contained within a process challenge device are tested each day the sterilizer is in use and for each type of cycle that will be used during the day. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clause: 8.19.4

CSA Z314-18: 16.6.8

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro) Quality Assurance Monitoring

**Biological indicators are used for every load containing implantable medical devices.**

#### **Additional Information**

If early release occurs (due to urgent, unplanned need), a report must be generated stating:

- patient's name
- surgeon's name
- date and time
- results of the physical and chemical monitors used in the sterilization process, plus the results of the BI, once known

If all of these are present in the early release report and the reason for early release is valid (e.g, urgent unplanned need), from a quality assurance function, answer yes.

A copy of report is stored in the reprocessing area.

If a package is released based on monitored physical parameters and internal chemical indicator results, the internal chemical indicator shall be Type 5 or Type 6.

*Note: Type 5 and Type 6 internal chemical indicators measure all critical parameters for steam sterilization and provide additional quality assurance for monitoring medical devices. Other types of internal chemical indicators might not be designed to measure all critical parameters, so deviations in critical variables might go undetected.*

#### **Recommended Corrective Actions**

Ensure that every load containing implantable devices is monitored with a biological indicator and packages containing implantable devices are quarantined until a negative biological indicator result is obtained.

#### **Reference**

AC, Clause: 9.15

AH, Clauses: 8.19.5, 8.22

CSA Z314-18: 16.6.8.2; 16.6.11.1

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Quality Assurance Monitoring**

**At a minimum, a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.**

**Additional Information**

Control biological indicators are **NOT** subjected to the sterilization process.

**Recommended Corrective Actions**

Ensure that a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.

**Reference**

CSA Z14-18: 16.6.8

**LOW TEMPERATURE STERILIZATION (Sterrad, V-Pro)  
Quality Assurance Monitoring**

**Time and temperature are verified and results documented for all biological indicator incubation or reading equipment. Verification is performed according to manufacturer's written instructions.**

**Additional Information**

Review documentation of biological indicator incubator or reader routine monitoring.

**Recommended Corrective Actions**

Ensure that time and temperature are verified, and results documented, for each biological indicator incubator or reader used. Verification is performed as per manufacturer's written instructions.

**Reference**

AH, Clause: 8.21  
CSA Z14161-11  
CSA Z314-18: 7, 16.6.8

**ETHYLENE OXIDE (ETO)  
Manufacturer's Instructions for Use**

**Devices being sterilized are validated for ethylene oxide sterilization.**

**Additional Information**

Check manufacturer's instructions for use for validation information.

**Recommended Corrective Actions**

Ensure that medical devices validated for reprocessing by ethylene oxide sterilization.

**Reference**

AC, Clause: 7.6; 7.7; 7.10; 9.0

AH, Clause: 8.4.2

CSA Z314-18: 7.1

**ETHYLENE OXIDE (ETO)**

**General**

**Consumables in use (e.g, biological indicator, chemical indicator strips, sterilant and tape) are appropriate for the sterilization method to be used.**

**Additional Information**

For the sterilant, DIN has been replaced by medical device license number from Health Canada. Check label for device license.

**Recommended Corrective Actions**

Ensure that the biological indicator and chemical indicator used for ethylene oxide are validated for use in the sterilizer.

**Reference**

AH, Clause: 8.19

CSA Z314-18: 16.2.4.3.1; 16.6.4; 16.6.8



**ETHYLENE OXIDE (ETO)**

**General**

Consumables in use (e.g, biological indicator, chemical indicator strip, sterilant and tape) are not expired.

**Additional Information**

None.

**Additional Information**

Check the expiry date of all types of biological indicators and chemical indicators.

**Recommended Corrective Actions**

Ensure that all biological and chemical indicators are discarded when their expiry date is reached.

**Reference**

AH, Clause 8.19.1

CSA Z314-18: 16.6.2.4

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### ETHYLENE OXIDE (ETO)

#### General

**There is a process in place that clearly identifies a non-reprocessed package from one that has been sterilized.\***

#### Additional Information

This is done to prevent use of a non-reprocessed device on a patient.

Examples include:

- labelling reprocessed devices with reprocessing date and reprocessing expiry date (if applicable)
- tracking of the device identifier at each step documenting the date and time that it has been: received for cleaning, cleaned, received for disinfection, disinfected, etc.
- placing unwrapped, semi-critical devices in clean bags or containers labelled with reprocessing date and expiry date (if applicable)

#### Recommended Corrective Actions

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

#### Reference

AH, Clause: 4.1.1

CSA Z314-18: 13.3.1.1; 13.3.14; 12.4.1.1

**ETHYLENE OXIDE (ETO)  
Loading and Unloading**

Packaged items are loaded in a manner that facilitates sterilization (e.g, not overcrowded, away from chamber walls, peel pouches on edge).

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure package items are loaded in a manner that facilitates sterilization.

**Reference**

AH, Clause: 8.15

CSA Z314-18: 16.2

**ETHYLENE OXIDE (ETO)  
Loading and Unloading**

**Correct cycle (if applicable) is selected.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure correct cycle is used for each load.

**Reference**

CSA Z314-18: 16.2.4

**ETHYLENE OXIDE (ETO)  
Loading and Unloading**

**During unloading, each package is inspected. Inspection includes checking external chemical indicators and package integrity.**

**Additional Information**

Observe staff unloading. If unable to view unloading, ask what steps are taken when unloading the sterilizer.

**Recommended Corrective Actions**

Ensure each package is inspected during unloading to verify that the external chemical process indicator is acceptable and that the packages are dry.

**Reference**

AC, Clause: 10.6

AH, Clauses: 8.18, 8.19.2, 8.21

CSA Z314-18: 16.2.5.2

**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes sterilizer identifier.**

**Additional Information**

Sterilizer identifier may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes load number.**

**Additional Information**

Sterilizer load number may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes date and time of cycle.**

**Additional Information**

Date and time may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10



**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes mechanical indicators of physical parameters (e.g, time, temperature, pressure).**

**Additional Information**

Mechanical indicators may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clauses: 8.24, 11.6

CSA Z314-18: 16.6.10

**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes load contents.**

**Additional Information**

Load contents may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**ETHYLENE OXIDE (ETO)  
Load Documentation**

**Load documentation includes identification of person responsible for load release.**

**Additional Information**

Sign-off may be recorded in a log, printout, database or recording chart.

Information can be:

- manually recorded
- downloaded and printed or
- checked on the electronic database and signed off electronically after each cycle

**Recommended Corrective Actions**

Ensure documentation is completed for each load being reprocessed.

**Reference**

AC, Clause: 13

AH, Clause: 11.6

CSA Z314-18: 16.6.10

**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**Internal chemical indicator is placed inside each package.**

**Additional Information**

Watch for incorrect location (e.g, on the top of the pack) or position (e.g, extender handle inside and indicator outside). Correct location is an area of the pack least susceptible to sterilization. Multi-level packs require a chemical indicator at each level.

**Recommended Corrective Actions**

Ensure each ethylene oxide sterilization cycle is monitored with a chemical indicator.

**Reference**

AH, Clause: 8.19.2

CSA Z314-18: 15.5.2.2; 16.7.3.1

**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**The printout is reviewed and initialed for critical elements on cycle completion.**

**Additional Information**

If unable to observe, ask staff what the protocol requires for verifying the load.

**Recommended Corrective Actions**

Ensure that staff unloading review mechanical indicators and sign off if all indicators pass.

**Reference**

AH, Clause: 8.21

CSA Z314-18: 16.6.3.1

**Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards**

**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**Biological indicator test is run each day the sterilizer is used and results documented.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that a biological indicator test is run each day the sterilizer is in use. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clause: 8.19.4, 8.19.4.2

CSA Z314-18: 16.6.8

**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**Each type of cycle to be used is monitored with a biological indicator.**

**Additional Information**

Must done for each cycle used.

**Recommended Corrective Actions**

Ensure that biological indicators contained within a process challenge device are tested each day the sterilizer is in use and for each type of cycle that will be used during the day. Results are documented.

**Reference**

AC, Clause: 4.7; 10.4

AH, Clause: 8.19.4

CSA Z314-18: 16.6.8

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## ETHYLENE OXIDE (ETO) Quality Assurance Monitoring

**Biological indicators are used for every load containing implantable medical devices.**

### Additional Information

If early release occurs (due to urgent, unplanned need), a report must be generated stating:

- patient's name
- surgeon's name
- date and time
- results of the physical and chemical monitors used in the sterilization process, plus the results of the BI, once known

If all of these are present in the early release report and the reason for early release is valid (e.g, urgent unplanned need), from a quality assurance function, answer yes.

A copy of report is stored in the reprocessing area.

If a package is released based on monitored physical parameters and internal chemical indicator results, the internal chemical indicator shall be Type 5 or Type 6.

*Note: Type 5 and Type 6 internal chemical indicators measure all critical parameters for steam sterilization and provide additional quality assurance for monitoring medical devices. Other types of internal chemical indicators might not be designed to measure all critical parameters, so deviations in critical variables might go undetected.*

### Recommended Corrective Actions

Ensure that every load containing implantable devices is monitored with a biological indicator and packages containing implantable devices are quarantined until a negative biological indicator result is obtained.

### Reference

AC, Clause: 9.15

AH, Clauses: 8.19.5, 8.22

CSA Z314-18: 16.6.8.2; 16.6.11.1



**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**At a minimum, a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.**

**Additional Information**

Control biological indicators are **NOT** subjected to the sterilization process.

**Recommended Corrective Actions**

Ensure that a control biological indicator from each shipping lot is incubated to verify the viability of the test spores and results are documented.

**Reference**

CSA Z14-18: 16.6.8

**ETHYLENE OXIDE (ETO)  
Quality Assurance Monitoring**

**Time and temperature are verified and results documented for all biological indicator incubation or reading equipment. Verification is performed according to manufacturer's written instructions.**

**Additional Information**

Review documentation of biological indicator incubator or reader routine monitoring.

**Recommended Corrective Actions**

Ensure that time and temperature are verified, and results documented, for each biological indicator incubator or reader used. Verification is performed as per manufacturer's written instructions.

**Reference**

AH, Clause: 8.21  
CSA Z14161-11  
CSA Z314-18: 7, 16.6.8

## **STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

### **General**

**The sterile storage area is well-lit and dedicated to storage of clean and sterile supplies.**

### **Additional Information**

Look for inappropriate items stored in this area, such as shipping containers, soiled items, housekeeping equipment.

Make sure there is sufficient lighting to allow easy reading of labels and to determine the condition of packaging, ask staff if they have any concerns about sufficient lighting.

### **Recommended Corrective Actions**

Ensure the sterile storage area is dedicated only to the storage of clean and sterile supplies.

### **Reference**

AH, Clauses: 2.3.1, 9.1c, 11.4.3

CSA Z314-18: 10.2.5.1

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Sterile storage areas have doors that are closed and access is restricted to authorized personnel.**

**Additional Information**

May be within the clean side of MDR.

**Recommended Corrective Actions**

Ensure sterile storage areas doors are closed and access is restricted to authorized personnel.

**Reference**

CSA Z314-18: 10.2.5.9; 17.3.2.2.1

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Signage is posted indicating the sterile storage area is a restricted area.**

**Additional Information**

Sterile storage may be within the clean side of MDR.

**Recommended Corrective Actions**

Ensure signage is posted indicating the sterile storage area is a restricted area.

**Reference**

CSA Z314-18: 10.2.5.9

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Sterile storage areas are protected from dust, insects and vermin.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure sterile storage areas are protected from dust, insects and vermin.

**Reference**

AH, Clauses: 2.3.4, 9.1b, 11.4.3

CSA Z314-18: 10.2.5.1

## **STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

### **General**

**Sterile storage areas are monitored daily and documented for temperature and humidity extremes.**

### **Additional Information**

Check temperature and humidity:

- Temperature: 18°C – 23°C and
- Humidity: 30% – 60%.

### **Recommended Corrective Actions**

Ensure sterile storage areas are monitored daily and documented for temperature and humidity extremes. Measure and document temperature (18 – 23°C) and humidity (30 – 60%) daily.

### **Reference**

AH, Clauses: 9.1b, 11.4.3

CSA Z314-18: 10.2.5.1

## **STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

### **General**

**Shelving material is non-shedding with smooth surfaces and easily cleanable.**

### **Additional Information**

Shelving construction shall be:

- non-porous on all surfaces
- non-shedding and easily cleanable
- free of burrs and sharp or rough edges

### **Recommended Corrective Actions**

Ensure shelving material is non-porous on all surfaces, non-shedding and easily cleanable, and free of burrs and sharp or rough edges.

### **Reference**

AH, Clause: 9.1e

CSA Z314-18: 10.2.5.6



**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**The top and bottom shelves of storage carts are solid.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure open storage units have a solid top and bottom shelf.

**Reference**

AH, Clause: 9.1e

CSA Z314-18: 10.2.5.6

## **STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

### **General**

**Sterile packages are stored at least 25 cm above the floor, 46 cm away from the ceiling and 5 cm away from any exterior wall.**

### **Additional Information**

Imperial dimensions:

- Ten inches above the floor on a solid cleanable surface,
- Eighteen inches from the ceiling and
- Two inches from outside walls.

### **Recommended Corrective Actions**

Ensure sterile packages are stored at least 25 cm (10 inches) above the floor, 46 cm (18 inches) away from the ceiling and 5 cm (two inches) away from any exterior wall.

### **Reference**

AH, Clause: 9.1e

CSA 314-18: 10.2.5.7

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Packages are adequately spaced.**

**Additional Information**

For rigid sterilization containers, check that container manufacturer's instructions for use allows for stacking.

**Recommended Corrective Actions**

Ensure packages are adequately spaced.

**Reference**

AH, Clauses: 2.3.2, 9.1c  
CSA Z314-18: 17.3.2.2.2

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Sterile packages are stored on a first in first out basis (FIFO).**

**Additional Information**

Ask MDRT how they operationalize the FIFO principle.

**Recommended Corrective Actions**

Use “first in/first out” principle when stocking and retrieving devices.

**Reference**

AH, Clause: 9.1a)

CSA Z314-18: 17.1.2

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

Case carts are cleaned and dried between each use and are in good repair.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure case carts are cleaned and dried between each use and are in good repair.

**Reference**

CSA Z314-18: 10.2.6.2.2

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**Clean and sterile devices are covered and transported separately (e.g, in separate carts or containers) from soiled devices or linens.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure clean and sterile devices are covered and transported separately from soiled devices or linens.

**Reference**

AH, Clauses: 5.2.1, 9.1d

CSA Z314-18: 17.6.1.1

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**A container labeling system (e.g, colour coding or tagging) is in place to identify clean or contaminated contents of transport containers.**

**Additional Information**

Labeling must be cleanable (not paper).

**Recommended Corrective Actions**

Ensure all transport containers have a labeling system (e.g, colour coding or tagging) to identify contents as clean or contaminated.

**Reference**

AH, Clauses: 5.2.2, 9.1d, 11.4.3  
CSA Z314-18: 11.3.1.3

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

Following high-level disinfection, dried devices are stored in a clean, dry, protected area until use.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that devices are stored in a clean, dry, protected area following high-level disinfection.

**Reference**

AH, Clause: 9.1

CSA Z314-18: 17.5.1.3



**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**Storage Cabinets**

Endocavity probes (e.g, endovaginal DI probes, TEE probes) are stored in a dedicated, closed, ventilated cabinet.

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure there is a dedicated, protected, clean and well ventilated storage cabinet for probes.

**Reference**

AH, Clause: 11.4.3

CSA Z314-18: 13.3.14

## **STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

### **Storage Cabinets**

**Endoscopes with lumens are hung vertically in ventilated (HEPA filtration) storage cabinets with non-porous, cleanable surfaces in a manner that protects them from contamination (e.g, tips do not touch the floor of the cabinet).**

### **Additional Information**

Air channel purge cabinets don't require vertical hanging of endoscopes, check manufacturer's instructions for use to confirm.

### **Recommended Corrective Actions**

Ensure there is a dedicated, protected, clean and well ventilated storage cabinet for endoscopes.

### **Reference**

AC: 11.8

AH, Clause: 11.4.3

CSA Z314-18: 12.5.1; 12.5.2.1; 12.5.2.2

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**Storage Cabinets**

**Caps, valves and other detachable components are removed during storage.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure caps, valves and other detachable components are removed during storage and reassembled before use.

**Reference**

AC, Clause: 11.8

AH, Clause: 11.4.3

CSA Z314-18: 12.5.3

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**Storage Cabinets**

**Endoscope and endocavity probe storage cabinets are cleaned at least weekly. Cleaning is documented.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure endoscope storage cabinets are cleaned at least weekly and documented.

**Reference**

AH, Clause: 11.4.3

CSA Z314-18: 12.5.2.2

**STORAGE AND USE OF REPROCESSED MEDICAL DEVICES**

**General**

**All semi-critical endoscopes, including bronchoscopes, are reprocessed if stored for longer than seven days.**

**Additional Information**

None.

**Recommended Corrective Actions**

Ensure that endoscopes are reprocessed when their shelf-life is reached. Endoscopes for GI procedures should be reprocessed if storage exceeds seven days. Bronchoscopes that are high-level disinfected and not sterilized, should be reprocessed if storage exceeds seven days.

**Reference**

AH, Clause: 11.4.3

CSA Z314-18: 12.5.4

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## STORAGE AND USE OF REPROCESSED MEDICAL DEVICES

### General

**When a random package or set is inspected from the storage area, sterilized devices are visibly clean and identified as reprocessed.\***

### Additional Information

Random packages include wrapped, pouches, and linen bundles (check as Surgical Textiles review tool no longer done).

If visible soil (e.g, blood) or a wet package is observed or items are not identified as sterile (external indicators), indicate “No”.

If there is anything observed wrong, other than that above, go back to the item in the tool and ensure the item for that issue is a “No”. For example:

- chemical indicator not in correct location: Question 232
- items without manufacturer’s instructions for sterilization: Question 207
- textiles that do not have manufacturer’s instructions for sterilization: Question 209

### Recommended Corrective Actions

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### Reference

AH, Clause: 11.4.3

CSA Z314-18: 17.5.2.1; 17.5.2.2

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Installation and Qualification Documentation**

**All sterilizers are installed, validated and performs according to manufacturer's specifications (installation and operational qualification) and results documented.**

**Additional Information**

Check for installation qualification only on sterilizers installed after Cycle 3 (2016/17).

This item includes Steris System 1.

Review documents that show tests have been conducted following installation and major repair. Results of the tests should be included with the documentation.

*Operational Qualification* needs to be done at least annually, and after:

- major repairs, including:
  - replacing controls
  - replacing plumbing
  - major rebuilding
  - installation of new major component
- sterilizer relocation
- construction in the sterilizer area
- environmental changes in the area (changes to HVAC, etc.)
- unexplained sterility failure
  - changes in steam supply or delivery

For table top sterilizers that are sent out for maintenance or repairs, *Operational Qualification* needs to be done each time a sterilizer is received (re-installed).

Check manufacturer's instructions for use for equipment-specific installation and operational qualification requirements. For example, for steam sterilizers, qualification requires running three consecutive cycles in an empty chamber using process challenge devices with biological indicators and, if dynamic air removal sterilizers are used, they also require testing with three consecutive air removal tests (e.g., Bowie-Dick) in an otherwise empty sterilizer. For example, for table-top steam sterilizers, testing will take place in a fully loaded chamber.

**Recommended Corrective Actions**

Ensure operational qualification testing of sterilizers is performed and documented following installation, major repairs or significant modifications.

**Reference**

AC, Clause: 4.4

AH, Clauses: 8.5, 8.6, 8.7, 8.8, 8.9, 11.2.1.3

CSA Z314-18: 16.5.2; 16.5.3; 16.8.3.3; 7

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Performance Qualification Documentation**

**Performance qualification is done and documented to verify that packs or sets (including loaners) can be sterilized in the facility's sterilizer(s).**

**Additional Information**

This is achieved by placing biological and chemical indicators within packs or sets in location(s) presenting the greatest challenge to sterilization.

Following sterilization, indicator results are reviewed to verify sterilization and documented before accepting the packs or sets for use.

Review documented performance qualification results.

**Recommended Corrective Actions**

Ensure performance qualification is done and to verify that packs or sets can be sterilized in the facility's sterilizer(s). This is done for each pack or set, or "product family", as determined by the MDR department, currently in use and when introducing:

- new bundles containing surgical textiles
- new, loaned or complex large or multi-level instrument sets
- new packaging or wrapping systems
- new processes (e.g, extended cycles as recommended by manufacturer)

This includes placing biological and chemical indicators within packs or sets in location(s) presenting the greatest challenge to sterilization. Following sterilization, indicator results are reviewed to verify sterilization and documented before accepting the packs or sets for use.

**Reference**

AH, Clause: 8.10, 11.2.1.3  
CSA Z314-18: 7; 16.5.4



**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Record of all maintenance and interventions associated with a failed sterilization load or a positive biological indicator.**

**Additional Information**

Review documentation from a follow-up of a failed sterilization load or positive biological indicator.

**Recommended Corrective Actions**

Ensure there is documentation of all maintenance and interventions associated with a failed sterilization load or a positive biological indicator.

**Reference**

AC, Clause: 14

AH, Clause: 8.25

CSA Z314-18, 5.7.7.1, 5.7.7.2, Figure 5.1, 18.1.3

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for steam sterilizers.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for Immediate Use Steam Sterilization.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6  
AH, Clause: 11.6.1  
CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for chemical sterilization methods (Steris System 1).**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for low temperature (V-Pro).**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6  
AH, Clause: 11.6.1  
CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for low temperature (Sterrad).**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation for Sterilizer Type**

**Maintenance and repair documentation is available for Ethylene Oxide.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for each sterilizer is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6  
AH, Clause: 11.6.1  
CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for biological indicator monitoring equipment.**

**Additional Information**

Check documentation for routine (daily or weekly) and preventative maintenance and equipment repair.

Some biological indicator incubators may be N/A if the manufacturer does not recommend any maintenance or repair.

**Recommended Corrective Actions**

Ensure all maintenance is documented. This includes all routine maintenance, preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1



**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for automatic washer or disinfectors.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

Check manufacturer's instructions for use for requirements around checking the accuracy of the recording device on the equipment, using an independent calibration device, and check records that this has been done.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clauses: 7.15.1, 11.6.1

CSA Z314-18: 11.8.4.1.7; 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for pasteurizers.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

Check manufacturer's instructions for use for requirements around checking the accuracy of the recording device on the equipment, using an independent calibration device, and check records that this has been done.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clauses: 7.15.1, 11.6.1

CSA Z314-18: 11.8.4.1.7; 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for drying cabinets.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for Automated Endoscope Reprocessors (AER).**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for ultrasonic cleaners.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION  
Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for automated lumen cleaners.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1; 12.4.12.2.2

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for probe reprocessing units (e.g, Trophon, TD100).**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for high-level disinfection air handling systems (e.g, GUS, AirClean System)**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1



**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for fume hoods.**

**Additional Information**

Maintenance includes routine maintenance (done by MDRD and Facilities Maintenance and Engineering) as well as preventive maintenance and repairs.

In some sites, routine and preventive maintenance and repairs are done by contracted service technicians. Check these reports.

**Recommended Corrective Actions**

Ensure all maintenance for this equipment is documented. This includes all routine maintenance (done by MDR and Facilities Maintenance and Engineering), preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6  
AH, Clause: 11.6.1  
CSA Z314-18: 18.1

**INSTALLATION, QUALIFICATION, MAINTENANCE AND REPAIR DOCUMENTATION**  
**Maintenance and Repair Documentation**

**Maintenance and repair documentation is available for instrument sterilization containers.**

**Additional Information**

Examples include Flashpak®, rigid container systems, etc.

Check documentation for routine (daily/weekly inspection, checking gaskets, changing filter, etc.) and preventative maintenance and equipment repair.

Inspection performed when the container is set up may be documented by initialing the container during assembly if the standard operating procedure outlines this as the process.

**Recommended Corrective Actions**

Ensure all maintenance is documented. This includes all routine maintenance, preventative maintenance and equipment repair. Frequency of routine and preventative maintenance follows manufacturer's written instructions.

**Reference**

AC, Clause: 4.5; 4.6

AH, Clause: 11.6.1

CSA Z314-18: 18.1

## Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

### **SINGLE-USE MEDICAL DEVICES** **Provincial Policies and Procedures**

**There is a documented policy stating that single-use medical devices are not to be reprocessed in the facility.**

#### **Additional Information**

There is an AHS policy/procedure available on Insite.

#### **Recommended Corrective Actions**

Develop, update or obtain a written policy that states single-use medical devices are not reprocessed.

AHS Critical and Semi-critical Single-use Medical Devices Policy

<https://extranet.ahsnet.ca/teams/policydocuments/1/clp-single-use-medical-devices-ps-07-policy.pdf>

#### **Reference**

AC, Clause: 7.2

AH, Clauses: 1, 11.3

# Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards

## SINGLE-USE MEDICAL DEVICES

### General

**Single-use medical devices are not reprocessed in the facility.\***

### Additional Information

Reviewers to note if any single-use medical devices are observed being reprocessed during the observational tour

Ask the staff:

- if they ever get single-use medical devices in the area,
- how they identify single-use medical devices, and
- what they do with single-use medical devices.

### Recommended Corrective Actions

Confirm that corrective actions implemented at the time deficiency was identified on review day remain in place.

### Reference

AC, Clause: 7.2

AH, Clauses: 1, 11.1.2