Dental instrument reprocessing
quick reference

Elements of a designated reprocessing area

Personal Protective Equipment (PPE) must always be available
Masks, gowns and eye protection are necessary when splashes or sprays may occur

<table>
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<tr>
<th>Pre-cleaning</th>
<th>Transport</th>
<th>Disassembly</th>
<th>Cleaning</th>
<th>Sterilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove gross soil immediately to prevent drying</td>
<td>Transport container must be cleanable, closed, covered and puncture proof</td>
<td>Disassemble as per Manufacturer’s Instructions for Use (MIFU)</td>
<td>Completely submerge equipment</td>
<td>Items must not touch in package, open hinged items</td>
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<tr>
<td>Dispose of sharps promptly (ideally at chairside)</td>
<td></td>
<td>Inspect for damage</td>
<td>Manual friction with detergent</td>
<td>Wrap/label with date, sterilizer used, load number, and initials, and contents if not visible</td>
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<td>Sort instruments into sets</td>
<td>Brush and flush lumens</td>
<td>Ensure quality indicators are documented: physical, chemical, biological</td>
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<td>Soak/pre-treat</td>
<td>Mechanical cleaning if available (e.g. ultrasonic cleaner or hydrim)</td>
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<td>Rinse</td>
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Quality control
Sterilization process
✔ Physical indicators – monitor with each load
  • Time, temperature, pressure
✔ Chemical indicators – monitor on each package
  • Internal (Class 4 minimum)
  • External (Class 1)
✔ For dynamic air removal type sterilizer, perform a Class 2 (Bowie-Dick) indicator once daily
✔ Biological indicators – monitor once daily
  • Monitor once daily
  • Use in every load containing implants
  • To use instruments prior to having BI results, a Class 5/6 Chemical indicator within a process challenge device should be in each load

Ultrasonic cleaners
✔ Test for efficacy once weekly

High level disinfectant
✔ Test for efficacy each day it is used

Any equipment labelled as single-use can never be reprocessed or re-used. Examples: syringes, needles, some suction tips, etc.

Storage of dental instruments
Never store in reprocessing area, on the floor, under/adjacent sinks, or with unclean items

Store single-use disposable semi-critical items
• Unwrapped or wrapped
• In clean, dry and covered area
• Handled only with forceps or clean hands

Store reprocessed sterile or critical items
• Stored in sterile package until time of use
• In a clean, dry secure area that prevents contamination
• Packaged items may be handled with clean hands
• Store in designated area adjacent to, but not accessible from reprocessing area
• Ensure items which have been reprocessed can be differentiated from items that have not (i.e. colour coding)
Key principles for reprocessing dental instruments

It is essential that each dental practice maintain an overall inventory of dental instruments used in each facility. The inventory must:
- ✔ State the recommended reprocessing for each instrument
- ✔ Reflect the manufacturer’s instructions for use for each item
- ✔ Be shared with all staff involved in reprocessing

Policies need to include:

**Cleaning and maintenance**
- environmental cleaning process and schedule for reprocessing area
- scheduled maintenance for cleaning and sterilization equipment

**Reprocessing**
- all aspects of reprocessing
- process for recall of instruments if there is a reprocessing failure
- quality monitoring and documentation
- items are reprocessed as per MIFUs or are single use
- single use items are not reprocessed

**Occupational Health and Safety**
- response to blood/body fluid spills
- prevention/management of sharps injuries
- use of personal protective equipment
- all chemicals are approved by PHC/CSA/Health Canada

Reprocessing decision tree

1. **Is this item single-use?**
   - Yes: Dispose as per waste management policy
   - No: Proceed to next step

2. **Is this item a critical instrument?**
   - Yes: Sterilization as per MIFU
     - e.g. surgical instruments, scalers, surgical burs, high speed hand tools, mouth mirrors, dental impression trays and cotton pliers
   - No: Proceed to next step

3. **Is this item a semi-critical instrument?**
   - Yes: Low level disinfection as per MIFU
     - e.g. radiograph head/cone, blood pressure cuff, light handle
   - No: Proceed to next step

4. **Is this item a non-critical device/equipment?**
   - Yes: Proceed to next step
   - No: Proceed to next step

   - **Yes**
     - MIFU = Manufacturer’s Instructions for Use

If there is a discrepancy between the reprocessing level recommended by the manufacturer and the intended use of the instrument by Spaulding’s criteria, the higher level of disinfection/sterilization must be used.

Helpful resources