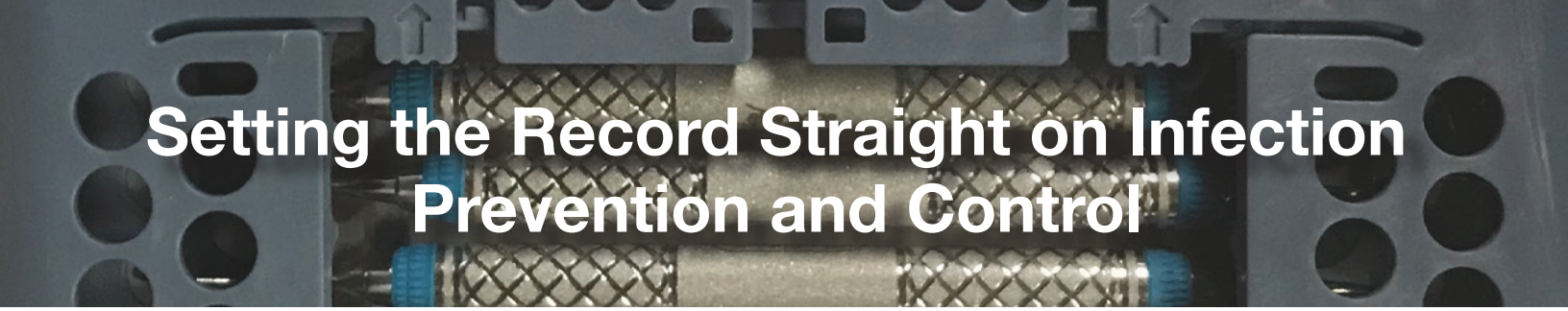

Setting the Record Straight on Infection Prevention and Control

The Facts About Reprocessing

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What is reprocessing?

Reprocessing involves the steps performed to prepare a used instrument/device for reuse. (1) Reprocessing steps of dental devices includes but is not limited to pre-cleaning, disassembly/soaking, cleaning, rinsing/drying, packaging, sterilization and storage.

Pre-cleaning

Pre-cleaning involves the removal of visible soil from instruments/devices at the point of use so that it does not dry or harden on items to be sterilized. Instruments should then be transported to the reprocessing/sterilization area in a closed puncture-resistant container. This container should be cleaned and disinfected after each use.

Disassembly/Soaking

Instruments should be lubricated, if required, and disassembled according to the manufacturer's instructions for use (MIFU). If instruments cannot be cleaned immediately, they should be kept moist and/or soaked in an enzymatic solution or detergent that is compatible with the instruments/devices being cleaned.

> *All staff involved in reprocessing should have completed formal education and training in reprocessing as part of their entry-to-practice education. Education should include theoretical and practical components including any necessary device-specific training. Also, every office should have ongoing audits with documentation of competency of staff involved in reprocessing dental equipment/devices.*

Cleaning

Instruments should be manually scrubbed cleaned or may alternatively be cleaned in a washer/disinfector or ultrasonic machine. Washers/disinfectors or ultrasonic machines should receive regular maintenance and be tested for efficacy at least weekly or as per MIFU. Ultrasonic solutions should be changed at least daily or more frequently if visibly soiled. Any brushes that are used for cleaning can accumulate organic matter and should be inspected throughout the day and changed when dirty. At the end of the day, brushes should be sterilized or discarded.

Rinsing/Drying/Inspecting

Once items have been cleaned, they should be thoroughly rinsed and dried with a lint-free cloth. Items should be inspected to ensure all organic and inorganic material have been properly removed. The integrity of the instrument should also be evaluated.

Packaging

Instruments must be sterilized in a manner where they remain sterile until point of use. This means instrument packaging should be opened in front of the client. There are many types of packaging materials such as peel/plastic pouches, woven and non-woven sterilization wrap. The packaging selected must be compatible with the sterilization process being

used. Care should be taken to not overload packages where instruments are pressing at the seams. There should be enough room in sterilized packages for steam to penetrate around all surfaces of instruments. Hinged instruments should be sterilized open and unlocked, and items should be packaged according to the manufacturer's recommendations for both the packaging and the instruments. The appropriate chemical or biological tests that monitor the efficacy of the sterilization process should be included in instrument/equipment packages prepared for sterilization. See **Sterilizer Monitoring: Process Challenge Devices** article on page 12. Packages should be labelled with the date processed, sterilizer used, cycle or load number, and initials of the oral healthcare who assembled the package. If contents are not visible (e.g. wrapped cassettes), package contents should also be included on the label. It is also recommended that the label includes the following statement: "Product is not sterile if packaging is open, damaged or wet. Check before using." (2)

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Labelling should be done with a permanent, soft-tipped marker that has been validated for use with the chosen sterilization method in a manner that does not puncture or damage the package or its contents and does not interfere with steam penetration. (2)

Sterilization

All critical and semi-critical items should be sterilized or disposed of after each use. Care should be taken to properly load the sterilizer. This should be done in a manner that follows the manufacturer's instructions for use of both items sterilized and the sterilizer being used. The performance of sterilizers should be monitored with biological indicators, chemical indicators, as well as physical monitors. See **Sterilizer Monitoring: Process Challenge Devices** article on page 12. The integrity of packages and instruments should also be evaluated following sterilization. If the packaging is wet, torn or damaged, the contents should be repackaged with new indicators and resterilized. The protocol for recalling instruments should be included in the office IPAC policy in the event of any reprocessing failures.

Storage

Instruments should be stored in a clean, dry place that maintains the integrity of packaging and prevents contamination. Instruments are best stored in a closed cabinet away from heavy flows of traffic. The temperature in storage areas should be between 18–23 degrees Celsius and humidity between 30–60 percent. Factors affecting the shelf life of sterile items would be dependent on the type of shelving used, regular maintenance and cleaning of storage areas, frequency of handling, integrity of packaging and environmental conditions in the storage area. Consult the manufacturer's instructions of the packaging used for further information about shelf life of sterile items. (2)

References

1. MDRAO. Medical Device Reprocessing Manual. 4th ed. Scarborough: Brown Brook Company; cJune 2017.
2. CSA Group. CAN/CSA Z314-18: Canadian Medical Device Reprocessing. Toronto, ON: CSA Group; 2018.

Public Health Ontario. Reprocessing in Dental Practice Settings checklist was used as a reference throughout this document. CDHO