

Storage Areas for Sterile Items and Maintaining Sterility

This reference sheet is an excerpt from [Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices](#). It outlines physical space requirements for maintaining sterility of instruments. For more information, please visit www.publichealthontario.ca or email ipac@oahpp.ca.

The storage area for sterile items should be located adjacent to the sterilization area, preferably in a separate, enclosed, limited-access area.^{1,2} Requirements for this area include^{1,2,14,23}:

- Adequate storage space is provided to prevent crushing or damage to packages.
- Environmental controls:
 - Temperature maintained between 18 and 23°C
 - Relative humidity maintained between 30% and 60%
- Containers used for storage of clean equipment/devices should be moisture-resistant and cleanable (i.e., cardboard boxes must not be used).
- Equipment/devices are stored in a clean, dry dust-free area (closed shelves); not at floor level, on window sills, or under sinks; and are protected from debris, drains, moisture and vermin to prevent contamination.
- Shelving requirements:
 - Constructed of materials that are non-porous on all surfaces, non-shedding, easily cleanable, and free of burrs and sharp or rough edges
 - Top and bottom shelves shall be solid
 - If open shelving units are used for storage of sterilized medical devices, the shelves should be at least 25 cm (10 in) off the floor, 46 cm (18 in) from the ceiling, and 50 cm (2 in) from an outside wall
- Equipment/devices are stored in an area where they are not subject to tampering by unauthorized persons.
- Supplies and materials not used for reprocessing will not be stored in storage areas used for sterile items.
- Equipment/devices are transported in a manner that avoids contamination or damage to the equipment/device.
- Carts, bins and plastic totes that are used for transportation of sterile goods shall be cleaned in accordance with health care setting policy.²

Maintaining sterility

Health care settings much have procedures for storage and handling of clean and sterile medical equipment/ devices that include^{1,23}:

- Medical equipment/devices purchased as sterile must be used before the expiration date, if one is given.
- Stock should be rotated, so that oldest stock can be used first.²
- Sterility must be maintained until used.²³
- Sterile packages that lose their integrity shall be re-sterilized prior to use.
- Equipment/devices must be handled in a manner that prevents recontamination of the item.

References

The following references follow the order of original document. For full reference list please refer to [Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices](#).

1. CSA Group. CAN/CSA-Z314.3-09: Effective sterilization in health care facilities by the steam process. Toronto, ON: CSA Group; 2009.
2. CSA Group. CAN/CSA-Z314.0-13: Medical device reprocessing - general requirements. Toronto, ON: CSA Group; 2013.
14. CSA Group. CAN/CSA Z314.8-08: Decontamination of reusable medical devices. Toronto, ON: CSA Group; 2008.
23. Health Canada. Infection control guidelines: hand washing, cleaning, disinfection and sterilization in health care. Can Commun Dis Rep. 1998;24 Suppl 8:1-55. Available from: <http://www.collectionscanada.gc.ca/webarchives/20071115105916/http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf>