cpsa
COLLEGE OF PHYSICIANS
& SURGEONS OF ALBERTA

# Infection Prevention and Control

## Flexible endoscope standards

Last revised: JULY 2020

**DATE: _____ CLINIC NAME: _____**

**IPAC CLINIC ID: _____ DESIGNATED CONTACT: _____**

**IPAC ASSESSOR: _____**

For assistance or more information on infection prevention & control, contact the CPSA IPAC Program at ipac@cpsa.ab.ca or 780-969-5004.

## STANDARDS

| E.1. FLEXIBLE ENDOSCOPES: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.1.1** | Endoscopes and accessories that come in contact with mucous membranes are cleaned and receive at least high-level disinfection after each patient use. | | | | |
| **E.1.2** | Reusable accessories (e.g., biopsy forceps or other cutting instruments) that break the mucosal barrier are cleaned and then sterilized between each patient. | | | | |
| **E.1.3** | There is a process in place that clearly identifies non-reprocessed equipment from reprocessed equipment to prevent use of a contaminated piece of equipment on a patient. | | | | |
| **E.1.4** | There are written, detailed procedures for cleaning and handling of endoscopes. | | | | |

| E.2. CLEANING: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.2.1** | Pre-cleaning of the endoscope with an enzymatic solution is performed at point of use, immediately following the clinical procedure to ensure that no blood or body fluids harden. | | | | |
| **E.2.2** | Meticulous cleaning is performed prior to high level disinfection. | | | | |
| **E.2.3** | Enzymatic cleaning solutions are used according to manufacturer's recommendations. | | | | |
| **E.2.4** | Accessories are disconnected and disassembled as per manufacturers instructions and are completely immersed in the enzymatic solution. | | | | |

| E.2. CLEANING: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.2.5** | A leak test is performed prior to, and/or during immersion of the endoscope as listed in the manufacturer's recommendations. | | | | |
| **E.2.6** | The entire endoscope is completely immersed in the enzymatic solution during the entire cleaning process to prevent splashing or aerosolization. | | | | |
| **E.2.7** | If the manufacturer states the scope is non-immersable; all non-immersable components are cleaned with enzymatic solution and low level disinfected with a manufacturer recommended product. | | | | |
| **E.2.8** | The bending section is kept straight so brushing does not damage endoscope. | | | | |
| **E.2.9** | The exterior of the endoscope is cleaned with a soft brush or lint free cloth. | | | | |
| **E.2.10** | All channels are cleaned with an appropriate sized channel cleaning brush until all visible debris is removed. | | | | |
| **E.2.11** | The brush is cleaned in the enzymatic solution each time it is passed through the channel. | | | | |
| **E.2.12** | The suction valve housing and instrument channel port is cleaned with channel opening brush until all debris is removed. | | | | |
| **E.2.13** | A 30ml syringe is attached to the adapter and enzymatic solution is injected into all channels of the endoscope at least three times or an approved automated system provides equivalent cleaning. | | | | |
| **E.2.14** | The endoscope is soaked in the enzymatic solution as per manufacturer's instructions to ensure proper contact time for the enzymatic cleaner. | | | | |
| **E.2.15** | The endoscope and accessories are thoroughly rinsed with tap water to remove all traces of enzymatic detergent and debris. | | | | |
| **E.2.16** | The valves and removable parts are brushed and flushed until all debris is removed. | | | | |

| E.2. CLEANING: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.2.17** | Final rinses prior to disinfection are performed in clear tap water followed by air purges using 30ml syringes or an approved automated system. | | | | |
| **E.2.18** | The exterior of the endoscope and all removable parts are thoroughly dried using a clean lint free cloth. | | | | |
| **E.2.19** | Cleaning accessories (e.g. brushes, sponges) are disposable or thoroughly cleaned and high level disinfected/sterilized between uses. | | | | |

| E.3. MANUAL DISINFECTION: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.3.1** | High level disinfectant (HLD) is used according to manufacturer's instructions as listed on the label. | | | | |
| **E.3.2** | HLD is stored in a closed container. | | | | |
| **E.3.3** | High level disinfectant concentration is checked each day it is used, with an appropriate chemical test strip. | | | | |
| **E.3.4** | The HLD solution is discarded and changed if the concentration is less than the minimum effective concentration (MEC). | | | | |
| **E.3.5** | Immediately following cleaning, rinsing and drying the endoscope and all its accessories are completely immersed in the HLD solution per the manufacturers recommended time. | | | | |
| **E.3.6** | The HLD solution is flushed through all channels using a 30ml syringe and appropriate adapters to purge air from the channels ensuring all channels are perfused. | | | | |
| **E.3.7** | Following the recommended immersion time the endoscope is removed from the HLD solution and air is flushed through channels to ensure removal of HLD. | | | | |

| E.3. MANUAL DISINFECTION: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.3.8** | The endoscope and accessories are completely immersed in clean water following removal from the HLD. | | | | |
| **E.3.9** | The endoscope and accessories always receive three separate rinses and all channels are flushed three times with clean water that is changed after each use. (It is recommended that sterile or sub-micron filtered tap water be used.) | | | | |
| **E.3.10** | A channel air flush followed by a 70% alcohol and a force-air purge is performed (a medical grade air supply is recommended) | | | | |
| **E.3.11** | The endoscope is dried with a clean, lint-free cloth. | | | | |

| E.4. AUTOMATED DISINFECTION: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.4.1** | High level disinfectant concentration is checked each day it is used with an appropriate chemical test strip. | | | | |
| **E.4.2** | The HLD is discarded and changed if the concentration is less than the minimum effective concentration (MEC). | | | | |
| **E.4.3** | Immediately following manual cleaning the dried endoscope and accessories are placed in the Automated Endoscope Reprocessor (AER) according to manufacturer's instructions for loading. | | | | |
| **E.4.4** | The AER channel attachments are appropriate to the scope being reprocessed. | | | | |
| **E.4.5** | The endoscope connectors/adapters are attached to the (AER). | | | | |

| E.4. AUTOMATED DISINFECTION: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.4.6** | The AER is to run so that the endoscope is completely immersed in HLD solution for the recommended time and temperature. | | | | |
| **E.4.7** | The endoscope is removed promptly after the final cycle has been completed. | | | | |
| **E.4.8** | A channel air flush followed by a 70% alcohol and a forced-air purge is done. ( A medical grade air supply is recommended) | | | | |

| E.5. STORAGE: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.5.1** | Endoscopes are stored in a well-ventilated, protected, clean area that facilitates drying. | | | | |
| **E.5.2** | Channeled endoscopes are stored in a vertical position. | | | | |
| **E.5.3** | Endoscopes are not coiled or stored in their cases. | | | | |
| **E.5.4** | Endoscopes are stored in a manner that protects them from contamination – i.e., do not touch the floor of the cabinet. | | | | |
| **E.5.5** | Caps, valves and other detachable components are removed during storage and reassembled before use. | | | | |
| **E.5.6** | Endoscope storage cabinets are cleaned and low level disinfected at least weekly. | | | | |

| E.6. DOCUMENTATION: | | YES | NO | N/A | IF "NO" PLEASE COMMENT |
|---|---|---|---|---|---|
| **E.6.1** | There is a permanent record of endoscope maintenance and reprocessing. | | | | |
| **E.6.2** | There is a system to track endoscopes and patients that includes recording the endoscope number in the patient record. | | | | |
| **E.6.3** | For each procedure, the patient's name and identification number, the date and time of the procedure, the type of procedure, the endoscopist, and the serial number or other identifier of both the scope and the AER (if used) is documented. | | | | |

## LIST OF ENDOSCOPES REPROCESSED

## ADDITIONAL COMMENTS

## REFERENCES


1. Alvarado CJ, Reichelderfer M. 2000. *APIC Guideline for Infection Prevention and Control in Flexible Endoscopy*. American Journal of Infection Control 28:138-55.
2. American Society for Gastrointestinal Endoscopy. 2011. *Multisociety guideline on reprocessing flexible gastrointestinal endoscopes.* Gastrointestinal Endoscopy 73(6):1075-84.
3. Capital Health Region. Regional Infection Prevention and Control. 2007. *Audit Checklist for Reprocessing Critical and Semi-Critical Medical Equipment and Devices.*
4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Provincial Infectious Diseases Advisory Committee. 2013. *Best practices for cleaning, disinfection, and sterilization of medical equipment/devices*. 3rd ed. Toronto, ON: Queen's Printer for Ontario.