Anesthesia Equipment Reprocessing

Introduction

The Canadian Anesthesiologists' Society (CSA) *Guidelines to the Practice of Anesthesia* (2013) state that "Anesthesia providers ensure that potentially infectious materials or agents are not transferred from one patient to another."

The BC Ministry of Health sets out the required practices for reprocessing of medical devices in all settings where care is provided. These settings include but are not limited to pre-hospital care, hospitals, outpatient clinics and physician offices.

Anesthesia and respiratory equipment includes but is not limited to facemasks, endotracheal tubes, laryngeal mask airways (LMAs), laryngoscopes, fiber-optic devices, stylets, forceps, and oral and nasal airways.

Definitions

cleaning	The physical removal of foreign material (e.g. dust, soil and organic material, blood, secretion, excretions, micro-organisms). Cleaning physically removes rather than kills micro-organisms. It is accomplished with water, detergents and mechanical action. Cleaning must be performed before high-level disinfection or sterilization.
critical medical devices	Medical devices that enter sterile tissues, including the vascular system (e.g. surgical instruments, biopsy forceps, dental equipment including high-speed dental hand pieces). Critical medical devices present a high risk of infection if the device is contaminated with any micro-organisms, including bacterial spores. Reprocessing critical devices involves meticulous cleaning followed by sterilization.
disinfection	A process that kills most disease-producing microorganisms. Disinfection does not destroy all bacterial spores. Medical devices must be cleaned thoroughly before effective disinfection can take

high-level disinfection	A process capable of killing vegetative bacteria, mycobacteria including mycobacterium tuberculosis, fungi and lipid and non-lipid viruses, as well as some but not necessarily high numbers of bacterial spores. High-

Single-use breathing circuits are discarded after each patient use

Single-use breathing bags are discarded after each patient use

Disposable breathing circuits are discarded in accordance with the manufacturer's instructions for use (e.g. after each patient, daily, weekly) at a minimum

Disposable breathing bags are discarded in accordance with the manufacturer's instructions for use (e.g. after each patient, daily, weekly) at a minimum

Reusable breathing circuits are reprocessed in accordance with the frequency recommended by the manufacturer's instructions for use (e.g. after each patient, daily, weekly) at a minimum

Reusable breathing bags are reprocessed in accordance with the frequency recommended by the manufacturer's instructions for use (e.g. after each patient, daily, weekly) at a minimum

Reusable anesthesia and respiratory equipment is reprocessed in accordance with the BC Ministry of Health best practice guidelines for reprocessing.

Indicators

Reusable devices with small lumens or other characteristics that make them difficult to clean (e.g. oral airways) are designated single-use and are not reprocessed and reused

Single-use anesthesia and respiratory equipment is discarded after each patient use

Reusable anesthesia and respiratory equipment is cleaned and high-level disinfected at a minimum (sterilization is preferred)

Glidescope, used with or without a sheath, is cleaned and high-level disinfected at a minimum (sterilization is preferred) after each patient use

Laryngoscope handles are cleaned and high-level disinfected at a minimum (sterilization is preferred)

Anesthesia workstation and equipment that touches only intact skin (e.g. ECG cables, oximeters, stethoscopes, blood pressure cuffs) are cleaned and low-level disinfected after each patient use

Reprocessed anesthesia and respiratory equipment is clearly distinguished from non-reprocessed equipment

Reprocessed anesthesia and respiratory equipment is handled, packaged and stored in a manner that prevents contamination

Reusable laryngeal mask airways (LMA) are tracked to prevent overuse.

Indicators

The number of times each LMA has been used and reprocessed is tracked

The LMA is tracked using a unique identification system such as its serial number

The number of times each LMA is used and reprocessed is limited to the number recommended by the manufacturer

Appendix A: Cleaning, disinfection, and sterilization

Information contained in this appendix provides a general overview of the requirement. The Ministry of Health *Best Practice Guidelines for Cleaning, Disinfection and Sterilization of Critical and Semi-critical Medical Devices* shall be referenced in addition to this appendix. The Ministry of Health document represents detailed requirements for medical device reprocessing in non-hospital medical/surgical facilities.

References

British Columbia Ministry of Health. Best practice guidelines for cleaning, disinfection and sterilization of critical and semi-critical medical devices in BC health authorities [Internet]. Victoria: Ministry of Health, 2011. [cited 2015 Feb 19]. Available from: http://www.health.gov.bc.ca/library/publications/year/2011/Best-practice-guidelines-cleaning.pdf

Canadian Standards Association. Decontamination of reusable medical devices. Mississauga: Canadian Standards Association; 2008 [cited 2014 Aug 18]. 87 p. CSA Standard No.: Z314.8-08 [reaffirmed 2013].