

Clean is Safe[©]

Reprocessing Surgical Instruments

Product Development – Washer Decontaminators
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Reprocessing Surgical Instruments

Summary: It is a recognized risk of exposure to unidentified microorganisms that reprocessing personnel endure during the decontamination, reprocessing, and cleaning of surgical instruments. Our goal is to minimize the amount and degree of reprocessing personnel exposure to this risk and provide reprocessed surgical instruments that are clean: safe to handle, safe for patient care, are cleaned, decontaminated reprocessed at the lowest cost. Optimal decontamination cleaning-reprocessing of surgical instruments will secure the prerequisite for disinfecting surgical instruments and/or sterilizing surgical instruments.

Typically, Healthcare Facilities manually clean [hand-wash] surgical instruments: with dried on or excessive debris, surgical instruments that are cannulated, surgical instruments with working channels and/or surgical instruments with lumens. Healthcare Facilities also manually clean [hand-wash] surgical instruments, when surgical instrument washer decontaminators or washer disinfectors are not available. **Reprocessing In the Decontam Side area, hand washing surgical instruments places the reprocessing personnel at risk.** In the decontamination area, surgical instruments are received that are contaminated with variable amounts of debris and unidentified microorganisms. **Reprocessing In the Clean Side area, surgical instruments requiring further reprocessing are handled by unprotected reprocessing personnel.**

CLEANING SURGICAL INSTRUMENTS BY HAND CAN LEAD TO INJURY AND INCREASED EXPOSURE TO HEPATITIS.¹ THE CDC BELIEVES THAT AS MANY AS 18,000 HEALTH CARE WORKERS PER YEAR MAY BE INFECTED BY THE HBV," AND "AS MANY AS 300 DEATHS MAY RESULT ANNUALLY."²

Reprocessing Surgical Instruments - Workers at Risk

Inherent in the manual reprocessing cleaning-decontamination of surgical instruments is power spraying, splashing, and the creation of contaminated aerosols. The manual reprocessing cleaning-decontamination of surgical instruments presents the risk of infectious puncture wounds. The handling of each individual surgical instrument device is time consuming, labor intensive, renders limited through-put and has high overhead costs.³

Reprocessing - Manual cleaning reprocessing can render devices that are clean ⁴. An item that is properly cleaned in a clean environment by reprocessing personnel with clean hands and uniforms will have a bacterial count of less than 10 to the sixth. Within the Universal Reprocessing Precautions, the body fluids from all patients should be considered contaminated. ⁵ Reprocessing personnel should wear protective apparel to include aprons, masks, gloves and eye covers. ⁶

Reprocessing Exposure Contained by Automated Reprocessing automated Washer Decontaminators Disinfectors Surgical Instrument Washer

Reprocessing Surgical Instruments - Washer Decontaminators or Disinfectors

In the United States manufacturers of Surgical Instrument Washers are not approved by the FDA to market their products as Washer Disinfectors. However, many of the Surgical Instrument Washers are manufactured to produce the times and temperatures that can effectively deliver disinfected surgical instruments. If it is your preference to have cleaning reprocessing results of a "washer disinfectant", refer to the Surgical Instrument Washer Specifications for assurance that the times and temperatures available are those you consider to be appropriate for disinfecting surgical instruments.

Automated Surgical Instrument Washer Decontaminator Disinfectors can safely contain within their chambers the cleaning-decontamination-reprocessing functions, removal of debris, and contaminated aerosols. The batch treatment of reprocessing surgical instruments using automated Surgical Instrument Washer Decontaminators Disinfectors saves time, increases material through-put, improves surgical instrument turnaround times, provides for FTE reduction, and lowers cost for surgical instrument cleaners.^{7, 8} It has been demonstrated that a properly designed Surgical Instrument Washer Decontaminator Disinfectant, that is used to manufacturer's specifications, will consistently and repeatedly remove all microorganisms from surgical instruments.^{9 10}

Surgical Instrument Washer Decontaminators Disinfectors should be used in accordance with the manufacturer's direction for use, to secure the most consistent and efficacious results. Worker safety and reprocessing efficacy can be compromised by violating the manufacturer's recommendations. Examples of such recommendations are: Keeping the cannulated surgical instrument working chambers and lumens exposed during cleaning-reprocessing and the use of purified water final rinses.

A Clean Surgical Instrument Device is Safe to for Reprocessing Personnel Handle.¹¹ It is critical that devices are cleaned properly to secure the safety of reprocessing workers in the Clean Area. During the steps of inspection, sorting and packaging of devices, the unprotected reprocessing personnel are repeatedly at risk from a surgical instrument that has remained contaminated with microorganisms.

Within the implementation of Universal Decontamination Reprocessing Precautions, it is our goal to eliminate exposure and reduce the risk to Reprocessing personnel whenever possible.

Conclusion:

The use of proper hand washing surgical instrument reprocessing decontamination methods can render surgical instruments that are clean, but requires the continual exposure of the Reprocessing Staff to contaminated surgical instruments. The Reprocessing Staff performance is influenced by skill level, knowledge and work load. This may impact the efficacy of the process. The use of a properly designed surgical

instrument washer decontaminator disinfectant reduces the: overhead cost of reprocessing, risks to the Reprocessing Staff and provides consistence removal of all microorganisms from soiled surgical instruments. Once a surgical instrument is clean, it is then safe for further reprocessing and handling. Proper cleaning is the prerequisite for disinfecting and/or sterilizing surgical instruments. Optimal cleaning can render surgical instruments that, at the end of decontamination, cleaning, and reprocessing, are sterile.

References

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