

Instrument Reprocessing - Disinfection

April 2019

What is Instrument Reprocessing?

Instrument reprocessing is the act of cleaning and disinfecting or sterilizing instruments and tools used to perform personal services. Proper instrument reprocessing is critical in preventing the cause and spread of infectious diseases.

Disinfection is the process of reducing or removing harmful microorganisms from the inanimate objects and surfaces. It will not necessarily kill bacterial spores.

Sterilization is a process of killing all forms of microbial life including the spores present in an object

Disinfection Types

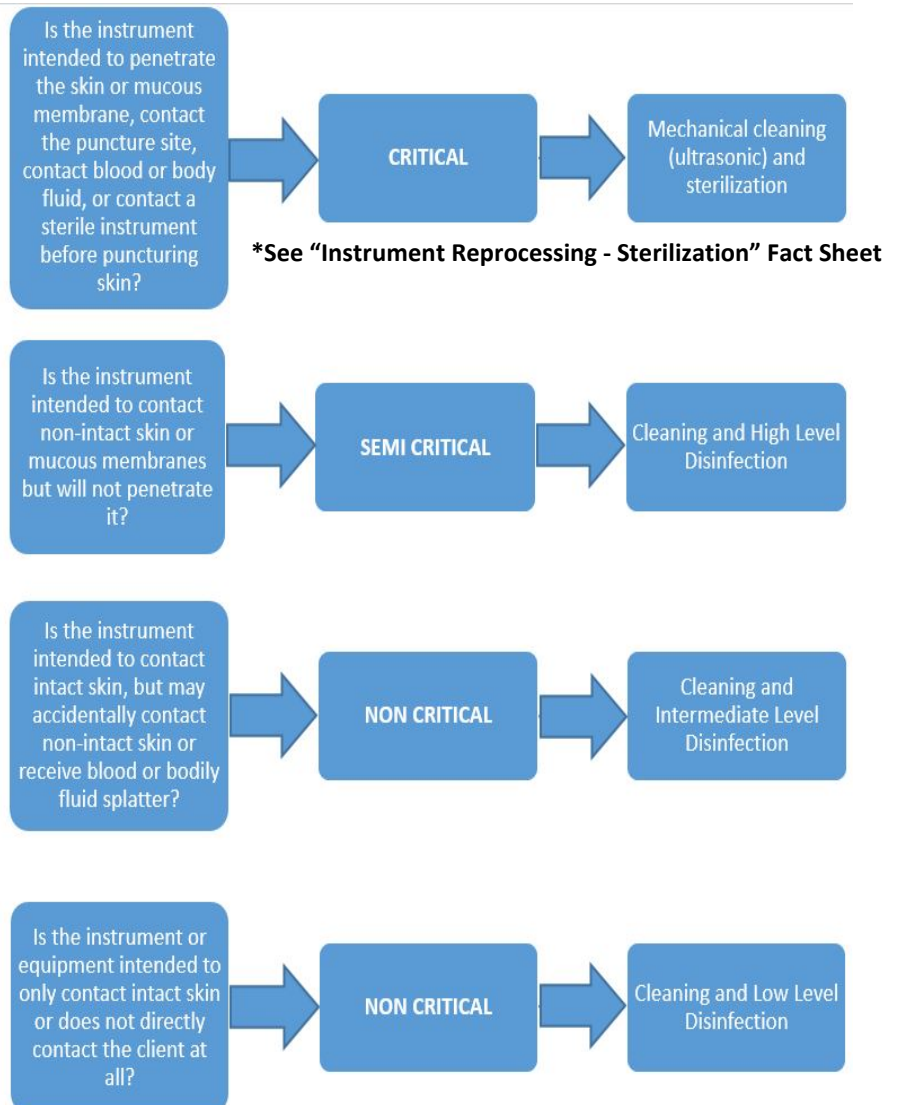
| High Level Disinfection Active Ingredients | Contact Times |
|--|---------------|
| ≥6% hydrogen peroxide (enhanced) | 20-30 minutes |
| 2% hydrogen peroxide (enhanced) | 5-8 minutes |
| 0.55% orthophthalaldehyde (OPA) | 10 minutes |

| Intermediate Level Disinfection Active Ingredients | Contact Times |
|--|---------------|
| 1:50 chlorine bleach solution | 10 minutes |
| 70-90% ethyl or isopropyl alcohol | 10 minutes |
| 0.5% hydrogen peroxide (enhanced) | 3-5 minutes |

| Low Level Disinfection Active Ingredients | Contact Times |
|---|---|
| 1:500 chlorine bleach solution | 10 minutes |
| Quaternary ammonium | 10 minutes or manufacturer's instructions |
| 3% hydrogen peroxide | 10 minutes |
| 0.5% hydrogen peroxide (enhanced) | Follow manufacturer's instructions |
| Phenols | Follow manufacturer's instructions |

Instrument Reprocessing Chart

Note Instruments may be single use disposable and therefore not require reprocessing



About Disinfection

How to Disinfect – Step-by-Step

1. Wash:
Manual cleaning using a detergent, a warm water solution, and scrubbing action to remove contaminants.
Mechanical cleaning using equipment such as an ultrasonic cleaner with a cleaning solution to remove contaminants.
2. Rinse
3. Air dry or hand dry with a paper or clean lint-free towel
4. Disinfect

What is a DIN?

Health Canada regulates disinfectant products. A DIN is the “Drug Identification Number” provided by Health Canada. It is on the label of approved disinfectants and indicates the product meets the claims on the label. Sodium hypochlorite or household bleach does not have a DIN but may be used as a disinfectant when approved by a Public Health Inspector.

Disinfectant Concentration Test Strips

Test strips are to be used to determine whether an effective concentration of disinfectant is present. Test strips can be obtained through chemical suppliers. The concentration of any disinfectant should be checked daily, with every new load, or as per manufacturer’s instructions.

Sterilization

Refer to “Instrument Reprocessing – Sterilization Fact Sheet” for sterilization information and examples.

DISINFECTANT VS. SANITIZER

To disinfect means to destroy or irreversibly inactivate specified infectious fungi and bacteria, and sometime the spores, on hard surfaces.

To sanitize means to reduce microorganisms of public health importance to levels considered safe.

A chemical solution may be used as both a low-level disinfectant AND a sanitizer (e.g. 100 ppm chlorine bleach solution). The contact time makes the difference!

Always read the label and follow all manufacturer’s instructions of the chosen disinfectant.

For more information on choosing the right disinfectant refer to the service specific fact sheet.
<https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/personal-service-facilities> and **the Saskatchewan Personal Services Best Management Practices**

For further information please contact your local Public Health Inspector (PHI) A list of PHI offices can be found here: <https://www.saskatchewan.ca/residents/health/public-health/public-health-inspectors>

The Saskatchewan Personal Services Best Management Practices and other Saskatchewan personal service fact sheets can be found here: <https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/personal-service-facilities>