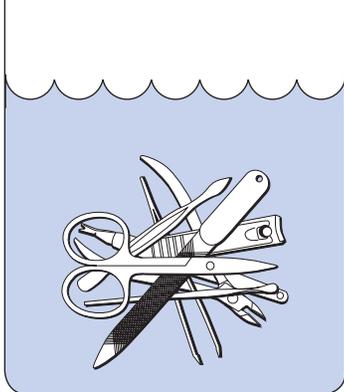


# How to Clean Instruments In Personal Service Settings

## STEP 1:

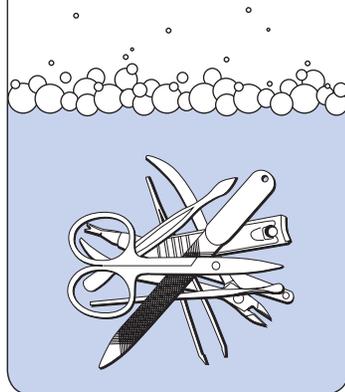
### Presoak



In cool water, soak instruments that **cannot be immediately cleaned** with water and detergent.

## STEP 2:

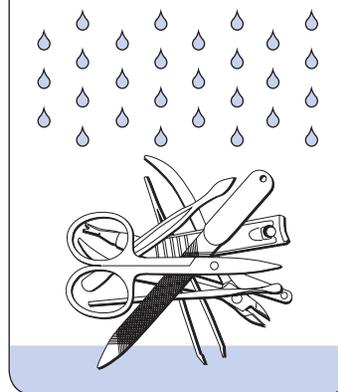
### Clean



Clean with warm water and detergent. Use a scrub brush or ultrasonic cleaner and utility gloves.

## STEP 3:

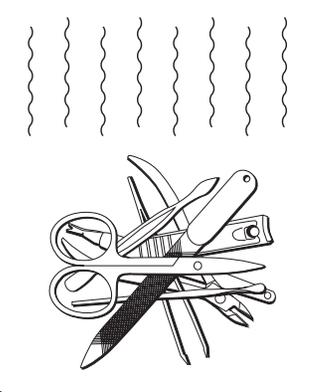
### Rinse



Rinse under warm running water.

## STEP 4:

### Air dry



Air dry and store in a clean, covered container until ready to disinfect or sterilize.

## STEP 5:

### Disinfect

Soak in appropriate disinfectant for the required contact time.

– OR –

### Sterilize

Use an autoclave or dry heat sterilizer, Canadian Standard Association (CSA).

Multi-use items that penetrate the skin and come in contact with blood/body fluid must be sterilized.

Other multi-use items may be disinfected.

Cleaning is the **FIRST** step before disinfection or sterilization. Disinfectants work **BEST** on clean instruments.

**Region of Waterloo Public Health and Emergency Services**

Health Protection and Investigation

Infection Control Program

519-575-4400 | TTY 519-575-4608 | [www.regionofwaterloo.ca/ph](http://www.regionofwaterloo.ca/ph)

# A guide to disinfection and sterilization

Level of disinfection/comments		Examples of items	Product options	Contact time	Helpful tips
<b>Sterilization</b> Capable of destroying or irreversibly inactivating vegetative bacteria, bacterial spores, fungi, fungal spores and viruses.	<b>Critical items:</b> Equipment, instruments, and items that penetrate the skin or mucous membranes to enter normally sterile tissue, or have direct contact with the bloodstream.	<ul style="list-style-type: none"> <li>• Re-usable parts of micro pigmentation pen, scalpel handle</li> <li>• Needle bars</li> <li>• Needle tubes and grips</li> <li>• Forceps</li> <li>• Piercing clamps, jewelry openers/closers, receiving tubes</li> <li>• Straight razors</li> </ul>	Dry heat sterilizer, Canadian Standard Association (CSA)	Follow manufacturer's instructions. Time varies with temperature and type of materials.	<ul style="list-style-type: none"> <li>• <b>Refer to manufacturer's instructions for proper dilution, contact time and material safety data sheet information.</b></li> <li>• Clean all instruments, equipment and surfaces with detergent and water before disinfection or sterilization.</li> <li>• Choose the higher level of disinfection if uncertain about the required level of disinfection.</li> <li>• Use a permanent marker to label the bottle clearly with the chemical name and mixing instructions.</li> <li>• Prepare a fresh chlorine and/or Barbicide solution daily. This ensures the maximum effectiveness of your disinfectant.</li> <li>• Store disinfected and/or sterilized instruments in a manner that will prevent contamination.</li> <li>• Store your chemicals in a locked room or cupboard, to keep them out of the reach of children and customers.</li> <li><b>Items requiring sterilization:</b> <ul style="list-style-type: none"> <li>• Purchase from a reputable supplier.</li> <li>• Ensure each package is clearly marked with manufacturer's method of sterilization and a batch/lot/code number.</li> <li>• Keep on site: records of purchases and a copy of manufacturer's sterilization certificate.</li> <li>• Monitoring for sterilization includes mechanical, biological (spore tests) and chemical indicators.</li> <li>• Sterility must be maintained until point of use.</li> </ul> </li> </ul>
			Autoclave		
<b>High-level disinfection</b> Capable of destroying or irreversibly inactivating all microbial pathogens, but not necessarily large numbers of bacterial spores.	<b>Semi-critical items:</b> Equipment, instruments, and items that contact mucous membranes or non-intact skin during use but do not ordinarily penetrate the skin or enter normally sterile areas.	<ul style="list-style-type: none"> <li>• Needle/probe holder (e.g. electrolysis)</li> <li>• Any equipment, instrument or item used to hold or contact a sterile needle (e.g. electrolysis)</li> <li>• Comedone extractors</li> <li>• Tweezers to expose ingrown hairs</li> <li>• Microblade handles and microneedle roller handles</li> <li>• Grater-style foot files</li> </ul>	1:10 bleach dilution (5000 ppm): 62 ml (¼ cup) 5.25% sodium hypochlorite bleach + 562 ml (2 ¼ cups) water	10 minutes	
			6% Hydrogen Peroxide	20-30 minutes	
			2% Stabilized Hydrogen Peroxide	5-8 minutes	
			0.55% Ortho-phthalaldehyde (OPA)	10 minutes	
<b>Intermediate-level disinfection</b> Capable of destroying or irreversibly inactivating all microbial pathogens, including mycobacteria but not bacterial spores.	<b>Non-critical items that require intermediate-level disinfection:</b> Equipment, instruments, and items that are intended to contact only intact skin, but may accidentally come into contact with non-intact skin or mucous membranes, or penetrate the skin.	<ul style="list-style-type: none"> <li>• Footbaths</li> <li>• Ear piercing guns</li> <li>• Handle and cradle of razors (e.g. electrolysis)</li> <li>• Crochet hook, hair trimmers, edgers</li> <li>• Nippers, clippers, cuticle pushers</li> <li>• Tweezers used to remove hair from hair follicle</li> <li>• Re-usable metal dremel bit</li> </ul>	1:50 bleach solution (1000 ppm): 20 ml (4 teaspoons) 5.25% sodium hypochlorite bleach + 1000 ml (4 cups) water	10 minutes	
			70–90% Alcohol	10 minutes	
			<b>Note:</b> Alcohol above 90% is not recommended.		
			0.5 % Hydrogen Peroxide	3-5 minutes	
<b>Low-level disinfection</b> Capable of destroying or irreversibly inactivating, at a minimum, vegetative bacteria.	<b>Non-critical items that require low-level disinfection:</b> Equipment, instruments, and items that do not directly contact the client, or contact only hair or intact skin.	<ul style="list-style-type: none"> <li>• Combs, brushes</li> <li>• Service trays</li> <li>• Hairdressing stations, chairs</li> <li>• Callus blade holder</li> <li>• Floor/walls/beds</li> <li>• Make-up brushes</li> <li>• Hair trimmers, edgers, guards, scissors, hair clippers</li> <li>• Handles for hairstyling razors</li> </ul>	1:500 bleach dilution (100 ppm): 1 ml (¼ teaspoon) 5.25% sodium hypochlorite bleach to 500 ml (2 cups) water	10 minutes	
			3% Hydrogen Peroxide	10 minutes	
			Quaternary Ammonium Products	10 minutes	
			0.5% Hydrogen Peroxide Phenols	10 minutes	

**Single use instruments**, such as emery boards, hindstones, orange sticks, buffers, pumice stones, toe separators cannot be cleaned or disinfected. They must be discarded after each client. Region of Waterloo Public Health does not promote any specific brand of products. This chart represents examples of some of the products used in personal service settings and does not include an exhaustive list. This chart is designed to help you understand the different levels of disinfection, so that you can prevent infections.

\***Mucous membranes:** eyes, nose, and mouth.