

Disinfection of Instruments & Equipment

Protect Yourself. Protect Your Clients.

Level of Disinfection	When to Use	Disinfectant Active Ingredient(s)	Immersion Contact Times (Approximate)	Advantages	Disadvantages
High Level Kills all bacteria, fungi & viruses. Does not kill bacterial spores.	Use on semi-critical items. Items that come into contact with non-intact skin or mucous membranes but do not penetrate them.	*1:10 chlorine bleach solution	10 Minutes	Inexpensive Fast acting	Corrosive to metals
		2% gluteraldehyde Not recommended for Personal Service Settings	45 Minutes Follow manufacturer's instructions	Not corrosive Re-usable	Toxic fumes Expensive
		0.55% orthophthalaldehyde (OPA)	10 Minutes Follow manufacturer's instructions	Fast acting No mixing needed	Stains Hands
		6% hydrogen peroxide	45 Minutes Follow manufacturer's instructions	Environmentally friendly No residue	Corrosive to metals
		7% stabilized hydrogen peroxide	30 Minutes Follow manufacturer's instructions	Environmentally friendly No residual	Corrosive to metals
Intermediate Level Kills most bacteria, fungi, viruses & mycobacteria (tuberculocidal). Does not kill bacterial spores.	Use on semi-critical items. Items that come into contact with non-intact skin or mucous membranes but do not penetrate them.	70-90% isopropyl or ethyl alcohol (99% alcohol is not recommended)	10 Minutes	Fast acting, leaves no residue Can also be used as skin antiseptic	Deteriorates glue Can damage rubber and plastic Flammable (ethyl alcohol)
		*1:50 chlorine bleach solution	10 Minutes	Inexpensive Fast acting	Corrosive to metals
Low Level Kills some bacteria, fungi & viruses. Does not kill bacterial spores.	Use on non-critical items. Items that contact intact skin and not mucous membranes.	*1:500 chlorine bleach solution	10 Minutes	Inexpensive Fast acting	Corrosive to metals
		3% hydrogen peroxide	10 Minutes	Environmentally safe	Corrosive to metals
		Quaternary ammonium; OR	Follow manufacturer's instructions	Good cleaning agent for environmental surfaces	Cannot be used on instruments
		Phenols			

^{*} These concentrations of bleach solution are based on using a 5.25% sodium hypochlorite solution (see mixing of Bleach Solution for Disinfecting)
This chart is not intended to be inclusive of all approved disinfectants.

All items must be cleaned and dried with a clean towel prior to disinfection. Follow manufacturer's safety instructions and directions for use. Follow manufacturer's safety instructions and directions for use.

Source:

Ontario Ministry of Health and Long-Term Care. (2009). *Infection prevention and control best practices for personal services settings*. Retrieved from http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/progstds/pdfs/pssp_2008.pdf

For more information please contact the Infectious Disease Control Team at 519-663-5317 ext. 2330 or visit www.healthunit.com

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