

Define the terms antiseptic and disinfectant. Briefly describe the advantages and disadvantages of alcohol, chlorhexidine, glutaraldehyde and providone iodine

Antiseptic is a substance applied topically to living tissue to prevent growth of microorganisms.

Disinfectants is an agent applied topically to an inanimate object to destroy pathogenic microorganisms.

	Advantages	Disadvantages
Alcohols antiseptic	Moderate spectrum bactericidal to many bacteria kills 90% of skin bacteria in 2 mins kills 75% with single wipe	Low potency Flammable Doesn't kill fungus
Chlorhexidine antiseptic	narrow spectrum - bactericidal only superior to iodine for skin prep due to good residual activity impregnated splint reduces CLABSI low potential for contact sensitivity	Not appropriate for eyes or ears Slower action - needs to dry Doesn't kill fungus or viruses
Providone iodine antiseptic	Rapid acting - broad spectrum Kills spores and viruses as well as bacteria Kills 90% of bacteria in 90 seconds	Binds to organism matter decreasing its potency Cutaneous burns at high concentrations
Glutaraldehyde disinfectant	effective against all microorganisms less odour and irritation than formaldehyde used for endoscopes etc.	can cause toxicity shelf life 2 weeks