



# Rutala's Pathogen & Disinfectant Hierarchy

Resistance	Level of Efficacy	Organism Class	HAI Pathogens in Healthcare	Other HAI-Causing Pathogens	Human Pathogens With Vaccines	Diversey Disinfectants	
<p>More Resistant</p> <p>Less Resistant</p>	Sterilisation/ Prion reprocessing	Prions	none	Creutzfeldt Jakob prions	none	Ophthaldehyde + heat	
	Very High Level Disinfection	Bacterial Spores	<i>Clostridium difficile</i> <i>Clostridium sordellii</i>	<i>Bacillus subtilis</i> <i>Clostridium sporogenes</i>	<i>Bacillus anthracis</i> <i>Bacillus cereus</i> <i>Clostridium tetani</i> (Tetanus)	<u>Sporicide Plus (4.5% AHP)</u> Divercleanse (5000ppm chlorine) Titan Chlor Tabs (5000ppm chlorine) Diversol (5000ppm chlorine)	
	High Level Disinfection	Mycobacteria	<i>Mycobacterium Abscessus</i> <i>Mycobacterium Tuberculosis</i>			<i>Mycobacterium Tuberculosis</i> (Tb)	<u>Oxivir Tb (0.5% AHP)</u>
		Nonenveloped Viruses (small) (<40 nm)	Hepatitis A (HAV) (30nm) Norovirus (35nm)	Canine Parvovirus (24nm) Poliovirus (30nm) Rhinovirus (30nm)		Poliovirus (30nm)	<u>Oxivir Tb (0.5% AHP)</u> <u>Oxivir Five 16 (AHP concentrate)</u>
	Intermediate Level Disinfection	Fungi, spore forming (Spore forming Yeast & Mould)	none		<i>Candida Albicans</i> <i>Aspergillus Niger</i> <i>Trichophyton Mentagrophytes</i>	none	<u>Oxivir Five 16 (AHP concentrate)</u> Virex II (quaternary ammonium)
		Gram Negative Bacteria	<i>Acinetobacter Baumannii</i> <i>Burkholderia Cepacia</i> Enterbacteriaceae (Carbapenem-Resistant) <i>Klebsiella pneumoniae</i> <i>Pseudomonas aeruginosa</i>	<i>Escherichia Coli</i> (O157:H7) ESBL-producing <i>Klebsiella</i> and <i>E. Coli</i> <i>Salmonella Typhi</i> (typhoid fever) <i>Stenotrophomonas</i>	<i>Bordetella pertussis</i> (Whooping Cough) <i>Haemophilus influenzae</i> (Meningitis) <i>Neisseria meningitidis</i> (Meningitis) <i>Vibrio cholerae</i> (Cholera)	Suma Bac Conc D10 Alcosan VT10 Suma San Conc D4a Degresan (all quaternary ammonium products)	
	Low Level Disinfection	Fungi, nonspore forming (non-spore Yeast Mould)	none		<i>Candida albicans</i>	none	Shield Citrus Shield Pine Knockout (all quaternary ammonium products)
		Nonenveloped Viruses (Medium and Large) (>40 nm)	none		Adenovirus (100nm) Rotavirus (76nm)	Human Papilloma Virus (HPV) (55nm) Rotavirus (76nm)	
		Gram Positive Bacteria	Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA) <i>Staphylococcus aureus</i> Vancomycin Resistant Enterococci (VRE) Vancomycin Intermediate Resistant <i>Staph aureus</i> (VISA) Vancomycin Resistant <i>Staph aureus</i> (VRSA)		<i>Streptococcus pneumoniae</i> (DRSP/PRSP)	<i>Corynebacterium diphtheriae</i> (Diphtheria) <i>Streptococcus pneumoniae</i> (Pneumococcal)	
		Enveloped Viruses (medium and large) (40-200 nm)	Hepatitis B & C (HBV, HCV) (42nm and 60nm) Human Immunodeficiency Virus (HIV/AIDS) (120nm) Influenza A (100nm)	Ebolavirus (80nm) Human Coronavirus (SARS, MERS)(120 nm) Herpes (190nm) Respiratory Syncytial Virus (RSV) (250nm)	Japanese Encephalitis Virus (JEV) (60nm) Mumps Virus, Paramyxovirus (200nm) Paramyxovirus (Measles/Rubeola) (200nm) Rabies Virus (180nm) Rubella Virus (German Measles) (60nm) Tick Borne Encephalitis Virus (60nm) Varicella Zoster Virus (Chicken Pox) (200nm) Varicella Zoster Virus (Shingles) (200nm) Variola Major/Minor (Small Pox) (260nm) Yellow Fever Virus (60nm)		