

Appendix T: List of Topical Antimicrobial and Antiseptic Agents

Topical Antimicrobial Agents:

This is not an exhaustive list of topical antimicrobial agents, but rather suggestions of information identified within the systematic review, AGREE II appraised guidelines, by the expert panel or external stakeholder feedback.

Agent	<i>S. aureus</i>	MRSA	<i>Streptococcus</i>	<i>Pseudomonas</i>	Anaerobes	Comments	Summary
Cadexomer iodine	+	+	+	+	+	Also debrides. Low potential for resistance. Caution with thyroid disease.	Low risk and effective
Silver	+	+	+	+	+	Do not use with saline. Low potential for resistance.	
Silver sulfadiazine	+	+	+	+	+	Caution with sulphonamide sensitivity.	
Polymyxin B sulphate/ Bacitracin zinc	+	+	+	+	+	Bacitracin in the ointment is an allergen; the cream formulation contains the less-sensitizing gramicidin.	Use selectively
Mupirocin		+				Reserve for MRSA and other resistant Gram+ species	
Metronidazole					+	Reserve for anaerobes and odour control. Low or no resistance of anaerobes despite systemic use.	
Benzoyl peroxide	Weak	Weak	Weak	Weak	Weak	Large wounds. Can cause irritation and allergy	Use with caution
Gentamicin	+		+	+		Reserve for oral/IV use—topical use may encourage resistance.	
Fusidin ointment	+		+			Contains lanolin (except in the cream).	
Polymyxin B sulphate/ Bacitracin zinc neomycin	+	+	+	+	+	Neomycin component causes allergies, Bacitracin zinc neomycin and possibly cross-sensitizes to aminoglycosides.	

Source: Reprinted from from “Best Practice Recommendations for Preparing the Wound Bed: Update 2006,” by R. G. Sibbald, H. Orsted, P. M. Coutts and D. H. Keast, 2006, *Wound Care Canada*, 4(1), pp. 15–29. Copyright 2006 by Wolters Kluwer Health, Inc. Reprinted with permission.

Topical Antiseptic Agents:

This is not an exhaustive list of topical antiseptic agents, but rather suggestions of information identified within the systematic review, AGREE II appraised guidelines, by the expert panel or external stakeholder feedback.

Agent	Effects
Chlorhexidine or PHMB	Low toxicity
Povidone-iodine (Betadine)	Broad spectrum
Acetic acid—vinegar diluted 1:5 to 1:10	<i>Pseudomonas</i>
Saline/sterile water	Not antibacterial
Dyes—scarlet red, proflavine	Select out gram negative
Sodium hypochlorite—Dakin solution, EUSOL	Toxic = bleach
Hydrogen peroxide	Action = fizz
Quaternary ammoniaVcetrimide	Very high toxicity

Agents are color coded by safety profile and antiseptic action: green = low toxicity potential, yellow = no antibacterial effect, red = high toxicity potential.

Source: Reprinted from “Optimizing the Moisture Management Tightrope with Wound Bed Preparation 2015,” by R. Sibbald, J. A. Elliott, E. A. Ayello, and R. Somayaji, 2015, *Advances in Skin & Wound Care*, 28(10), pp. 466–476. Copyright 2015 by Wolters Kluwer Health, Inc. Reprinted with permission.