

825 Dissociation of Alcohol-Treated Blood Bioburden. D. ROBINSON*, R. ROBISON, B. PLOEGER, R. LEAVITT, & CHRISTENSEN (Clin. Res. Assoc. & Brigham Young Univ.).

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When whole blood is used as bioburden in tests for disinfectant efficacy, some alcoholic preparations cause blood aggregates to form. Viable organisms could become entrapped within these aggregates. Therefore, a method for dispersing the aggregates without harming potential viable organisms was sought.

Following materials were tested to see if they dissolved blood treated with SDA-40 ethyl alcohol: Epsom Salts; Phisoderm (1, 5, 6 10%); Triton X-100 & phosphates; tryptic soy broth with Tween 80, lecithin, & Na₂S₂O₃; Urea (4, 6, & 7M); warm water.

7M urea was found to dissolve blood aggregates best so it was then tested with M. bovis, P. aeruginosa, S. aureus, and S. choleraesuis using a wipe test (CRA Newsl. Oct '87) & with Poliovirus I (Mahoney strain) using a suspension test.

Results showed: (1) 7M urea dissociated both dried & liquid blood aggregates without affecting the gram positive test organisms & Poliovirus I; (2) 7M urea killed the gram negative test organisms.

It was concluded that 7M urea can be used with gram positive test organisms or Poliovirus I to assay for potential viable organisms within blood bioburden treated with alcohols.