that while triclosan is effective at reducing the bacterial level on skin, it does not eliminate all resident bacterial microflora on the skin, thus oneway pressure for the proliferation of a competing organism does not exist. Furthermore, many experts agree that normal dry skin is not a hospitable environment for the survival of gramnegative species. Long-term studies measuring the consequences of exposure to triclosan, through frequent use of handwash products, failed to generate evidence that gramnegative bacteria would colonize and proliferate on the skin of the test subjects.5-7

In May 1982, Ciba-Geigy received notification from the Division of OTC Drug Evaluation, Office of Drugs recommending that the status for use of triclosan in surgical scrubs, personnel health care handwashes, and patient pre-operative preparations be changed from a not approved (Category II) to a conditional approval (Category III) (W. Gilberston, personal communication, 1982). Since receiving this notification, Ciba-Geigy has generated (and submitted to the FDA) additional data to support our position that triclosan is safe and efficacious for use in the clinical environment<sup>4,8</sup> (Cox AR, unpublished data, 1981).

The antimicrobial effectiveness of a topically applied product is a function of the total formulation rather than a single ingredient. Based on the facts we have presented, it is clear that the conclusions of Barry et al are unsubstantiated.

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> William R. Findley, PhD Manager, Technical Development and Services Stephen E. Spainhour Associate Chemist Ciba-Geigy Corporation Greensboro, North Carolina

The authors of the article in question respond to Findley and Spainhour's concerns.

Dr. Findley and Mr. Spainhour appear concerned that our findings with OR Scrub® (Huntington Laboratories), a product containing 1% triclosan, may have implications for their product Irgasan DP-300 (Ciba-Geigy). We agree with their conclusion that topical antiseptic agents should be evaluated as a function of their total formulation rather than on the basis of the active ingredient. For that reason, we carried out our investigations with OR Scrub®, rather than triclosan alone. Our data emphasized three points: 1) "In-use" OR Scrub® was contaminated with Serratia marcescens, 2) In vitro studies clearly indicated that OR Scrub® had limited activity against S. marcescens and Pseudomonas aeruginosa, 3) OR Scrub<sup>®</sup> was not only more expensive but less effective against S. marcescens than a non-antiseptic soap (Wash<sup>®</sup>), also produced by Huntington Laboratories. OR Scrub was reformulated after our manuscript was in press, and we added the addendum to demonstrate that the "new" OR Scrub<sup>®</sup> was improved. However, we remain concerned over its low activity against S. marcescens, a common nosocomial pathogen. Our manuscript contained no data on other products containing triclosan.

The importance of testing the final formulation rather than the active antimicrobial ingredient is emphasized in our manuscript. Because 1% triclosan was the only ingredient in OR Scrub® claimed to be antimicrobial, we assumed that the product's lack of activity was due to the triclosan rather than the "inert" ingredients added as preservatives. We did not provide data or draw any specific conclusions regarding the efficacy of Irgasan DP-300, and we invite Dr. Findley and Mr. Spainhour to provide specific data on the efficacy of their product against S. marcescens and P. aeruginosa. We, and other readers of Infection Control, do not have ready access to unpublished reports, master files, or FDA docket numbers to which they refer. However, of the two medical literature references cited, <sup>6,8</sup> triclosan was used in concentrations greater than 1%, or was combined with another agent that had antimicrobial activity. Unfortunately, neither of these reports used S. marcescens as a test organism.

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## IV Administration and Tracheostomy Care in the Home

## To the Editor:

Please notify me if you have information concerning intravenous administration and tracheostomy care in the home. Our home health agency feels the frequency of changing IV tubing in the hospital might not be necessary in the home. Reimbursement sources are stressing resterilization and aseptic technique in the home for trach care.

We have not been able to locate durable supplies to withstand resterilization.

> Wanda Humphrey, RN Home Health Coordinator T.J. Samson Community Hospital Glasgow, Kentucky

Sue Crow, RN, MSN, Nurse Epidemiologist at Louisiana State University Medical Center offers the following reply.

There have been no studies relating infection control practice to home health care. National organizations have not addressed appropriate infection control guidelines for this area. With this in mind, we must make judg-