

# INFECTION CONTROL<sup>AND</sup> HOSPITAL EPIDEMIOLOGY

Volume 10, Number 10 • October 1989

## EDITORIAL

### **Iodophor Antiseptics: intrinsic Microbial Contamination with Resistant Bacteria**

Roger L. Anderson, PhD

## ORIGINAL ARTICLES

### ***Pseudomonas aeruginosa* Infections Associated with Use of Povidone-Iodine in Patients Receiving Continuous Ambulatory Peritoneal Dialysis**

Angella Goetz, RN, MNEd; Robert R. Muder, MD

### **Subungual Bacteria of the Hand: Contribution to the Glove Juice Test; Efficacy of Antimicrobial Detergents**

J.J. Leyden, MD; K.J. McGinley, MS; S.G. Kates, MD; K.B. Myung, MD

### **Nosocomial Bloodstream Infection at a Veterans Hospital; 1979 to 1987**

Joseph M. Mylotte, MD; Donald White, PhD; Carolyn McDermott, BSN; Carolyn Hodan, BA

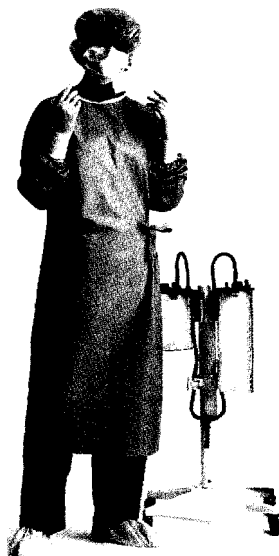
### **Annual Tuberculin Skin Testing of Employees at a University Hospital: A Cost-Benefit Analysis**

Issam Raad, MD; Janet Cusick, RN; Robert J. Sherertz, MD; Mouin Sabbagh, MD; Nora Howell, RN

---

The Official Journal of The Society of Hospital Epidemiologists of America

Time  
spent  
in the O.R.  
shouldn't be  
hazardous  
duty.



Your staff is exposed to infectious fluids and waste every day. It's part of the job.

That's why Baxter Operating Room Division offers a complete line of products and services designed to protect both staff and patient.

Products like our Medi-Vac® suction canister system. Our Jackson-Pratt® closed wound drainage system, and Pour-Safe™ exudate disposal bags. All are designed for safe collection, retention and disposal of infectious waste.

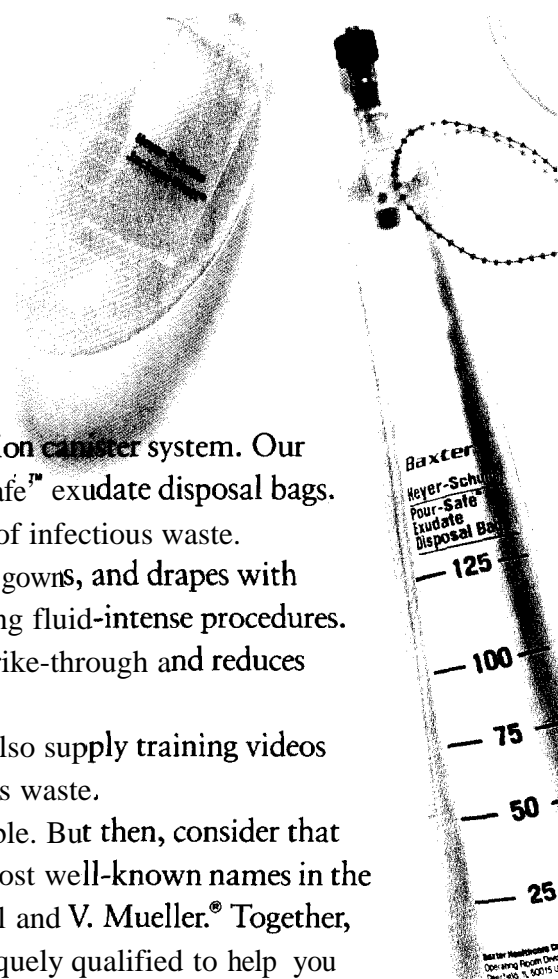
In addition, Convertors® poly-reinforced impervious gowns, and drapes with fluid collection pouches help protect staff and patient during fluid-intense procedures. Iso•Bac® absorbent reinforcement in our drapes prevents strike-through and reduces pathogenic growth.

For staff safety and reduction of disposal costs, we also supply training videos and seminars on segregation and minimization of infectious waste.

What we're doing to make the O.R. safe is considerable. But then, consider that the Operating Room Division is made up of three of the most well-known names in the business: Convertors/Custom Sterile, Pharmaseal® Surgical and V. Mueller® Together,

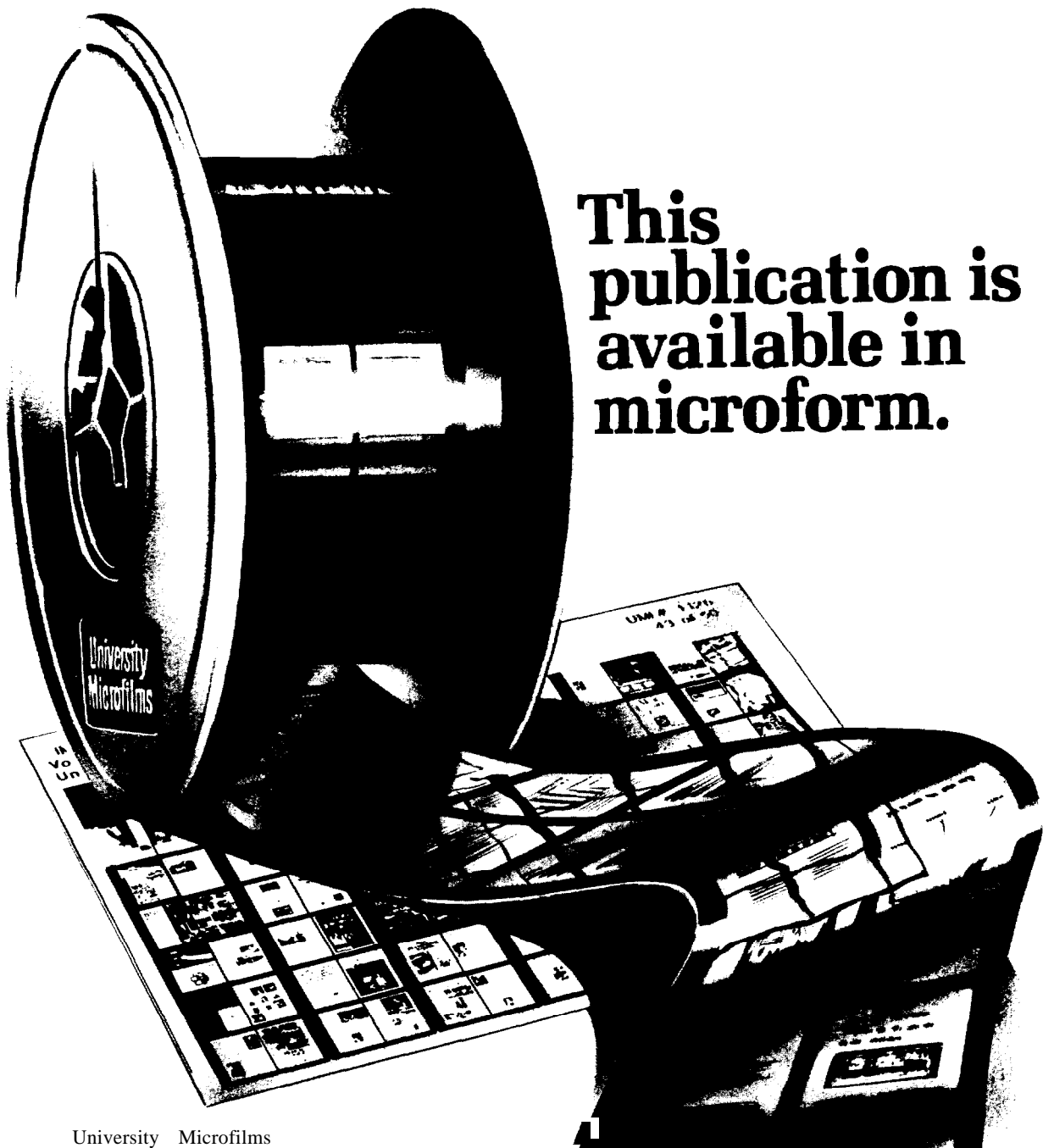
we're uniquely qualified to help you with any clinical or business issues you face.

To find out more about how we're taking the hazard out of hazardous duty, contact your local Baxter Operating Room Division sales representative, or write Baxter Healthcare Corporation, Operating Room Division, 1500 Waukegan Rd., McGaw Park, IL 60085.



Operating Room Division

**Baxter**



**This  
publication is  
available in  
microform.**

University Microfilms  
International reproduces this publication  
in microform: microfiche and 16mm or 35mm film.  
For information about this publication or any of the  
more than 13,000 titles we offer, complete and mail  
the coupon to: University Microfilms International,  
300 N. Zeeb Road, Ann Arbor, MI 48106. Call us  
toll-free for an immediate response: **800-521-3044**.  
Or call collect in Michigan, Alaska and Hawaii:  
313-761-4700.

**University  
Microfilms  
International**

Please send information about these titles:

Name \_\_\_\_\_

Company/Institution \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_

# INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY

EDITORIAL	<b>Iodophor Antiseptics: Intrinsic Microbial Contamination with Resistant Bacteria</b> Roger L. Anderson, PhD	443
ORIGINAL ARTICLES	<b><i>Pseudomonas aeruginosa</i> Infections Associated with Use of Povidone-Iodine in Patients Receiving Continuous Ambulatory Peritoneal Dialysis</b> Angella Goetz, RN, MNED; Robert R. Muder, MD	447
	<b>Subungual Bacteria of the Hand: Contribution to the Glove Juice Test; Efficacy of Antimicrobial Detergents'</b> J.J. Leyden, MD; K.J. McGinley, MS; S.G. Kates, MD; K.B. Myung, MD	451
	<b>Nosocomial Bloodstream Infection at a Veterans Hospital, 1979 to 1987</b> Joseph M. Mylotte, MD; Donald White, PhD; Carolyn McDermott, BSN; Carolyn Hodan, BA	455
	<b>Annual Tuberculin Skin Testing of Employees at a University Hospital: A Cost-Benefit Analysis</b> Issam Raad, MD; Janet Cusick, RN; Robert J. Sherertz, MD; Mouin Sabbagh, MD; Nora Howell, RN	465
SPECIAL SECTIONS	<b>Topics in Clinical Epidemiology Surveillance for Quality Assessment: I. Surveillance in Infection Control Success Reviewed</b> William Crede, MD; Walter J. Hierholzer, Jr., MD	470
	<b>Topics in Clinical Microbiology Nosocomial Group B Streptococcal Infections</b> Natalie C. Klein, MD, PhD; Paul E. Schoch, PhD; Burke A. Cunha, MD	475
	<b>Topics in Long-Term Care Current Challenges and Future Opportunities</b> David W. Bentley, MD	481
DEPARTMENTS	<b>Information for Authors</b>	438
	<b>Letters to the Editor</b>	440
	<b>Book Reviews</b>	485
	<b><i>SHEA Newsletter</i></b>	487
	<b>Calendar of Events</b>	489
	<b>Classified Marketplace</b>	492

---

**The ideas and opinions expressed by contributing authors do not necessarily reflect those of the editors or publisher.**

---

Publisher: Infection Control and Hospital Epidemiology (ISSN-0899-823X) is published monthly by SLACK Incorporated, 6900 Grove Road, Thorofare New Jersey 08086 Telephone (609) 848-1000

**Copyright 1989:** All rights reserved No part of this publication may be reproduced without written permission from the publisher.

**Subscriptions:** Requests should be addressed to the publisher (except Japan) In Japan, contact Woodbell Incorporated, 4-Z-11, Kitakasai, Edogawaku, Tokyo 134. Japan Subscription rates in the US and possessions Individual One year-\$50.00; Two years-\$85.00. Three years-\$115.00. Institutional: One year-\$60.00; Two years-\$100.00; Three years-\$140.00; Canada: 515.00 additional each year, all other countries \$25.00 additional each year Single copies of current issues may be obtained for \$7.00, United States and possessions: \$13.00 all other countries

Reprints: All requests to reprint or use material published herein should be addressed to Lester J Robeson, SLACK Incorporated, 6900 Grove Road, Thorofare, NJ 08086 For reprint orders and prices, contact Joanne Patterson at (609) 848-1000 Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by SLACK Incorporated, provided that the base fee of \$1.00 per copy plus \$.15 per page is paid directly to Copyright Clearance Center, 27 Congress Street, Salem, MA 01970 This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotional purposes, or for creating new collective works

**Change of address:** Notice should be sent to the publisher six weeks in advance of effective date. Include old and new addresses with zip codes The publisher cannot accept responsibility for undelivered copies Second-class postage is paid at Thorofare, New Jersey 08086, and additional entry points **Postmaster:** Send address changes to SLACK Incorporated, 6900 Grove Road, Thorofare, NJ 08086

As of Volume 1, Number 1, INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY is listed in *Index Medicus*, *Current Contents—Clinical Practice*, *Hospital Literature Index*, and *Cumulative Index to Nursing and Allied Health Literature*.

Recommended by all major scope manufacturers

# Sporicidin® Requires No Heat

Compare for 100% TUBERCULOCIDAL ACTIVITY

	Temperature	Immersion Time	Dilution	Reuse Life
<b>Sporicidin®</b> (EPA Reg. No. 8383-5)	68°F and above (True Room Temperature)	10 Minutes	1:16	30 Days
<b>CIDEX®</b> (EPA Reg. No. 7078-1)	77°F Requires Heat	45 Minutes	Full Strength	14 Days

100% Hospital Level  
Disinfection for  
instruments and  
equipment in the  
O.R. and  
respiratory therapy

**Note: Because of confusion  
created in the marketplace,  
EPA issued this letter to  
reaffirm the label claims  
of Sporicidin.**

"Sporicidin is currently registered with EPA as a cold sterilizing solution and concentrated disinfectant, (for endoscopes, respiratory equipment, etc.), based on test results from EPA prescribed tests for such products... at this use dilution (1:16), the product is effective against bacteria, pathogenic fungi, tubercle bacillus and viruses (those specifically tested) in 10 minutes at 20°C/68°F and above."

EPA letter 11/22/88



**Sporicidin®**  
**INTERNATIONAL**

12000 Old Georgetown Road • Rockville, MD 20852

For Information: 1-800-424-3733

"All Sporicidin disinfectant products kill HIV-1 (AIDS virus) on pre-cleaned environmental surfaces." (EPA accepted on 2/6/89)



## EDITORIAL OFFICES

Vanderbilt University School of Medicine  
A-1131 Medical Center North  
Nashville, TN 37232-2637  
(615) 343-1095; (615) 343-1882 (FAX)  
Email: [iche@mcmail.vanderbilt.edu](mailto:iche@mcmail.vanderbilt.edu)

## EDITOR

Michael D. Decker, MD, MPH

## MANAGING EDITOR

Susan Cantrell

## STATISTICAL EDITOR

Beverly G. Mellen, PhD

## SENIOR ASSOCIATE EDITORS

C. Glen Mayhall, MD

Gina Pugliese, RN, MS

William Schaffner, MD

## ASSOCIATE EDITORS

Donald A. Goldmann, MD

Didier Pittet, MD, MS

Andreas Widmer, MD, MS

## SECTION EDITORS

### Beyond Infection Control:

#### The New Hospital Epidemiology

Bryan P. Simmons, MD

Stephen B. Kritchevsky, PhD

Memphis, Tennessee

Wing Hong Seto, MD

Hong Kong

### Disinfection and Sterilization

William A. Rutala, PhD, MPH

Chapel Hill, North Carolina

### Emerging Infectious Diseases

Larry J. Strausbaugh, MD

Portland, Oregon

Robert W. Pinner, MD

Atlanta, Georgia

### From the Laboratory

Marcus Zervos, MD

Royal Oak, Michigan

Fred C. Tenover, PhD

Atlanta, Georgia

### Information Management

John A. Sellick, DO

Buffalo, New York

### The International Perspective

Mary D. Nettleman, MD, MS

Richmond, Virginia

### Issues in Surgery

James T. Lee, MD, PhD

St. Paul, Minnesota

### Medical News

Gina Pugliese, RN, MS

Chicago, Illinois

Martin S. Favero, PhD

Irvine, California

### Practical Healthcare Epidemiology

Loreen A. Herwaldt, MD

Iowa City, Iowa

### SHEA News

Murray D. Batt, MD

Clarksburg, West Virginia

### Statistics for Hospital Epidemiology

David Birnbaum, PhD, MPH

Sidney, British Columbia, Canada

### Topics in Long-Term Care

Philip W. Smith, MD

Omaha, Nebraska

### Topics in Occupational Medicine

David Weber, MD, MPH

Chapel Hill, North Carolina

# INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY<sup>®</sup>

## EDITORIAL ADVISORY BOARD

Jacques F. Acar, MD	Paris, France
J. Wesley Alexander, MD	Cincinnati, Ohio
Paul Arnow, MD	Chicago, Illinois
Graham A.J. Ayliffe, MD	Birmingham, United Kingdom
Neil L. Barg, MD	Yakima, Washington
Elizabeth Ann Bolyard, RN, MPH, CIC	Atlanta, Georgia
John M. Boyce, MD	Providence, Rhode Island
Professor Dr. Ilja Braveny	Munich, Federal Republic of Germany
Charles Bryan, MD	Columbia, South Carolina
Christian Brun-Buisson, MD	Creteil, France
Donald E. Craven, MD	Boston, Massachusetts
Sue Crow, MSN, RN, CIC	Shreveport, Louisiana
Franz Daschner, MD	Freiburg, Federal Republic of Germany
Leigh G. Donowitz, MD	Charlottesville, Virginia
Charles E. Edmiston, Jr., PhD	Milwaukee, Wisconsin
Theodore C. Eickhoff, MD	Denver, Colorado
Bruce Farber, MD	Manhasset, New York
Victoria J. Fraser, MD	St. Louis, Missouri
Peter C. Fuchs, MD, PhD	Black Butte, Oregon
Richard A. Garibaldi, MD	Farmington, Connecticut
Velvl Greene, PhD, MPH	Beer Sheva, Israel
Robert Gaynes, MD	Atlanta, Georgia
David W. Gregory, MD	Nashville, Tennessee
David K. Henderson, MD	Bethesda, Maryland
Peter N.R. Heseltine, MD	Los Angeles, California
Karen Hoffmann, RN, CIC, MS	Chapel Hill, North Carolina
Marguerite McMillan Jackson, RN, PhD	San Diego, California
Janine Jagger, MPH, PhD	Charlottesville, Virginia
William R. Jarvis, MD	Atlanta, Georgia
Douglas S. Kernodle, MD	Nashville, Tennessee
Robert H. Latham, MD	Nashville, Tennessee
Lewis B. Lefkowitz, MD	Nashville, Tennessee
Hsieh-Shong Leu, MD, MSc	Taipei, Taiwan
Jack Levy, MD	Brussels, Belgium
Victor Lorian, MD	Bronx, New York
Dennis G. Maki, MD	Madison, Wisconsin
Professor Dr. Walter Marget	Munich, Federal Republic of Germany
William J. Martone, MD	Bethesda, Maryland
Allison McGeer, MD	Toronto, Ontario, Canada
John E. McGowan, Jr., MD	Atlanta, Georgia
Jonathan L. Meakins, MD, DSc	Montreal, Quebec, Canada
Raf Mertens, MD	Brussels, Belgium
Robert R. Muder, MD	Pittsburgh, Pennsylvania
Joseph M. Mylotte, MD, CIC	Buffalo, New York
Lindsay Nicolle, MD	Winnipeg, Manitoba, Canada
Juhani Ojajarvi, MD	Helsinki, Finland
Michael T. Osterholm, PhD, MPH	Minneapolis, Minnesota
Jan Evans Patterson, MD	San Antonio, Texas
Sindy M. Paul, MD	Trenton, New Jersey
Michael A. Pfaller, MD	Iowa City, Iowa
Samuel Ponce de Leon, MD, MSc	Mexico City, Mexico
Isaam Raad, MD	Houston, Texas
Manfred L. Rotter, MD, DipBact	Vienna, Austria
Theodore Sacks, MD	Jerusalem, Israel
William E. Scheckler, MD	Madison, Wisconsin
Kent Sepkowitz, MD	New York City, New York
Denis Spelman, MD	Prahran Victoria, Australia
Michael L. Tapper, MD	New York, New York
Clyde Thornsberry, PhD	Brentwood, Tennessee
Professor Leonid P. Titov	Minsk, Republic of Belarus
Timothy R. Townsend, MD	Millwood, Virginia
Antoni Trilla, MD, PhD	Barcelona, Spain
Professor Wang Shu-Qun	Beijing, People's Republic of China
J. John Weems, Jr., MD	Greenville, South Carolina
Robert A. Weinstein, MD	Chicago, Illinois
Professor Dr. W. Weuffen	Greifswald, Federal Republic of Germany
Sergio B. Wey, MD	São Paulo, Brazil
Rebecca Wurtz, MD	Evanston, Illinois

## SLACK Incorporated

6900 Grove Road  
Thorofare, New Jersey 08086  
(609) 848-1000

### Vice President/Group Publisher

Richard N. Roash

### Publisher

John C. Carter

### Editorial Director

Jennifer Kilpatrick

### Production Editor

Shirley P. Strunk, ELS

### Assistant Editor

Eileen C. Anderer

### Circulation Manager

Lester J. Robeson, CCCP

### Production Director

Christine Malin

### Production Coordinator

Joanne Patterson

### Publishing Director/ Advertising

Wayne McCourt

### Pharmaceutical Group Sales Director

Michael LoPresti

### Advertising Sales Representative

Jennine Kane

### Classified/Recruitment Sales Manager

Michele Burch