

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY[®]

EDITORIAL

- Asymptomatic Hospital Foodhandlers Should Not Be Screened Routinely
for Intestinal Parasites 457
DUC J. VUGIA, MD, MPH; PATRICIA M. GRIFFIN, MD

ORIGINAL ARTICLES

- Dissemination of *Bacillus cereus* in an Intensive Care Unit 459
E. A. BRYCE, MD, FRCPC; J.A. SMITH, MD, FRCPC; M. TWEEDDALE, MD, FRCPC;
B.J. ANDRUSCHAK, RRTA; M.R. MAXWELL, RRT

- Prolonged and Multipatient Use of Prefilled Disposable Oxygen
Humidifier Bottles: Safety and Cost 463
ELIZABETH HENDERSON, PHD; DONNA LEDGERWOOD, RN, BN; KAREN MYRTHU HOPE, MSC;
KAREN HUME, RN, CIC; WALTER KRULICKI, RLT; GORDON FORD, MD; SANDY GOLAR, RRT;
LINDA SUTHERLAND, RRT; THOMAS J. LOUIE, MD

- Risk Factors for Urinary Lithotripsy-Associated Sepsis 469
ROBERT ORENSTEIN, DO; JAMES E. BROSS, MD; MARY DAHLMANN, MT, CIC

- Hand Dexterity in Hospital Personnel with Multiple Needlestick Injuries 473
J.E. CASANOVA, MD; G.P. BARNAS, MD; J. GOLLUP, BSN; S. SCHMITT, BSN, MS; J.S. CASANOVA, BS

- Efficacy of Immunization with a Combination of Serum and Recombinant
Hepatitis B Vaccines 476
KARLYN K. PEARL, RN; ANA A. ORTIZ, MD; WILLIAM PEARL, MD

ASK THE EPIDEMIOLOGIST

- Is Eliminating Flash Sterilization Practical? 479
LOWELL SCOTT WEIL, DPM, FACFAS; MARTIN S. FAVERO, PHD; FARRIN A. MANIAN, MD, MPH

TOPICS IN CLINICAL MICROBIOLOGY

- Tuberculosis. Infection Control. and the Microbiology Laboratory 481
CHARLES W. STRATTON, MD

PRODUCT COMMENTARY

- Steam Sterilizers: An Evolution in Design 488
SUE CROW, MSN, RN, CIC

BEYOND INFECTION CONTROL: THE NEW HOSPITAL EPIDEMIOLOGY

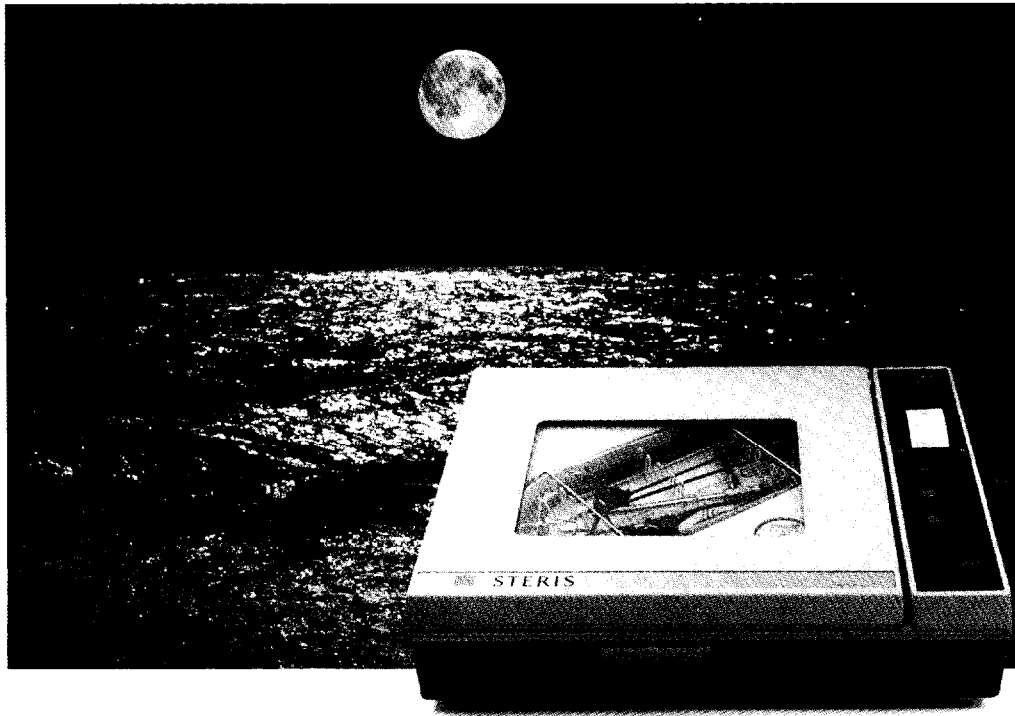
- Computed Tomography Imaging in Children with Head Trauma:
Utilization and Appropriateness from a Quality Improvement Perspective 491
MONTERRAT VERA, MD, MPH; GARY R. FLEISHER, MD; PATRICK D. BARNES, MD;
BRUCE H. BJORNSON, MD; ELIZABETH N. ALLRED, MS; DONALD A. GOLDMANN, MD

LETTERS TO THE EDITOR

- Parasitologic Infestation in Hospital Foodhandlers and Risk to AIDS Patients 452
JACQUES GERMANAUD, MD; DIDIER POISSON, PHD; CLEMENT PADONOU, MD

- TB and HIV in Healthcare Settings (with Reply) 453
GIOVANNI DI PERRI, MD DTM&H; ROCCO MICCIOLO, MD; STEFANIA MAROCCO, MD;
ANGELO CAZZADORI, MD; ERCOLE CONCIAL, MD; DANTE BASSETTI, MD; SAMUEL W. DOOLEY, MD;
KENNETH G. CASTRO, MD

Dream Machine.



**Rapid, Safe,
Sterile Processing
Was Once
Just A Dream**

● STERIS SYSTEM 1™ has made the dream of rapid and safe sterile processing a reality.

STERIS SYSTEM 1 is the proven, low temperature sterile processing system for immersible surgical and diagnostic devices. Even delicate, heat sensitive scopes, cameras, instruments, and accessories can be safely sterilized in less than 30 minutes-Just In Time for each patient procedure. ●

STERIS SYSTEM 1 also provides peace of mind. There are no toxic fumes, and no disposal restrictions to lose sleep over. ● And liquid processing means that your devices can be sterilized without the drying and wrapping which are required with gaseous systems.

Write or call us today to learn why thousands of health professionals rest assured with the rapid and safe sterile processing of STERIS SYSTEM 1. ○

The STERIS PROCESS™
The Proven Process
Just In Time

STERIS®



STERIS CORPORATION
9450 Pineneedle Drive ■ Mentor, OH 44060
1-800-JIT-4-USE (1-800-548-4873)

The Leader In Site-Of-Use Sterile Processing Systems.

Answers To Commonly Asked Questions About the STERIS PROCESS™

STERILE vs. DISINFECTED

- Q. Does STERIS SYSTEM 1™ sterilize or just disinfect?
- A. STERIS SYSTEM 1 is a sterile processing system, not a disinfectant. The STERIS PROCESS™ is sterilization, and is equal in efficacy to steam or ethylene oxide. Sterilization means the elimination or destruction of all microbial life, including bacterial spores. Unlike disinfection, sterilization eliminates doubt-items are either sterile or they are not. Nothing can be safer than sterile.
- Q. High level disinfection is supposed to eliminate all disease causing organisms. Why isn't this just as good as sterilization?
- A. The potential problems with high level disinfection lie in the disinfection process. Disinfection is most often attempted with a manual process that is inherently difficult to control. Numerous variables-time, temperature, disinfectant concentration, surface contact, bioburden levels. etc.-can adversely affect process outcome if not properly implemented or controlled. Many studies have shown that items which are considered to be "high level disinfected" frequently remain contaminated. The only practical way to be certain that all disease causing organisms have been eliminated is to eliminate all microbial organisms of any type-which is the definition of sterilization.
- Q. Why should I use a sterile scope for a "non-sterile" procedure such as a colonoscopy?
- A. Procedures which some people consider "non-sterile" often involve penetration of mucous membranes, such as during biopsies or polypectomies. Frequently the need to enter this sterile tissue is not determined until after the procedure has already started. Since STERIS SYSTEM 1 can sterilize items in less than 30 minutes-about the same time as it takes to disinfect-there is no reason not to make sterile items the single standard of care for each patient procedure.
- Q. What items can be processed in STERIS SYSTEM 1?
- A. STERIS SYSTEM 1 can process a wide variety of immersible surgical and diagnostic devices such as scopes, cameras, instruments, and accessories. If an item is immersible, can fit in one of the flexible or rigid Processing Trays, and can withstand the low processing temperature of 55.5°C, then it can generally be processed in SYSTEM 1. STERIS is constantly working with medical device manufacturers to ensure that their devices are compatible with SYSTEM 1. Numerous manufacturers endorse the STERIS PROCESS as being an effective and compatible method for sterilizing their devices. If you aren't sure whether a device can be processed in SYSTEM 1, contact the device manufacturer or STERIS.

STERIS Corporation develops, manufactures, and markets sterile processing and infection prevention systems for the worldwide healthcare market. STERIS® is committed to providing products which improve patient, worker, and environmental safety. If you would like more information about STERIS or STERIS SYSTEM 1, please write us or call 1-800-JIT-4-USE (1-800-548-4873).

Paid Advertisement

STERIS®


INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY™

CONTENTS

EDITORIAL

Asymptomatic Hospital Foodhandlers Should Not Be Screened Routinely for Intestinal Parasites **457**

DUC J. VUGIA, MD, MPH; PATRICIA M. GRIFFIN, MD

ORIGINAL ARTICLES

Dissemination of *Bacillus cereus* in an Intensive Care Unit **459**

E.A. BRYCE, MD, FRCPC; J.A. SMITH, MD, FRCPC; M. TWEEDDALE, MD, FRCPC;
B.J. ANDRUSCHAK, RRTA; M.R. MAXWELL, RRT

Prolonged and Multipatient Use of Prefilled Disposable Oxygen Humidifier Bottles:
Safety and Cost **463**

ELIZABETH HENDERSON, PHD; DONNA LEDGERWOOD, RN, BN; KAREN MYRTHU HOPE, MSC;
KAREN HUME, RN, CIC; WALTER KRULICKI, RLT; GORDON FORD, MD; SANDY GOLAR, RRT;
LINDA SUTHERLAND, RRT; THOMAS J. LOUIE, MD

Risk Factors for Urinary Lithotripsy-Associated Sepsis **469**

ROBERT ORENSTEIN, DO; JAMES E. BROSS, MD; MARY DAHLMANN, MT, CIC

Hand Dexterity in Hospital Personnel with Multiple Needlestick Injuries **473**

J.E. CASANOVA, MD; G.P. BARNAS, MD; J. GOLLUP, MD; S. SCHMITT, BSN, MS;
J.S. CASANOVA, BS

Efficacy of Immunization with a Combination of Serum and Recombinant Hepatitis B Vaccines **476**

KARLYN PEARL, RN; ANA A. ORTIZ, MS; WILLIAM PEARL, MD

TOPICS IN CLINICAL MICROBIOLOGY

Tuberculosis, Infection Control, and the Microbiology Laboratory **481**

CHARLES W. STRATTON, MD

PRODUCT COMMENTARY

Steam Sterilizers: An Evolution in Design **488**

SUE CROW, MSN, RN, CIC

BEYOND INFECTION CONTROL: THE NEW HOSPITAL EPIDEMIOLOGY

Computed Tomography Imaging in Children with Head Trauma: Utilization and
Appropriateness from a Quality Improvement Perspective **491**

MONTERRAT VERA, MD, MPH; GARY R. FLEISHER, MD; PATRICK D. BARNES, MD;
B RUCE H. BJORNSON, MD; ELIZABETH N. ALLRED, MS; DONALD A. GOLDMANN, MD

DEPARTMENTS

Letters to the Editor **452**

Ask the Epidemiologist **479**

Medical News **500**

SHEA News **503**

THE PUBLICATION OF ADVERTISING IN THE JOURNAL DOES NOT CONSTITUTE ANY GUARANTEE OR ENDORSEMENT BY THE SOCIETY FOR HOSPITAL EPIDEMIOLOGY OF AMERICA OR SLACK INCORPORATED OF THE ADVERTISED PRODUCT OR SERVICE OR OF CLAIMS MADE BY THE ADVERTISER. THE PUBLICATION OF ARTICLES AND OTHER EDITORIAL MATERIAL IN THE JOURNAL DOES NOT NECESSARILY REPRESENT THE POLICY RECOMMENDATIONS OR ENDORSEMENT BY THE SOCIETY.

PUBLISHER: Infection Control and Hospital Epidemiology (ISSN-0899823X, Canadian GST#129780466) is published exclusively by SLACK Incorporated 12 times a year. Address: 6900 Grove Rd., Thorofare, NJ 08086. Telephone: (609) 8481000.

COPYRIGHT 1993 The Society for Hospital Epidemiology of America, Inc., and SLACK Incorporated. All rights reserved. No part of this publication may be reproduced without written permission from the publisher. Printed in the USA.

SUBSCRIPTIONS: Requests should be addressed to the publisher (except Japan). In Japan, contact Woodbell Incorporated, 4-22-11, Kitakasai, Fuchu, Tokyo 134, Japan. Subscription rates in the United States and possessions: Individual: One year-\$80.00; Two years-\$115.00; Three years-\$145.00; Institutional: One year\$90.00; Two years-\$130.00; Three years-\$170.00. Fellows: \$20 per year with proof of training status. Canada: \$18.00 additional each year plus 7% for Canadian Goods & Services tax; all other countries: \$36.00 additional each year. Single copies of current issues may be obtained for \$15.00, United States and possessions; \$20.00 all other countries.

REPRINTS: All requests to reprint or use material published herein should be addressed to Lester Robeson, SLACK Incorporated, 6900 Grove Rd., Thorofare, NJ 08086. For reprint orders and prices, contact Lester Robeson 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 St., 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 Rd., Thorofare, NJ 08086.

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY is listed in Index Medicus, Current Contents-Clinical Practice, Hospital Literature Index, Cumulative Index to Nursing & Allied Health Literature, Nursing Abstracts, and Laboratory Performance Information Exchange System.

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

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[®]

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, CCCC

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