An Official Journal of The Society for Healthcare Epidemiology of America

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY®

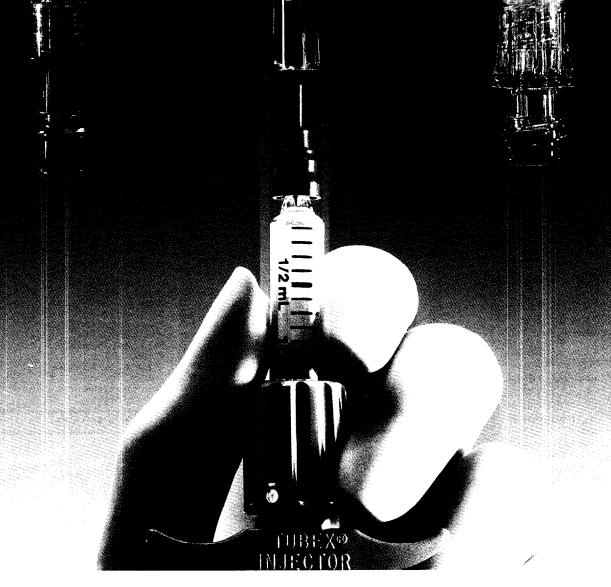
EDITORIAL

Measles and Healthcare Workers William L. Atkinson, MD, MPH	5
ORIGINAL ARTICLES	
Measles Immunity in Employees of a Multihospital Healthcare Provider Larry J. Wright, MD; John F. Carlquist, PhD	8
Measles Immunity in a Population of Healthcare Workers Mary E. Willy, MPH; Deloris E. Koziol, Phd; Thomas Fleisher, MD; Sylvia Koo; Henry McFarland, MD; James Schmitt, MD; Robert Wesley, PhD; Eugene S. Hurwitz, MD; David K. Henderson, MD	12
Measles-Mumps-Rubella Immunization of Susceptible Hospital Employees During a Com Measles Outbreak: Cost-Effectiveness and Protective Efficacy	
BETH H. STOVER, RN, CIC; GARRETT ADAMS, MD, MPH; CAROL A. KUEBLER, RN; KAREN M. COST, PHD; GERARD P. RABALAIS, MI	D 18
Nosocomial Transmission of Salmonella Gastroenteritis to Laundry Workers in a	
Nursing Home Steven M. Standaert, MD; Robert H. Hutcheson, MD, MPH; William Schaffner, MD	22
The Epidemiology of Needlestick and Sharp Instrument Accidents in a Nigerian Hospital Alibola A. Adegboye, DDS; Gregory B. Moss, MD; Femi Soyinka, MD, MPH; Joan K. Kreiss, MD, MSPH	27
BRIEF REPORT	
Attitudes of Internal Medicine Residents Regarding Influenza Vaccination Daniel A. Nafziger, MD, MS; Loreen A. Herwaldt, MD	32
REVIEW	
Human Immunodeficiency Virus Infection in Pregnancy: Epidemiology and Prevention	
of Vertical Transmission Donald E.Craven, MD; Kathleen A. Steger, RN, MPH; Cecelia Jarek, PA	36
MOLECULAR HOSPITAL EPIDEMIOLOGY	
DNA Analysis in the Study of the Epidemiology of Nosocomial Candidiasis Louise M. Dembry, MD; Jose A. Vazquez, MD; Marcus J. Zervos, MD	48



NEW TUBEX[®] BLUNT POINTE STERILE CARTRIDGE UNIT: ONE-PIECE SIMPLICITY MAKES IV SAFETY EASY.

Introducing the newest approach to IV safety-the TUBEX® Blunt Pointe sterile cartridge unit. Now there's a prefilled cartridge unit with no assembly, no adapters. Simply remove the rubber cover and **insert** into a "needle-less" IV set.* And needlestick accidents can be dramatically reduced because the point is not sharp. TUBEX® Blunt Pointe sterile cartridge unit was designed to meet OSHA's engineering and work practice controls and FDA's recommendations for IV administration sets.^{1,2} For IV safety, simplicity, and convenience choose TUBEX® Blunt Pointe sterile cartridge units.



INTRODUCING



*TUBEX® Blunt Pointe sterile cartridge unit is compatible with the following sets shown: Abbott's LifeShield® Prepierced Reseal Injection Site, B.BraunMedical'sSAFSITE®Reflux Valve, and Baxter'sInterLink® Injection Site. Consult manufacturer's recommendations regarding "directions for use" for the "needle-less" system.

References: ¹. Occupationa: Exposure to Bloodborne Pathogers, Final Rule, 56 Fed. Reg. 64175 (1991) (29 CFR 1910-1030), 2, FDA Sofety Alert, Neodlesick and Other Risks from Hypodermic Needles on Secondary IV, Administration Sets—Piggyback and Intermittent IV. Rockville, Md: Faba and Drug Administration, April 16, 1992. © 1993, Wyeth-Ayerst Laboratories. 63293



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 Omaĥa, Nebraska **Topics in Occupational Medicine** David Weber, MD, MPH Chapel Hill, North Carolina

Vice President/Group Publisher Richard N. Roash Publisher John C. Carter Editorial Director Jennifer Kilpatrick Production Editor Shirley P. Strunk, ELS

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY®

EDITORIAL ADVISORY BOARD

Jacques F. Acar, MD J. Wesley Alexander, MD Paul Arnow, MD Graham A.J. Ayliffe, MD Neil L. Barg, MD Elizabeth Ann Bolyard, RN, MPH, CIC John M. Boyce, MD Professor Dr. Ilja Braveny Charles Bryan, MD Christian Brun-Buisson, MD Donald E. Craven, MD Sue Crow, MSN, RN, CIC Franz Daschner, MD Leigh G. Donowitz, MD Charles E. Edmiston, Jr., PhD Theodore C. Eickhoff, MD Bruce Farber, MD Victoria J. Fraser, MD Peter C. Fuchs, MD, PhD Richard A. Garibaldi, MD Velvl Greene, PhD, MPH Robert Gaynes, MD David W. Gregory, MD David K. Henderson, MD Peter N.R. Heseltine, MD Karen Hoffmann, RN, CIC, MS Marguerite McMillan Jackson, RN, PhD Janine Jagger, MPH, PhD William R. Jarvis, MD Douglas S. Kernodle, MD Robert H. Latham, MD Lewis B. Lefkowitz, MD Hsieh-Shong Leu, MD, MSc Jack Levy, MD Victor Lorian, MD Dennis G. Maki, MD Professor Dr. Walter Marget William J. Martone, MD Allison McGeer, MD John E. McGowan, Jr., MD Jonathan L. Meakins, MD, DSc Raf Mertens, MD Robert R. Muder, MD Joseph M. Mylotte, MD, CIC Lindsay Nicolle, MD Juhani Ojajärvi, MD Michael T. Osterholm, PhD, MPH Jan Evans Patterson, MD Sindy M. Paul, MD Michael A. Pfaller, MD Samuel Ponce de Leon, MD, MSc Isaam Raad, MD Manfred L. Rotter, MD, DipBact Theodore Sacks, MD William E. Scheckler, MD Kent Sepkowitz, MD Denis Spelman, MD Michael L. Tapper, MD Clyde Thornsberry, PhD Professor Leonid P. Titov Timothy R. Townsend, MD Antoni Trilla, MD, PhD Professor Wang Shu-Qun J. John Weems, Jr., MD Robert A. Weinstein, MD Professor Dr. W. Weuffen Sergio B. Wey, MD Rebecca Wurtz, MD

Paris, France Cincinnati, Ohio Chicago, Illinois Birmingham, United Kingdom Yakima, Washington Atlanta, Georgia Providence, Rhode Island Munich, Federal Republic of Germany Columbia, South Carolina Creteil, France Boston, Massachusetts Shreveport, Louisiana Freiburg, Federal Republic of Germany Charlottesville, Virginia Milwaukee, Wisconsin Denver, Colorado Manhasset, New York St. Louis, Missouri Black Butte, Oregon Farmington, Connecticut Beer Sheva. Israel Atlanta, Georgia Nashville, Tennessee Bethesda, Maryland Los Angeles, California Chapel Hill, North Carolina San Diego, California Charlottesville, Virginia Atlanta, Georgia Nashville, Tennessee Nashville, Tennessee Nashville, Tennessee Taipei, Taiwan Brussels, Belgium Bronx, New York Madison, Wisconsin Munich, Federal Republic of Germany Bethesda, Maryland Toronto, Ontario, Canada Atlanta, Georgia Montreal, Quebec, Canada Brussels, Belgium Pittsburgh, Pennsylvania Buffalo, New York Winnepeg, Manitoba, Canada Helsinki, Finland Minneapolis, Minnesota San Antonio, Texas Trenton, New Jersey Iowa City, Iowa Mexico City, Mexico Houston, Texas Vienna, Austria Jerusalem, Israel Madison, Wisconsin New York City, New York Prahran Victoria, Australia New York, New York Brentwood Tennessee Minsk, Republic of Belarus Millwood, Virginia Barcelona, Spain Beijing, People's Republic of China Greenville, South Carolina Chicago, Illinois Greifswald, Federal Republic of Germany São Paulo, Brazil Evanston Illinois

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

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

$\begin{array}{l} \text{Infection Control and}\\ \text{Hospital Epidemiology} \end{array} \\ \ensuremath{\textcircled{}^{\circ\circ}} \end{array}$

CONTENTS

BOOK REVIEWS

Classifieds

Hospital Infections (Bennett JV, Brachman PS) G.A.J. Ayliffe	5
Epi-TUTOR (Birnbaum D) Janet Covington, RN	5
LETTERS TO THE EDITOR	
Measles Immunization in HCWs Kevin G. Huang, MD; Michaale R. Spence, MD, MPH; Adamadia DeForest, PhD; Alicia T. Bradley, MT (ASCP)	
MEDICAL NEWS	
Gina Pugliese, RN, MS	5
SHEA NEWS	
C. Glen Mayhall, MD	6
OTHER DEPARTMENTS	
Calendar of Events	58

Cover 3

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-0899-823X, Canadian GST#129780466) is published exclusively by SLACK Incorporated 12 times a year. Address: 6900 Grove Rd., Theorofare, NJ 08086. Telephone: (609) 848-1000.

COPYRIGHT 1994 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. Edogawaku, Tokyo 134, Japan. Subscription rates in the United States and possessions: Individual: One year—\$85.00; Two years—\$120.00; Three years-\$150.00; Institutional: One year-\$95.00: Two years—\$135.00; Three years-\$175.00. Fellows: \$20 per year with proof of training_status. Canada: \$18.00 additional each war 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; \$0.00 all other countries

REPRINTS: All requests to reprint or use material published herein should be addressed to Lester Robeson, SLACK Incorporated, 6900 Grove Rd., Thorotare, NJ 08086. For reprint orders and prices, contact Lester Robeson at (609) 8481000. 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 fur creating new collective works

CHANGE OF ADDRESS: Notice should he 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