Medical News

EDITED BY GINA PUGLIESE, RN, MS

American College of Surgeons and CDC to Sponsor Conference on Surgical Blood Exposures

The American College of Surgeons (ACS) and the Centers for Disease Control and Prevention (CDC) will cosponsor a conference on "Prevention of Transmission of Bloodborne Pathogens in Surgery and Obstetrics," February 13-15, 1994, in Atlanta. The conference will include state-of-the-art lectures by experts in the field, as well as presentation of original research. Major topics will include data on the risk of transmission of bloodborne pathogens to healthcare workers in surgical and obstetrical suites; information on new devices, technology, and protective equipment that may reduce occupational exposure in surgical and obstetrical settings; and methods to evaluate studies of risk and prevention measures. The abstract deadline is October 31, 1993. For registration and hotel information, contact John F. Lynch, American College of Surgeons, 55 East St., Chicago IL 60011-2797. Telephone (312) 664-4050.

EPA Issues Stop-Sale Order on Sterilizing Solution for Lack of Efficacy

Citing failure to meet efficacy tests and the potential danger to human health, the U.S. Environmental Protection Agency (EPA) issued a stopsale, use, and removal order on May 18, 1993, against the liquid chemical sterilant 'Wipeout Cold Sterilizing Disinfecting Solution." EPA also asked the registrant, Health Care Products, Inc., of Canada (acting through the American agent, Meditox, Inc., Deer-field Beach, FL) to recall the product voluntarily. Any leftover stock of this product should not be used, the EPA warned. This is the fourth liquid chemical sterilant that EPA has taken action against since it reinstated its efficacy testing program. The other products that failed EPA's efficacy testing include Bionox A and Bionox B Rapid Sterilizing Solution (Bionox Company, Inc.); Coldspor (Coldcide 10) Sterilizing Disinfecting solution (Coldcide, Inc.); and Sporicidin Cold Sterilizing Solution (Sporicidin International).

Prior to 1982, EPA conducted limited testing of sterilants to confirm efficacy data submitted by the registrants to support claims on the product labeling. Due to budget constraints, such testing was curtailed. Since that time, registrants have been required to submit full registration data completed by a second source laboratory before an EPA registration could be granted. Concerns from the public health community about the efficacy of antimicrobial products has prompted the EPA to reassess its policy on efficacy testing of liquid chemical sterilants and other public health products. Three years ago, EPA entered into an interagency agreement with the Food and Drug Administration (FDA) to test the efficacy of all registered liquid chemical sterilants, products that are crucial to infection control. Wipeout is one of 34 liquid sterilants registered in the United States. Additional information about specific actions taken by the EPA can be obtained from the EPA Communications Branch, Field Operations Division, at (703) 3055017.

NIOSH to Sponsor Workshop on Preventing Airborne Infections in Healthcare Facilities

The National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC), is convening a workshop on "Engineering Controls for Preventing Airborne Infections in Healthcare and Related Facilities." The workshop will be held on July 1416, 1993, at the Omni Netherland Hotel, in Cincinnati, Ohio. The purpose of the workshop is to review the nature and extent of airborne transmission of infections in workers in healthcare and related facilities; review current data and new findings regarding the engineering controls of airborne infections that may have relevance to occupational exposures; and recommend a national research agenda that would close the gap and permit reliable recommendations for protecting healthcare workers.

https://doi.org/10.1017/S0899823X00091546 Published online by Cambridge University Press

For further information and registration, contact Workshop on Engineering Controls for Preventing Airborne Infections in Workers in Healthcare Facilities, Project Coordinator (R-2), NIOSH, 476 Columbia Parkway, Cincinnati, OH 45226. Telephone (513) 841-4321.

Drug-Resistant TB Reinfects Same Patient

Exogenous reinfection with multidrug-resistant *Mycobacterium tuberculosis* can occur during therapy for the original infection or after therapy has been completed. This finding was reported by Dr. Peter Small and colleagues at the Howard Hughes Medical Institute, Stanford University, San Francisco General Hospital, and the State University of New York Health Science Center at Brooklyn, New York.

The researchers studied 17 patients seen at a New York City hospital who had positive cultures for *M tuberculosis* repeatedly. Analysis of restriction-fragment-length polymorphisms (RFLP) was performed on serial isolates of *M tuberculosis* obtained from these patients. Six patients had isolates that remained drug susceptible, and the RFLP patterns of these isolates did not change over time. Eleven patients had isolates that became resistant to antimicrobial agents. The RFLP patterns of the isolates from six of these patients remained essentially unchanged despite the development of drug resistance. In five other patients, however, the RFLP patterns of the isolate changed dramatically at the time that drug resistance was detected. The change in the RFLP pattern of the isolate from one patient appeared to be the result of contamination during processing in the laboratory. In the remaining four patients, all of whom had advanced HIV disease, the clinical and microbiologic evidence was consistent with the presence of active tuberculosis caused by a new strain of *M tuberculosis.*

The authors concluded that resistance to antituberculosis drugs can develop not only from a mutation in the strain that caused the initial disease, but also as a result of reinfection with a new strain of *M tuberculosis* that is drug resistant. Thus, exogenous reinfection with multidrug-resistant *M tuberculosis* can occur either during therapy for the original infection or after therapy has been completed.

The possibility that persons previously infected *with M tuberculosis* can be exogenously reinfected has been debated for decades. However, it was thought to occur rarely because of the immunity conferred by the initial infection. On the few occasions in which exogenous reinfection has been documented, it has involved only selected populations, for example, alcoholic residents of a homeless shelter.

The authors note that the lack of acquired immunity to *M tuberculosis,* which permitted reinfection with a multidrug-resistant strain, presumably would predispose HIV-infected persons to reinfection with drug- sensitive organisms as well. Whether normal hosts can be exogenously reinfected-and if so, how frequently-has not been determined. The lack of protective immunity to *M tuberculosis* after therapy in HIV-infected patients complicates efforts to control the disease and suggests that those with a history of tuberculosis or known tuberculosis reactivity need to be evaluated for the possible development of a new episode of tuberculosis after contact with someone who is infectious.

It is not possible to infer from this study the frequency with which patients are reinfected with *M tuberculosis.* The authors note that future studies are needed to define the frequency, settings, and specific risk factors for exogenous reinfection.

FROM: Small PM, Shafer RW, Hopewell PC, et al. *N Engl J Med* 1993;328:1137-1144.

Previous Hospitalization a Risk Factor for Drug-Resistant TB

Almost 30% of patients hospitalized in New York City with pulmonary tuberculosis were found to have multidrug-resistant (MDR) disease, and previous hospitalization was found to be a significant risk factor. These findings were reported by Dr. Craig Keyes and colleagues of the New York State Health Department in a paper presented at the May 16-19, 1993, American Lung Association International Conference in San Francisco. Keyes studied sputum samples and demographic and clinical data on 393 patients hospitalized for pulmonary tuberculosis at New York City's 18 metropolitan hospitals. Of the 142 *Mycobacterium tuberculosis* culture-positive patients, 41 (29%) were resistant to isoniazid and at least one other standard antituberculosis drug. A number of factors were positively correlated with MDR-TB, including HIV seropositivity, homelessness, Caucasian race, female gender, incarceration, shelter living, and drug or alcohol abuse. However, only previous hospitalization emerged as a significant risk factor for MDRTB.

https://doi.org/10.1017/S0899823X00091546 Published online by Cambridge University Press