Medical News

EDITED BY GINA PUGLIESE, RN, MS

American Hospital Association Closes Infection Control Program

After a five-decade presence in the infection control arena, the American Hospital Association's executive staff met on October 24, 1995, and made the decision to end AHA program in the area of infection control. The program will close officially on December 31, 1995. This decision reflects the tremendous changes that hospitals and healthcare networks currently are experiencing.

E-mail Facilitates Outbreak Investigation

Upon returning home from a conference in Baltimore that included attendees from 50 states, one conference attendee (index case) became ill with diarrhea, and Salmonella was isolated from his stool. After learning that four other attendees had diarrheal illness, the attendee contacted the Centers for Disease Control and Prevention (CDC). Upon learning of a possible multistate food outbreak, the CDC conducted an epidemiological investigation using the electronic mail (e-mail) system of the organization sponsoring the conference. Because it was an internal e-mail, responses to the questionnaire were returned to CDC via fax. Within 4 weeks. 40% (156) of the conference attendees returned the questionnaire. Six respondents reported having diarrhea during the period beginning 12 hours after the conference started and ending 5 days after the conference ended; two additional persons had known Salmonella infection. Illness was not found to be associated with taking the same flight as the index case. Because few conference attendees or airline flight passengers became ill with symptoms suggestive of salmonellosis during the likely period, the possibility of an airplane- or conference-associated outbreak was thought to be improbable.

The Salmonella isolates were identified at CDC as Salmonella serotype Norwich, of the Salmonella serogroup C1. In 1994, only 102 isolates of this serotype were reported to the Public Health Laboratory Information System (PHLIS), a nationwide, electronic, laboratory-based surveillance system that collects and summarizes data on isolates from state public health laboratories. Because infection with S Norwich is so uncommon, a common source outbreak was suspected. Additional cases of salmonellosis caused by serogroup C1 had been reported to the Maryland Department of Health and were traced to a restaurant in Baltimore where the conference attendees had eaten. Salmonella serotype Norwich subsequently was isolated from several travelers that had eaten at the restaurant and from an employee of the restaurant who had reported a diarrheal illness. No single menu item had been eaten by all ill persons.

This outbreak illustrates the usefulness of rapid electronic communication in a public health setting. Isolation of a rare *Salmonella* serotype and national electronic reporting to the PHLIS assisted in the detection and investigation of this widely dispersed multistate outbreak of salmonellosis in record-breaking time. New technologies undoubtedly will continue to be useful in addressing emerging public health problems.

FROM: Mahon BA, Rohn DD, Pack SR, Tauxe RV. Electronic communication facilitates investigation of a highly dispersed foodborne outbreak: *Salmonella* on the superhighway. *Emerging Infectious Diseases* 1995;1(3):94-95.

Reducing TB Exposures

Dr. Henry Blumberg and colleagues at Grady Memorial Hospital in Atlanta, Georgia, recently reported the dramatic reduction in both tuberculosis (TB) exposure episodes and healthcare worker (HCW) tuberculin skintest (TST) conversion rates following the implementation of expanded infection control measures.

The initiation of expanded control measures were prompted by the documentation of nosocomial transmission of drug-susceptible tuberculosis caused by HCW-to-HCW transmission and patient-to-HCW transmission. The TB control measures, implemented between March and July 1992, focused first on administrative controls and included (1) an expanded respiratory isolation policy that included a protocol for early identification and isolation of suspect TB patients, isolation of all patients with HIV infection, and an abnormal radiograph of the chest; (2) increased surveillance for proper isolation of patients; (3) hiring of a nurse epidemiologist to serve as TB infection control coordinator; (4) expanded HCW educational program on TB; and (5) mandatory skin test for all HCWs, with an increase in frequency from annually to every 6 months to include nonemployee HCWs (eg, attending physicians, agency nurses). The interim engineering controls that were implemented consisted of converting 90 patient rooms without air circulation to negative pressure with the use of a window fan and periodic monitoring of negative pressure. Finally, dust-mist particulate respirators was used for entering all isolation rooms.

The number of tuberculosis exposure episodes and skin-test conversion rates of HCWs were measured before and after implementation of expanded infection control measures. Tuberculosis exposure episodes were defined as the number of patients who were not placed in respiratory isolation at admission but who subsequently had a diagnosis of acid-fast bacilli smear-positive pulmonary TB during admission of within 2 weeks of discharge. Sixmonth TST conversion rates among HCWs were evaluated during a 2.5-year period.