

## Medical News

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### Hospitals Must Notify Emergency Response Workers of Exposure to Infected Patients

Hospitals and medical facilities must have programs in place by April 20, 1994, for notifying emergency response employees (EREs) of their possible exposure to life-threatening infectious disease. This requirement is part of the Ryan White Comprehensive AIDS Resource Emergency Act (Public Law 101-381) enacted in 1990. In the March 21, 1994 issue of the *Federal Register*, the CDC outlined the final list of diseases to which these provisions apply, the circumstances under which exposure may occur, and guidelines for determining whether an exposure has occurred.

EREs include firefighters, law enforcement officers, paramedics, emergency medical technicians, and other persons, including legally recognized volunteers who respond to emergencies. The CDC has divided the list of diseases that require notification into three categories: 1) airborne disease including only tuberculosis; 2) bloodborne diseases including hepatitis B and HIV; and 3) uncommon or rare diseases including diphtheria, meningococcal meningitis, plague, hemorrhagic fevers, and rabies. The rule requires immediate (within 48 hours) notification of a "designated officer" only in cases involving airborne diseases—that is, pulmonary tuberculosis. The designated officer is the liaison between the ERE and the medical facility. The rule requires the state public health officer to select a designated officer for every employer of EREs.

Hospitals do not face damages or civil action for failing to comply with the CDC's notice. However, the

secretary of Health and Human Services can seek "appropriate injunctive relief" against alleged violators. Although many states already have some notification systems in place, union representatives have applauded these guidelines because they will provide consistency across the country and greater protection for emergency response employees.

FROM: *Federal Register* March 21, 1994;59(54):13418-13428.

### Transmission of Hepatitis B from Surgeon to Patients Continues

Researchers from the United Kingdom, Canada, and the United States presented the results of investigations of transmission of hepatitis B from surgeon to patients at a recent conference on preventing bloodborne pathogen transmission in surgery cosponsored by the American College of Surgeons and the CDC (see the Abstracts in this issue).

In the most compelling report, epidemiologists from the CDC presented the results of an investigation of the patients of a cardiothoracic surgery resident in Los Angeles with acute HBV infection. Of the surgeon's 142 susceptible patients, 18 (13%) had been infected recently with HBV, compared with 0 of 155 patients of other surgeons. The HBsAg subtype and DNA sequence of a region of the HBV genome were identical in isolates from the surgeon and infected patients. In a follow-up study of the surgeon that simulated the procedure of typing sutures, lesions were observed on the surgeons hand after 1 hour, and HBsAg was found in his glove

juice washings.

These reports underscore the need for HBV vaccination of all surgeons and the need to consider these data when developing policies regarding surgical practice restrictions for HBeAg-positive surgeons.

## Steep Drop in New Cases of TB in New York City

Dr. Margaret Hamburg, New York City Health Commissioner, announced that the city experienced its most significant drop in new tuberculosis (TB) cases in 15 years; more than \$30 million was spent last year to combat the resurgence of the disease, compared with \$4 million in 1988. New York City, which accounts for about 15% of the nation's TB caseload, showed a decline of 15% in new cases: 3,235 cases in 1993 compared with 3,811 in 1992. Nationwide, the number of TB cases dropped about 5% in 1993.

The decline in cases in New York City is particularly significant because the city has 61% of the nation's cases of multidrug-resistant tuberculosis. New York City was among one of the first cities to allow involuntary long-term detention of patients who did not take their medications consistently. The detention of more than 30 patients over the past year has served as a deterrent and helped in control efforts. But Dr. Hamburg said, "The mainstay of tuberculosis control efforts has been a program of directly observed therapy and the program currently follows 1,200 patients, up from fewer than 100 two years ago." Other factors that have contributed to the decline include tripling of the staff in the health department, expansion of TB services in the city's TB clinics, and better methods for early identification of cases.

FROM: *New York Times* March 15, 1994.

## NIOSH Appoints New Director

Dr. Linda Rosenstock was appointed director of the National Institute for Occupational Safety and Health (NIOSH), part of the CDC. Rosenstock will lead NIOSH, which, together with the Occupational Safety and Health Administration (OSHA), was created by an Act of Congress in 1970. NIOSH has research and public health mandates from Congress and serves as a scientific partner to OSHA and the Mine Safety and Health Administration, the two Department of Labor agencies responsible for regulating the safety and health of working conditions.

Dr. Rosenstock, previously professor of medicine and environmental health and director of the occupational and environmental medicine program

at the University of Washington, conducted research and published extensively on occupational diseases, including asbestos-related disease and the effects of exposure to pesticides. She founded one of the first hospital-based, university-affiliated occupational medicine clinics in the country.

CDC Director Dr. David Satcher said, "She is eminently suited to lead NIOSH in its mission of improving the safety of our work force. Among the challenges facing Dr. Rosenstock are increasing the visibility of occupational safety and health and working more closely with other federal agencies. To enhance efforts to meet these challenges, Dr. Rosenstock and the NIOSH central headquarters will be located in the Public Health Service offices in Washington, DC." Hospital epidemiologists will be watching NIOSH closely for its role in the CDC's final recommendation on respiratory protection for healthcare workers against tuberculosis, which is expected to include the development of a new certification process for respirators.

## Inadequate Disinfection of Dialyzer O-Rings Responsible for Outbreak of Gram-Negative Bacteremia

Following hemodialysis treatment, 11 patients in a university outpatient hemodialysis unit had 12 episodes of primary gram-negative bacteremia caused by *Pseudomonas cepacia*, *Xanthomonas maltophilia*, *Citrobacter freundii*, *Acinetobacter calcoaceticus var. anitratus*, or *Enterobacter cloacae*. In 11 episodes, symptoms developed within 3 hours of starting hemodialysis. A matched-pair, case-control study found that case patients were more likely to have received high-flux dialysis with Hemoflow F-80 dialyzers (odds ratio, 11) than were controls. O-rings from dialyzers used by bacteremic patients were culture-positive for the organism responsible for bacteremia.

Three of the four dialyzers were disinfected using a standard automated method with a hydrogen peroxide-peracetic acid germicide, and cultures were obtained again 72 hours later; the O-rings of all three dialyzers remained culture-positive. Simulated dialysis using dialyzers with contaminated O-rings caused blood pathway contamination despite reprocessing. When the disinfection method for the F-80 dialyzers included removal and complete disinfection of the O-rings, O-ring and blood pathway cultures were consistently negative. After this procedure was made routine, no episodes of primary gram-negative bacteremia occurred during the next 6 months.