Medical News

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Additional news items in this issue: *Reducing IV Device-Associated Infections,* page 448; *Early-Onset Versus Late-Onset Nosocomial Pneumonia in ICU,* page 454.

Anergy Testing and Tuberculin Skin Testing

Although anergy testing is commonly used to help interpret negative tuberculin skin test results, the validity of this approach has not been demonstrated. Specific issues include lack of a standardized protocol for antigen selection, number needed to evaluate reliably inability to respond, and uniform criteria for defining cutaneous reactivity, as well as regional variation in skin test reactivity. Tuberculin skin testing is used to screen for latent infection and to evaluate the need for INH prophylaxis. The presence or absence of reactivity to control antigens does not affect this decision. The results of anergy testing also do not predict the risk for progression to active disease in either HIV-negative or HIV-positive patients. In HIV-negative patients with active TB, 10% to 20% have negative tuberculin test results, and 5% to 10% have a negative tuberculin result but have a positive reaction to another antigen. A negative tuberculin skin test result does not exclude either latent infection or active disease, even in the presence of a reaction to other antigens. Neither anergy testing nor tuberculin testing obviates the need for microbiological evaluation when there is suspicion for active TB infection. Therefore, anergy testing is not useful in screening for asymptomatic tuberculous infection or for diagnosing active TB.

FROM: Slovis BS, Plitman JD, Haas DW. The case against anergy testing as a routine adjunct to tuberculin skin testing. *JAMA* 2000;283:2003-2007.

DHHS Classified ETO as Human Carcinogen

Ethylene oxide (ETO) has been identified as a known human carcinogen in the Ninth Report on Carcinogens, prepared by the National Toxicology Program and released by the Department of Health and Human Services (DHHS) on May 15. The substance, which is widely used in healthcare facilities to sterilize medical devices, had been listed in previous reports as "reasonably anticipated to be a human carcinogen."

When ETO was first listed in the Fourth Report on Carcinogens in 1985 as a reasonably anticipated human carcinogen, only limited evidence of its carcinogenicity in humans was available. Subsequent research showing an increased risk for leukemia and non-Hodgkin's lymphoma in workers exposed to ETO, coupled with data on its genotoxic and biochemical interactions with human DNA, led to its reclassification as a known human carcinogen.

Ethylene oxide is used in hospitals to sterilize heat-sensitive medical items, surgical instruments, and other objects and fluids coming in contact with biological tissues. The report states "Exposure mostly results from peak emissions during operations such as opening the door of the sterilizer and unloading and transferring sterilized material . . . With the proper use of engineering controls and work practices, exposure levels can be very low." A Special Hazard Review by NIOSH recommended ETO exposure limits of 0.1 ppm as an 8-hour time-weighted average (TWA) and 5 ppm as a ceiling concentration for no more than 10 minutes. OSHA lowered the permissible exposure limit from 50 ppm to 1 ppm as an 8-hour TWA in 1984 and in 1988 established a short-term exposure limit of 5 ppm during a 15-minute period.

FROM: Ninth Report on Carcinogens. US Department of Health and Human Services National Toxicology Program, "The 9th Report on Carcinogens 2000": http://ehis.niehs.nih.gov/roc.

Hemolysis Outbreak in Hemodialysis Patients

Hemolysis associated with hemodialysis is rare. The most frequent causes of hemodialysis-associated hemolysis are chemical contamination, heat, or mechanical injury of erythrocytes from occluded or kinked hemodialysis bloodlines. When patients in three states developed hemolysis while undergoing hemodialysis between May 13 and 23, 1998, Dr. Rose Duffy and coinvestigators from the CDC's Hospital Infections Program, in collaboration with the state health departments, initiated an investigation. A case-patient was defined as any patient at healthcare facilities A (Nebraska), B (Maryland), or C (Massachusetts) during May 13 through 23, 1998 (epi-