Medical News

EDITED BY GINA PUGLIESE, RN, MS; MARTIN S. FAVERO, PHD

Additional news items in this issue: Vancomycin-Intermediate S aureus in Korea, page 756; Preventing Spread of VRE in Long-Term-Care Facility, page 779; Influenza Vaccination—Is It Cost-Effective? page 795; Reminder Systems Improve Immunization Rates, page 799.

Improved Handwashing Compliance

Dr. Didier Pittet and colleagues on the infection control team at the University of Geneva Hospitals, Switzerland, successfully promoted hand hygiene by implementing a hospitalwide program with special emphasis on bedside alcohol-based hand disinfection. A sustained improvement in compliance was associated with a marked reduction in nosocomial infection and methicillin-resistant *Staphylococcus aureus* (MRSA) cross-transmission rates.

The overall compliance with hand hygiene during routine patient care was monitored before and during implementation of the hand-hygiene campaign. Seven hospitalwide observational surveys were conducted biannually from December 1994 to December 1997. Hand-hygiene promotion strategy involved the use of posters that emphasized the importance of hand cleansing and hand-hygieneperformance feedback. The posters were displayed in strategic areas within the institution called "Talking Walls."

Compliance improved progressively from 48% in 1994 to 66% in 1997 (P<.001). Although recourse to hand washing with soap and water remained stable, frequency of hand disinfection increased substantially over the study period (P<.001). During the same period, overall nosocomial infection (prevalence of 16.9% in 1994 to 9.9% in 1998; P=.04), as well as MRSA transmission rates (from 2.16 to 0.93 episodes per 10,000 patient-days; P<.001), decreased. The consumption of alcoholbased handrub solution increased from 3.5 L to 15.4 L per 1,000 patient-days between 1993 and 1998 (P<.001).

The promotion of bedside antiseptic handrubs largely contributed to the increase in compliance. Contributing factors to the success of the promotion campaign were the multimodal and multidisciplinary approach, including communication and education tools; reminders in the work environment; active participation and feedback at both individual and organizational levels; and involvement of institutional leaders. Special care was taken to ensure that healthcare workers identified strongly with the institution's goals by involving them directly in the promotional campaign. For instance, the most visible components, ie, the posters, prepared by the artist during interactive sessions with personnel, carried the name of the ward that had proposed the message.

This study represents the first reported experience of a sustained improvement in hand-hygiene compliance. The University of Geneva has developed a web site with resources for their hand-hygiene education (see www.hopisafe.ch).

FROM: Pittet D, Hugonnet S, Harbarth S, Mourouga P,

Sauvan V, Touveneau S, et al. Effectiveness of a hospital-wide programme to improve compliance with hand hygiene in a teaching hospital. *Lancet* 2000;356:1307-1312.

Congress Approves Needlestick Safety Bill

On October 26, Congress approved the Needlestick Safety and Prevention Act. The law mandates that the 1991 OSHA Bloodborne Pathogens Standard (29 CFR 1930.1030) be revised to require the use of safety-engineered sharp devices. The bill states that "modification of the Bloodborne Pathogens Standard is appropriate to set forth in greater detail its requirement that employers identify, evaluate, and make use of effective safer medical devices."

The main provisions include the following: (1) expanded definition of engineering controls that includes "safer medical devices, such as sharps with engineered sharps injury protection and needleless systems"; (2) new definitions for both safety devices and needleless devices; (3) new requirement for exposure control plans to include evaluation of safety devices with updates as necessary to "reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens' and "document consideration and implementation of appropriate commercially available and effective safer medical devices"; (4) a sharps-injury log, in addition to the OSHA 200 log, that includes detailed information on the injury, including the "type and brand of device involved in the incident, the department or work area where the exposure incident occurred, and an explanation of how the incident occurred"; and (5) involvement of frontline healthcare workers when evaluating and selecting safer devices.

The bill includes a provision that the usual hearings process for amending an existing OSHA standard be bypassed and requires that, within 6 months of the bill's enactment, the modifications to the standard required by the bill must be published in the *Federal Register*. The law will be in effect 90 days after the revised standard has been published in the *Federal Register*. The bill does not provide a mechanism for covering state and municipal employees in federal OSHA states, and those states with state-run OSHA plans must implement requirements that are at least as effective as the federal OSHA requirements.

Advocates of this bill, including Dr. Janine Jagger from the International Healthcare Worker Safety Center, believe that this is a historic bill for healthcare worker safety. Jagger and her colleagues have worked hard at supporting the bill at