

containers had no associated injuries, but control nurses also did not report use of these two containers for the last sharp object they discarded. It is possible that statistical power was insufficient to detect a difference. For these reasons, our findings cannot be interpreted as demonstrating the safety of these SDCs.

In summary, we investigated factors associated with disposal-related sharps injuries in a large medical center. Container placement and timely emptying, as well as worker education, should be considered in interventions to prevent sharps injuries. Such interventions should assess the risks in each particular setting and always should incorporate the experience of clinical staff. Further studies to confirm our findings are needed.

## REFERENCES

- Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report*. 1993;6:13.
- Krasinski K, LaCouture R, Holzman RS. Effect of changing needle disposal systems on needle puncture injuries. *Infect Control* 1987;8:59-62.
- Ribner BS, Landry MN, Gholson GL, Linden LA. Impact of a rigid, puncture resistant container system upon needlestick injuries. *Infect Control* 1987;8:63-66.
- Edmond M, Kbakoo R, McTaggart B, Solomon R. Effect of bedside needle disposal units on needle recapping frequency and needlestick injury. *Infect Control Hosp Epidemiol* 1988;9:114-116.
- Jagger J, Hunt EH, Brand-Elnaggar J, Pearson RD. Rates of needle-stick injury caused by various devices in a university hospital. *N Engl J Med* 1988;319:284-288.
- Linnemann CC, Cannon C, DeRonde M, Lanphear B. Effect of educational programs, rigid sharps containers, and universal precautions on reported needlestick injuries in healthcare workers. *Infect Control Hosp Epidemiol* 1991;12:214-219.
- Mangione CM, Gerberding JL, Cummings SR. Occupational exposure to HIV frequency and rates of underreporting of percutaneous and mucocutaneous exposures by medical house staff. *Am J Med* 1991;90:85-90.
- Mendelson MH, Short LJ, Dong JT, Solomon J, Meyers BR, Hirschman SZ. Analysis of sharps injuries at an 1100 bed teaching medical center: priorities for injury reducing devices. presented at the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy; 1991; Chicago, IL. Abstract.
- Sellick JA, Hazamy PA, Mylotte JM. Influence of an educational program and mechanical opening needle disposal boxes on occupational needlestick injuries. *Infect Control Hosp Epidemiol* 1991;12:725-731.
- Yassi A, McGill M. Determinants of blood and body fluid exposure in a large teaching hospital: hazards of the intermittent intravenous procedure. *Am J Infect Control* 1991;19:129-135.
- English JE. Reported hospital needlestick injuries in relation to knowledge/skill, design, and management problems. *Infect Control Hosp Epidemiol* 1992;13:259-264.
- Haiduvan DJ, DeMaio TM, Stevens DA. A five-year study of needlestick injuries: significant reduction associated with communication, education, and convenient placement of sharps containers. *Infect Control Hosp Epidemiol* 1992;13:265-271.
- Department of Labor-Occupational Safety and Health Administration. OSHA bloodborne pathogen standard. (CFR Section 1910.1030) *Federal Register*. December 6, 1991;56:64175-64182.
- Fleiss JL. *Statistical methods for rates and proportions*. 2nd ed. New York, NY: Wiley; 1981:123-126.
- Kleinbaum DG, Kupper LL, Morgenstern H. *Epidemiologic Research: Principles and Quantitative Methods*. New York, NY: Van Nostrand Reinhold; 1982:394-397.
- O'Neill TM, Abbott AV, Radecki SE. Risk of needlesticks and occupational exposures among residents and medical students. *Arch Intern Med* 1992;152:1451-1456.

## FDA Approves Long-Awaited Varicella Vaccine

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The US Food and Drug Administration (FDA) gave Merck and Company (Whitehouse Station, NJ) approval to market Varivax, a varicella (chickenpox) vaccine. One dose by injection, which costs approximately \$39, is recommended for children ages 12 months to 12 years. Two doses, 4 to 8 weeks apart, are recommended for children over 13 years of age. Varivax has been tested on over 11,000 individuals in the US. It can be combined safely with vaccinations for measles,

mumps, and rubella.

The American Academy of Pediatrics has indicated that it would soon recommend the vaccine for children and adults who have not had chickenpox. The USPHS Advisory Committee on Immunization Practices (ACIP) currently is developing recommendations for its use. Each state will determine whether to add varicella to this list of vaccines required for school admission, although ACIP recommendations usually are adopted.

Studies to date on the vaccine indicate no increased risk of herpes zoster (shingles). Studies are continu-

ing to determine if vaccination in individuals that have had chickenpox will prevent shingles. Further studies also are being conducted to determine if a booster dose will be needed. Adverse reactions are reported to be mild.

There are over 4 million reported cases of varicella each year in the US. Approximately 99% of cases occur before the age of 15, and 95% before young adulthood. There is a higher risk of serious complications and mortality in adolescents and adults.

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