

single use; and 4) using heat-based sterilization methods (eg, steam autoclave or dry-air oven) not liquid chemical germicides, to reprocess reusable needles and syringes.

FROM: Centers for Disease Control and Prevention. Improper infection control practices during employee vaccination programs-District of Columbia and Pennsylvania, 1993. *MMWR* 1993;42:969-971.

### **First Reported Case of Patient-to-Patient Transmission of HIV in a Healthcare Setting**

In the December 18, 1993, issue of *Lancet*, Dr. Kerry Chant et al reported the results of an investigation in Australia that indicated apparent transmission of HIV from one patient to four other patients in a surgeon's office. Four female patients with risk factors for HIV underwent minor surgical procedures (eg, removal of skin lesions) on the same day in 1989. A male patient with known risk factors for HIV, who has died of AIDS since, also had surgery on the same day and is presumed to have been the source of infection to the other four patients. The surgeon, who has tested negative for HIV infection, performed these procedures without assistance.

Australian health officials believe that a breach in infection control precautions caused HIV to be transmitted from one patient to subsequent patients. Examples of such breaches in infection control include inadequate disinfection and sterilization of reusable instruments, reuse of needles or syringes designed for single use only, or improper technique for drawing blood and infection of medications. Although the precise event(s) that led to patient-to-patient transmission have not been identified to date, Australian health officials have said that an investigation has found that the doctor did not sterilize all his equipment. The investigation is continuing, and DNA viral sequencing studies are being performed.

### **Surgeons Still Deficient in Hepatitis B Vaccination**

According to an abstract submitted to the First National Conference on Human Retroviruses and Related Infections, held December 12-16, 1993, in Washington, DC, the CDC conducted a seroprevalence survey of HIV, HBV, and HCV infection among hospital-based surgeons in moderate to high HIV/AIDS incidence areas. The survey was voluntary and anonymous and included 770 (27%) of 2,887 eligible surgeons. The participants reported practicing

a mean of 7.8 years since 1978 and, in the past year, performing a mean of 174 operating room procedures and sustaining a mean of three percutaneous injuries. One (0.14%) of 740 surgeons not reporting nonoccupational HIV risk factors was HIV seropositive. None of 20 surgeons reporting nonoccupational HIV risk factors were HIV positive. None of the participants not responding to the questions of nonoccupational risk factors was HIV positive.

One hundred twenty-nine surgeons had a pattern of HBV serologic markers indicating past HBV infection. Among participants, 418 (55%) reported receiving  $\geq 3$  doses of hepatitis B vaccine; of these, 88% had detectable levels of antiHBs. However, 199 surgeons (26%) had not received hepatitis B vaccine, and of these, 105 (53%) were susceptible to HBV infection. Seven surgeons were positive for anti-HCV.

These results do not indicate a high rate of previously undetected HIV infection among surgeons who practiced in moderate to high HIV/AIDS incidence areas. In addition, a substantial percentage of surgeons are susceptible to HBV infection and need to be vaccinated.

FROM: Panlilio A, et al. Serosurvey of HIV, HBV, and HCV among hospital-based surgeons. Abstracts of the First National Conference on Human Retroviruses and Related Infections. December 12-16, 1993; Washington, DC. Abstract 536.

### **Pediatric Emergency Departments -- Missed Opportunities for Measles Vaccination During Outbreaks**

The CDC's Division of Immunization reported the performance of two inner-city hospital pediatric emergency department (ED) immunization programs that were implemented during a measles outbreak.<sup>1</sup> The two pediatric EDs were located in urban Chicago and served primarily an indigent minority population. As part of outbreak control, measles vaccine was provided free of charge to both hospital EDs by the local health department and specific procedures were developed for the vaccination programs, including a triage nurse to obtain a parental history of vaccination and a nurse specifically hired to administer vaccinations. The study, reported in a recent issue of the *Journal of the American Medical Association*, found that 59% of the vaccine-eligible patients seen in the EDs were not vaccinated.

Some of the factors that may have adversely affected the success of these vaccination programs included misperceptions by healthcare providers about valid contraindications to vaccination and less aggressive screening of older children for vaccination history

because they should already be age-appropriately immunized.

Dr. Mary Lou Lindegren et al concluded that providing measles vaccination in EDs during community outbreaks may increase coverage among a hard-to-reach population and may be a cost-effective means of preventing ongoing transmission of measles and associated hospitalizations.

There also may be patients who have a history of vaccination who may be vaccine eligible. In a related study published in the same issue, Dr. Karen Goldstein et al from the Wyler's Children's Hospital, Chicago, found that immunization information provided by accompanying adults (from recall or from immunization cards) is inadequate to determine accurately which preschoolers in the pediatric emergency departments are delayed in childhood immunizations."

According to the CDC, no cases of measles were reported in the United States for three consecutive weeks (November 7 to November 27, 1993), representing the first three-week period without measles since reporting began in 1912.<sup>3</sup> However, this does not indicate that measles has been eliminated; previous low-level measles activity has been followed by resurgence. High vaccination coverage levels among preschool and school-aged children need to be achieved and sustained in all communities to ensure the elimination of endemic measles transmission.

#### REFERENCES

1. Lindegren ML, et al. Measles vaccination in pediatric emergency departments during a measles outbreak. *JAMA* 1993;270:2185-2189.
2. Goldstein KP, et al. Accuracy of immunization histories provided by adults accompanying preschool children to a pediatric emergency department. *JAMA* 1993;270:2190-2194.
3. Centers for Disease Control and Prevention. Absence of reported measles-United States, November, 1993. *MMWR* 1993;42:925-926.

### Distribution of HIV-Contaminated Blood Prompts Closer Monitoring of Blood Supply Programs

German health officials discovered in October 1993 that a small Germany blood supply company in Koblenz, UB Plasma, had distributed HIV-contaminated blood products to 88 hospitals and four companies in Germany. After it was determined that UB Plasma had knowingly failed to test all units of blood products for HIV prior to distribution, UB Plasma officials were arrested and the company has closed. The investigation began after German health officials noted that UB Plasma had sold 7,000 units of blood since 1992 but had purchased only 2,500 kits to screen for HIV.

The HIV scare spread rapidly beyond Germany when UB Plasma records showed shipments went to Austria, Greece, and Saudi Arabia, as well as to intermediary companies that may have sent products to France, the Netherlands, Britain, Portugal, Sweden, Italy, and Switzerland. A spokesperson for the U.S. armed forces stationed in Heidelberg has confirmed that no contaminated blood was given to Americans because they rely on their own blood sources, which are tested for HIV.

Some critics argue that the German system is fundamentally flawed because it makes use of for-profit companies that may be tempted to take shortcuts. This incident also has health officials in Germany and some other European countries questioning the practice of payment for blood donations because the money attracts drug addicts and others at high risk for HIV infection.

FROM: *Time* November 15, 1993; *New York Times* November 23, 1993.

### CDC Data Confirm Low Risk of HIV Transmission from HCW to Patient

At the First National Conference on Human Retroviruses and Related Infections in Washington, DC, December 12-16, 1993, the CDC reported data from an ongoing evaluation of the risk of HIV transmission from infected healthcare workers (HCWs) to patients. The CDC analyzed data from investigations of 60 infected HCWs (30 dentists/dental students, 13 surgeons or obstetrician/gynecologists [OB/GYNs], 13 physicians/medical students, and four other HCWs), excluding the Florida dental practice where six patients are believed to have acquired HIV from a dentist with AIDS. As of July 1993, HIV test results were known for 19,876 patients. Of these, procedure data were available for 2,850 patients, including 425 patients (of four dentists) who underwent periodontal, root canal, or oral surgery procedures; 838 patients (of three OB/GYNs) of whom 174 (21%) had vaginal deliveries, 155 (18%) had cesarean sections, and 134 (16%) had major gynecologic surgery; and 1,587 patients (of a breast surgeon and an orthopedic surgeon) who underwent an invasive procedure. No seropositive persons were found among 12,369 patients of 49 HCWs; 92 HIV-infected persons were found among 7,507 patients of the 11 remaining HCWs. Of these 92 patients, eight were infected prior to receiving care; six were under investigation; and 30 had HIV genetic sequencing analysis performed, including 14 (25%) of 57 with established risk factors and 16 (76%) of 21 without an identified risk. When complete