reported that, during the time under investigation, he had a thumbnail-sized wound on the medial side of the third finger of his right hand, sustained in mid-April 1998. He used a bandage for 3 or 4 days, but not thereafter, although the wound was still weeping. The assistant admitted to negligent behavior, but at the time he considered the open wound to be an old injury and was not aware that such an attitude might be risky for him and his patients. Between April 28, 1998, the day of surgery in patient 1, and June 9, 1998, the day of surgery in patient 6, the assistant participated in 39 operations. Between the time he went on sick leave because of acute hepatitis C and July 1998, another 118 operations were performed in the hospital; no further HCV infections occurred.

Numerous breaches of general infection control practices had taken place. For instance, needles were frequently recapped after use, and gloves were not always worn in settings in which exposure was likely. Multidose vials for flushing solutions, saline, local anesthetic drugs, and heparin were often used in the operating rooms, although the solutions were changed every second day. As a disinfectant for surfaces, the hospital used a product based on a peroxide compound (Dismozon pur, Bode Chemie, Hamburg, Germany) not recommended for areas grossly contaminated with blood.

This report provides evidence that a nonsurgical staff member infected with HCV transmitted the virus to at least five patients. The precise mechanisms leading to infection could not be determined. The only identifiable condition that might have caused the spread of the virus was the wound on the assistant's hand. Given the high plasma levels of HCV RNA in both patient 1 and the assistant, and given that the assistant usually did not wear gloves in the operating room, it is possible that a fraction of a microliter of blood or wound secretions might have transmitted HCV from patient 1 to the assistant and subsequently from him to the five other patients.

FROM: Ross RS, Viazov S, Gross T, Hofmann F, Seip HM, Roggendorf M. Transmission of hepatitis C virus from a patient to an anesthesiology assistant to five patients. *N Engl J Med* 2000;343:1851-1854.

Psychiatric Inpatients at Risk for HIV, TB, and Hepatitis

In a study of 655 men and women admitted to a psychiatric hospital between 1997 and 1999, the patients were 4.5 times as likely to have hepatitis B and 11.9 times as likely to have hepatitis C as those in the general public. The risk seems to be increasing. In 1997 they found that 19.9% of the cohort was infected with hepatitis C; by 1999 this figure rose to 28.4%. The researchers also found that 20.2% of patients tested positive for TB, which is four times the estimated rate in the general US population; the rate of HIV infection among the psychiatric patients was 2.8%, nine times that seen in the general population. "It was interesting that these patients, who are directly involved in the medical system, have very poor medical care—and less than 20% have regular medical doctors that they see," lead investigator Dr. W.F. Pirl, Harvard University, Boston, Massachusetts, said. He presented the findings at the annual meeting of the Academy of Psychosomatic Medicine, in Palm Springs, California.

Dr. Pirl told Reuters Health he was surprised by the high infection rates in the psychiatric inpatients. "I think prevention efforts need to give more attention to substance abuse treatment," he said, adding that psychiatric inpatients are often not tested for these diseases. "Some of the things you would think would make people be tested—such as a history of drug abuse—were not indicative of whether or not they had been tested. So, in general, we need to find better ways to integrate medical doctors into the care of chronic psychiatric patients," he concluded. "All of them have some medical issues, and it would be nice to develop a system where preventative healthcare was part of mental health systems instead of being separate."

FROM: ICAN News. Nov 21, 2000.

Rubella Outbreak: From Workplace to Community

The largest outbreak of rubella in the past 5 years occurred in Nebraska in 1999. To examine risk factors for disease, susceptibility of the risk population, role of vaccine failure, and the need for new vaccination strategies, a detailed investigation was conducted of the 83 confirmed rubella cases occurring in Douglas County, Nebraska, between March 23 and August 24, 1999. Case characteristics, compared with that of the general county population; area childhood rubella vaccination rates; and susceptibility among pregnant women before versus during and after the outbreak were the main outcomes measured.

All 83 rubella cases were unvaccinated or had unknown vaccination status and fell into three groups: (1) Fifty-two (63%) were young adults (median age, 26 years), 83% of whom were born in Latin American countries where rubella vaccination was not routine. They were either employed in meat-packing plants or were their household contacts. Attack rates in the plants were high (14.4/1,000 vs 0.19/1,000 for general county population). (2) Sixteen (19%), including 14 children (9 of whom were aged <12 months) and two parents, were US-born and non-Hispanic, who acquired the disease through contacts at two day-care facilities (attack rate, 88.1/1,000). (3) Fifteen (18%) were young adults (median age, 22 years) whose major disease risk was residence in population-dense census tracts where meat-packing–related cases resided ($R2=0.343$; $P<.001$); 87% were born in Latin America. Among pregnant women, susceptibility rates were 13% before the outbreak and 11% during and after the outbreak. Six (25%) of 24 susceptible women tested were seropositive for rubella IgM. Rubella vaccination rates were 90.2% for preschool children and 99.8% for school-aged children.

A large rubella outbreak occurred among unvaccinated persons in a community with high immunity levels. Crowded working and living conditions facilitated transmission, but vaccine failure did not. Workplace vaccination could be considered to prevent similar outbreaks.

FROM: Danovaro-Holliday MC, LeBaron CW, Allensworth C, Raymond R, Borden G, Murray AB, et al. A