Tested to a specified maximum loading level (200 mg), the N- and R-series will be certified with the recognition that in some settings time-use limitations will apply. A single shift time limitation, for example, may be appropriate. In addition to possible time-use restrictions, the N-series filters should be restricted to use in those workplaces free of oil or other severely degrading aerosols. The R-series filters would not have similar aerosol-use restrictions. The P-series filters will be tested with DOP until no further decrease in filter efficiency is observed. The P-series filters have neither aerosol-use nor time-use limitations. As for any filter, service time will be limited by considerations of hygiene and increased breathing resistance due to filter loading.

The final rule differs from the proposal (59 FR 26850) in eight ways. These changes are summarized

in Table 2. This final rule was effective on July 10, 1995.

For further information contact Richard W. Metzler, Chief, Certification and Quality Assurance Branch, Division of Safety Research, NIOSH, 1095 Willowdale Rd, Morgantown, WV 26505-2888; telephone (304) 285-5907. Copies of this final rule may be downloaded from the NIOSH World Wide Web page (http://www.cdc.gov/niosh/homepage.html) or may be obtained by calling the NIOSH toll-free information number, (800) 35-NIOSH, option 5, 9:00 AM to 4:00 PM, ET). Arrangements also have been made for this final rule to be listed on the electronic bulletin boards of the Government Printing Office, (202) 512-1387, and the Department of Labor, (202) 219-4784.

Hepatitis B Linked to Cryopreservation Tank

by Gina Pugliese, RN, MS Medical News Editor

A contaminated cryopreservation tank has been identified as the source of infection of a cluster of six cases of acute hepatitis B that occurred at the University College Hospital in London, England. The six patients, whose stays in the hospital did not overlap, all had hematologic or other malignant disorders and had bone marrow or stem cells stored in a single cryopreservation tank for future autologous transplantation. Human DNA, HBsAg, and HBV DNA with sequences identical to those from four patients with related infections subsequently were found in the liquid nitrogen. Leakage of the cryopreservation bags used to store bone marrow harvested from the first patient during acute HBV infection led to contamination of the tank and

its contents with HBV and subsequent transmission to patients after transplantation.

FROM: Tedder RS, Zuckerman MA, Goldstone AH, et al. Hepatitis B transmission from contaminated cryopreservation tank. *Lancet* 1995; 346:137-140.