part of the vaccinated employee. Two of these cases included a physician and a nurse of a dialysis unit. The reason they did not develop antibody was unknown. The third instance involved a pathologist who did not refrigerate the vaccine between doses. (The vaccine should be kept refrigerated and is sensitive to freezing and room temperatures.)

In summary, most hospitals in Salt Lake County have established programs that offer Heptavax to high-risk employees. Since we surveyed the hospitals in December 1983, two additional hospitals have begun programs. The vaccine is provided free for those at high-risk by five of nine established programs. As of December 1983, approximately 30% of employees thought to be at high-risk received the vaccine through these programs. Observed side effects have been few (2.0%) and self-limiting.

Hospitals offering vaccine at no

charge to high-risk employees have not convinced even the majority of those employees to accept the vaccine. Because of limited acceptance of the vaccine, the costs of offering free vaccine may be rather modest.

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Risk of Hepatitis B. **Acquisition Among Hospital Staff**

To the Editor:

As Hadler et al have reported, 1 risk

of hepatitis B acquisition by staff may not be uniform among all hospitals. Vaccination of occupationally-defined risk groups may not be a cost-effective nor even a necessary measure in centers with very low levels of inherent risk. Personnel practices minimizing exposure potential, provision of lowrisk services and/or procedures, serving a low-risk patient population, and/ or other factors may produce a low level of inherent risk attributed to some community hospitals in comparison with metropolitan centers.

One strategy to measure risk of hepatitis B acquisition that may be readily applied in any hospital relies upon data produced routinely by employee health services.² Serologic profiles on over 40 of our staff have been acquired in determining their eligibility for treatment following needlestick-type exposures. Knowing their duration of employment exposure prior to their exposure incident, this can be compared to expected serologic marker prevalence for various rates of conversion incidence. Having allowed our "high-risk" staff to sample itself in this manner, our results do not suggest a need for changing from a strategy stressing hygienic precautions augmented by treatment after exposure incidents. Vaccination is neither costeffective nor necessary based upon our own experience. While this conclusion may not apply to other community hospitals, this study approach may be helpful in reaching a decision. Hygienic precautions to block transmission of hepatitis B, AIDS, and other infections are fundamentally important. The cost-effectiveness of active immunization of "high-risk" groups should be considered carefully, especially in institutions with a low incidence of hepatitis B among staff and low rates of staff turnover.

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