plier to deal with, and an enormous reduction of workload for the ICP, but has the disadvantages of a delay in availability and an incomplete match of patients to those seen by the ICP The latter would not have occurred in an "on-line" situation.

The electronic linking of laboratory data to hospital discharge data would further improve the quality of NI surveillance.

REFERENCES

- Verbrugh HA, Mintjes-de Groot AJ, Verkooyen RPAJ. Registratie en preventie van ziekenhuisinfecties in een algemeen ziekenhuis. Ned Tijdlwhr Geneeskd 1990;134:490-495.
- 2. Michel MF, Priem CC. Positive blood cultures in a university

- hospital in The Netherlands. Infection 1981:9:283-289.
- Anonymous. Preventie en bestrijding van ziekenhuisinfecties. Rapport Gezondheidsraad: Den Haag, The Netherlands; 1990:20.
- Haley RW, Culver DH, White JW, et al. The efficacy of infection surveillance and control programs in preventing nosocomial infections in US hospitals. Am J Epidemiol 1985;121:182-205.
- Garner JS, Jarvis WR, Emori TG, et al. CDC definitions for nosocomial infections. Am JInfect Control 1988;16:128-140.
- Efron B. The Jackknife, the Bootstrap, and Other Resampling Plans. CBMSNSF Regional Conference Series in Applied Mathematics. no 38. Philadelphia, PA Society for Industrial and Applied Mathematics; 1982.
- 7. Mertens R, Berg JMJ van den, Veerman-Brenzikofer MLV, Kurz X, Jans B, Klazinga N. International comparison of results of infection surveillance: The Netherlands versus Belgium. *Infect Control Hosp Epidemiol* 1994;15:574-580.

TB Skin-Test Conversion Rates Among Exposed Hospital Workers

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A 4-year retrospective cohort study was conducted from January 1989 to December 1992 among employees at a large metropolitan hospital where a nosocomial outbreak of multidrug-resistant TB had occurred. The risk of tuberculin skintest (TST) conversion among employees who worked on wards where patients with culture-confirmed TB were cared for (exposed) was compared with the risk among employees who worked on wards with no such patients (unexposed).

Exposed employees had a higher 4-year risk of TST conversion (14.5%) than unexposed employees (1.4%; adjusted relative risk, 13.4; Cl₉₅, 5.1-35.2). Exposed employees had significantly higher risks of conversion than unexposed employees from 1989 through 1991, but not for 1992. Among the exposed, ward clerks had a risk of conversion (15.6%) only slightly lower than nurses (18.2%).

The authors concluded that employees who worked in areas where patients with active *Mycobacterium tuberculosis* infection were cared for, including workers

who did not provide direct patient care, had a higher risk of TST conversion than employees who did not work in these areas. Reasons for the decline in risk over time include outbreak termination, fewer admissions of patients with TB, implementation of effective infection control measures, and possible resistance to infection in some members of the study population.

FROM: Boudreau AY, Baron SL, Steenland NK, Van Gilder TJ, Decker JA, Galson SK et al. Occupational risk of *Mycobacterium tuberculosis* infection in hospital workers. *Am J Ind Med* 1997;32:528-534.