

# Occupational Exposure to Electromagnetic Fields and the Occurrence of Brain Tumors

## An Analysis of Possible Associations

Ruey S. Lin, M.D., Dr. P.H.; Patricia C. Dischinger, Ph.D.; Jose Conde, M.D., M.P.H.; and Katherine P. Farrell, M.D., M.P.H.

To explore the association between occupation and the occurrence of brain tumor, an epidemiologic study was conducted using data from the death certificates of 951 adult white male Maryland residents who died of brain tumor during the period 1969 through 1982. Compared with the controls, men employed in electricity-related occupations, such as electrician, electric or electronic engineer, and utility company servicemen, were found to experience a significantly higher proportion of primary brain tumors. An increase in the odds ratio for brain tumor was found to be positively related to electromagnetic (EM) field exposure levels. Furthermore, the mean age at death was found to be significantly younger among cases in the presumed high EM-exposure group. These findings suggest that EM exposure may be associated with the pathogenesis of brain tumors, particularly in the promoting stage.

Journal of Occupational Medicine/Vol. 27, No. 6/June 1985