

A B S T R A C T

AN HISTORICAL PROSPECTIVE MORTALITY STUDY
OF THE SARNIA DIVISION OF
DOW CHEMICAL CANADA INC.
SARNIA, ONTARIO
(1950-1984)

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The mortality experience of 3,479 male Dow Canada employees who were employed at Sarnia Division for at least 12 continuous months during the years 1945 through 1983 was examined. Mortality ascertainment was obtained utilizing the Canadian Mortality Data Base maintained by Statistics Canada and covered the years 1950 through 1984. Cause-specific mortality analyses were accomplished using male, age and calendar-year adjusted death rates for Canada and the province of Ontario. Total mortality was observed to have been significantly below expectation whether the entire follow-up period (240 observed vs. 366.9 expected) or a 15-year latency period (171 observed vs. 290.4 expected) was considered. Statistically significant fewer observed deaths were found for all respiratory cancer, cancer of the bronchus and lung, circulatory disease, ischemic heart disease, cerebrovascular disease, digestive disease, cirrhosis and other liver disease and deaths due to accidents, poisonings and violence. The observation of three deaths due to mesothelioma, a rare cancer often associated with asbestos exposure, was a significant finding as was a statistically significant elevation of observed deaths in the category "other forms of heart disease".

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