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TITLE: An Abstract of Factors Associated with Fatal Accident Involvement Among California Drivers

DATE: December 1981

AUTHOR(S): Marilee E. Garretson & Raymond C. Peck

REPORT NUMBER: 79.1

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## **PROJECT OBJECTIVE:**

To identify possible factors of fatal accident causation and to isolate common patterns or characteristics for use in developing accident countermeasures.

## **SUMMARY:**

The primary objectives of this study were to examine characteristics of drivers involved in fatal accidents and to determine if those drivers could be distinguished from California's general driving population on the basis of prior driving record. A sample of drivers involved in 1970-71 fatal accidents was analyzed and compared to a sample of drivers from the general driving population licensed during the same time period. The accident-group analyses indicated moderate ability to identify fatal accident types (e.g., alcohol-related vs. nonalcohol, night vs. day) that could be differentiated on the basis of the driver's prior characteristics. Specifically, drivers who had been drinking prior to the accident, who were considered "at fault" for the accident, or whose accident occurred at night were found to have worse prior driving records than other fatal accident-involved drivers. The results also indicated that, as a group, drivers involved in fatal accidents evidenced worse violation and/ or accident records than drivers in the general population, as well as different demographic and license characteristics. However, the classification functions derived to predict fatal accidents did not differ greatly from regression equations that have been constructed to predict total accidents. It was therefore concluded that prediction systems keyed to total accidents will, to a large extent, also identify drivers who have a high risk of having a fatal accident.

## **IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:**

The results were generally supportive of the Department's criteria for identifying and acting against high-risk drivers. No changes have been implemented to date.

## **SUPPLEMENTARY INFORMATION:**

This report was also published, in a slightly revised form, in *Journal of Safety Research*, 13(4), 141-156, 1982.