PATTERNS OF HELMET USE AMONG SAN FRANCISCO BAY AREA MOTORCYCLISTS

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Objectives The objectives of this study were to describe the methods used in a survey of San Francisco Bay Area motorcyclists, the patterns of helmet use among respondents, and the associations between personal characteristics and helmet types chosen by motorcyclists.

Methods Out of 860 San Francisco Bay Area motorcyclists, 269 were sampled at recreational riding areas, 549 were sampled by leafleting motorcycles parked in public areas in 5 SFBA cities and 42 were sampled by postings on motorcycling Internet venues. Multiple imputation by chained equations was used to address missing values. Multivariable analysis was conducted using ordinal logistic regression, with the primary response variable being adequate helmet usage. Covariates included age, sex, motorcycle type, riding experience, riding frequency, annual miles ridden, primary purpose of riding, and sample method.

Results Seventy-one percent were always adequately helmeted while 3% were never adequately helmeted. Being African American (OR 2.8), riding a Cruiser motorcycle (OR 2.7) and riding for more than 10 years were associated with higher frequency of inadequate helmet use, while riding a Sport motorcycle was associated with decreased odds of inadequate helmet use (OR 0.44).

Conclusions This study has identified characteristics of riders who lack adequate helmet protection. These results may aid in designing targeted education or injury prevention programs to increase and improve helmet use.