

ALCOHOL USE & TRAUMA RECIDIVISM

RESEARCH QUESTION



In patients with more than one admission to the emergency department of a hospital or trauma center, what proportion is related to alcohol use?

SIGNIFICANCE



- Alcohol use is thought to be associated with increased risk of repeated injury; however, the global scale of alcohol-related trauma recidivism is unclear.
- Objective of this study:** To determine the prevalence of trauma recidivism related to alcohol use by synthesizing evidence from the published literature.

METHODS



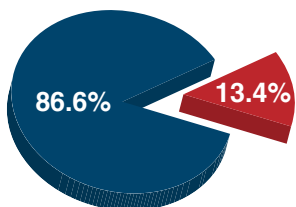
- We performed a systematic review of MEDLINE, Embase, CINAHL, Web of Science, and grey literature for studies of alcohol use in repeat trauma cases.
- Descriptive statistics were used to assess the prevalence of trauma recidivism related to alcohol use and any factors found to be associated with recidivism.

RESULTS



Articles Screened	Studies Included	Patients (Total)	Recidivists (Total)
2,470	12	25,207	3,386

ALL TRAUMA CASES

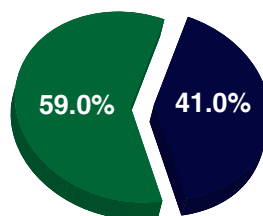


13%

of trauma cases are repeat presentations

- Single presentation
- Repeat presentations

RECIDIVISM CASES



41%

of recidivism cases involved alcohol use

- Alcohol involvement
- No alcohol involved

ASSOCIATION BETWEEN ALCOHOL USE AND TRAUMA RECIDIVISM

For patients with positive alcohol on admission:

Study 1: Relative risk of recurrent MVC = 3.73, 95% CI 3.00–4.64

Study 2: Hazard ratio for recurrent TBI = 2.51, 95% CI 1.38–4.56

Study 3: Relative risk of recurrent TBI = 4.41, 95% CI 1.53–12.70

TAKE HOME MESSAGE



While our findings suggest 41% of trauma recidivism is related to alcohol use, **ACTUAL RATES** are likely higher as some trauma patients present at different centers, fail to seek health care, or die prehospital.

