

# 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



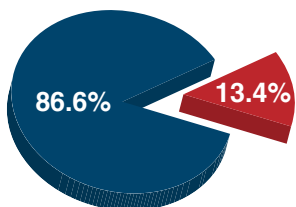
- We performed a systematic review of MEDLINE, Embase, CINAHL, Web of Science, and grey literature for studies of alcohol use in repeat trauma cases.
- Descriptive statistics were used to assess the prevalence of trauma recidivism related to alcohol use and any factors found to be associated with recidivism.

## RESULTS



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

### ALL TRAUMA CASES

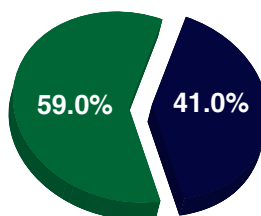


**13%**

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.

