



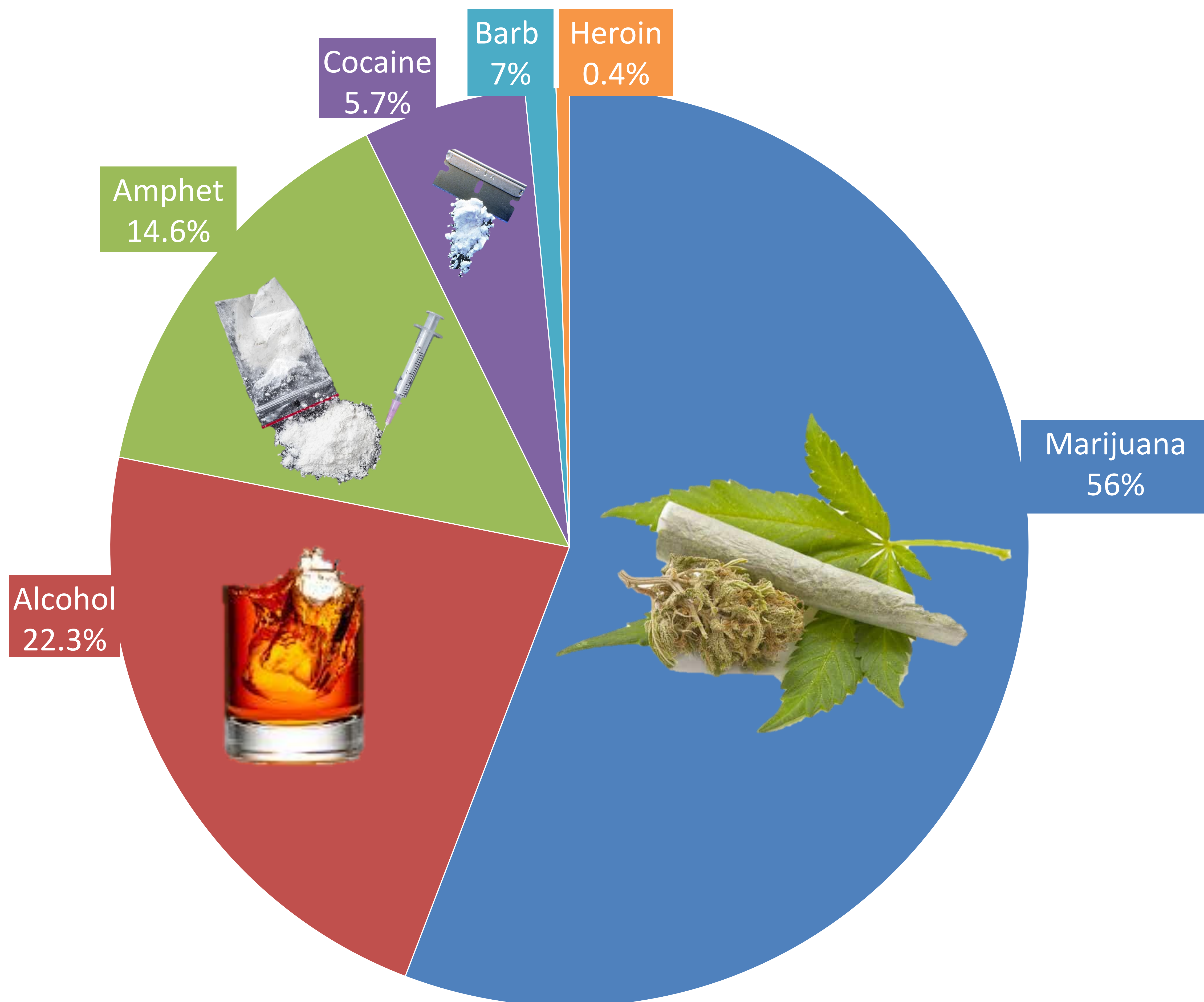
Marijuana and Drugs of Abuse: Impact on Clinical Outcomes in Burn Injury



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Conclusion

- **48%** of burn admissions are positive for marijuana and other drugs of abuse.
- Patients positive for marijuana have a significant increase in wound infections.
- Alcohol positive patients continue to have a more complicated hospital course, longer length of stay and overall poorer outcomes.
- Marijuana is now the most common drug of abuse in burn patients in Colorado.



Introduction

Alcohol has been shown to increase hospital length of stay, complications and mortality in burn patients in studies examining its effects over the past 25 years.

The primary aim of this study is to evaluate the clinical outcomes of marijuana use on burn patients in comparison to other drugs of abuse including alcohol.

Methods

A retrospective cohort study was conducted on **875 burn patients** admitted to a verified burn center from July 2015 to July 2019.

The primary comparison was between patients with and without a positive toxicology (tox) screens on admission.

Results

Toxicology screens were positive in 48% (423) of burn admissions:

Alcohol positive tox screens were significant for increased:

- Hospital length LOS ($p=0.0121$)
- ICU LOS ($p=0.0166$)
- Ventilator days ($p=0.0324$)
- Number of operations ($p=0.0341$)
- Complication rates ($p=0.0005$)

Marijuana positive tox screens

- Increased wound infections ($p=0.0476$)
- Significantly younger ($p<0.0001$)

Positive drug, but negative alcohol screens:

- Hospital LOS ($p=0.029$),
- Hospital complications ($p=0.0251$),
- Wound infections ($p=0.04$).

Future Directions

- There is a clear association between worse outcomes and patients presenting with positive tox screens.
- Narcotics Anonymous and Alcohol Anonymous groups started within burn centers may improve long term outcomes and decrease recidivism.

