

## BACKGROUND

University Medical Center (UMC) has been maintaining data in a Trauma Registry for over 20 years. As the only Level 1 Trauma Center in Nevada, UMC sees the most severely injured, many of whom obtain their injuries through violent means (Gun Shot Wounds, Stabbings, and Blunt Assaults). We also track data for patients with other injury mechanisms, including but not limited to ATV accidents and auto versus pedestrians. This data is abstracted to spreadsheets for month to month and year to year comparison to identify trends and was used to facilitate the building of the pedestrian bridges we have downtown. The year 2020 was unlike any in recent history and anecdotally it seemed to bring patients in with increased numbers of certain injury mechanisms and amputations.

## PURPOSE

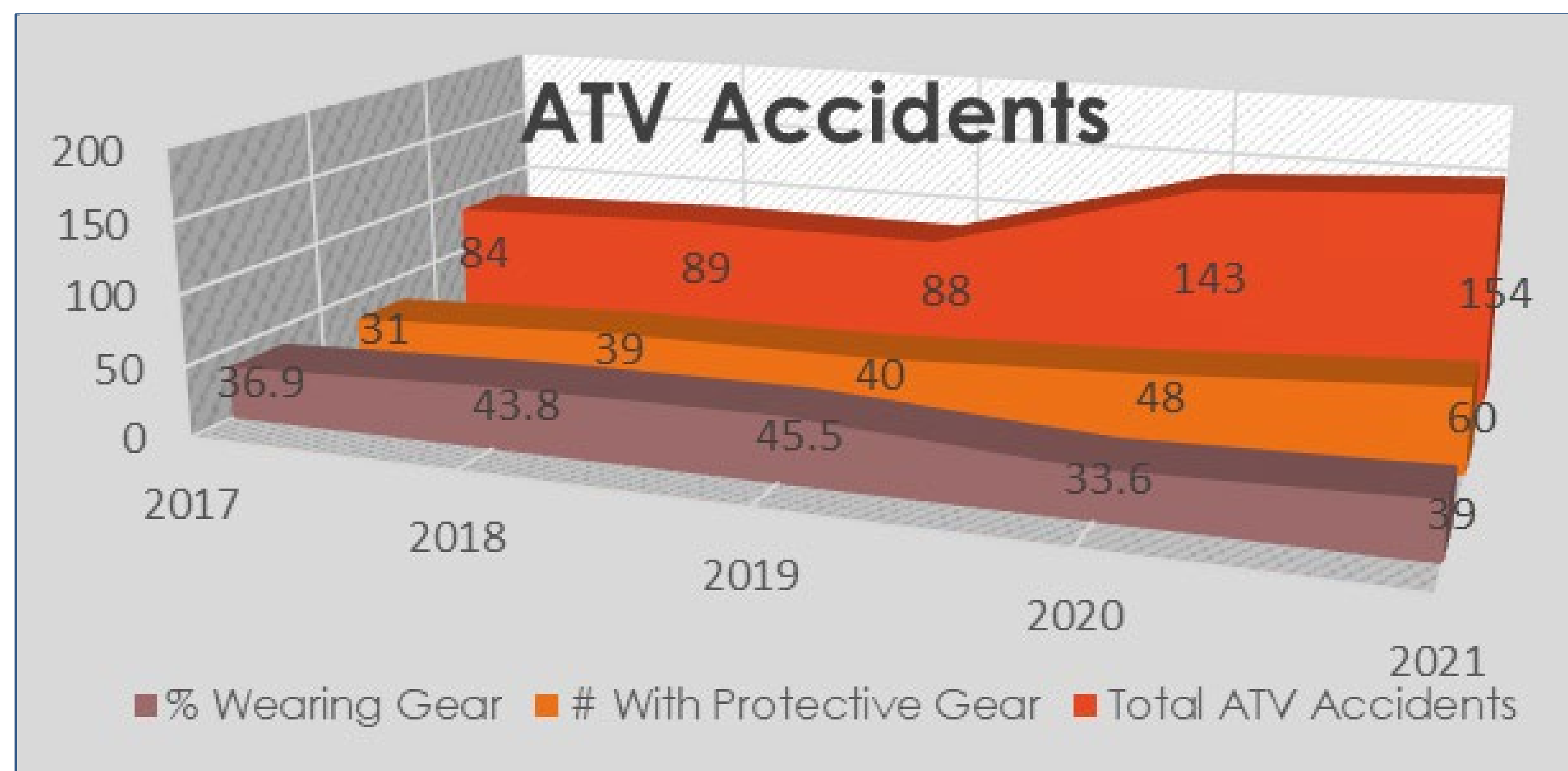
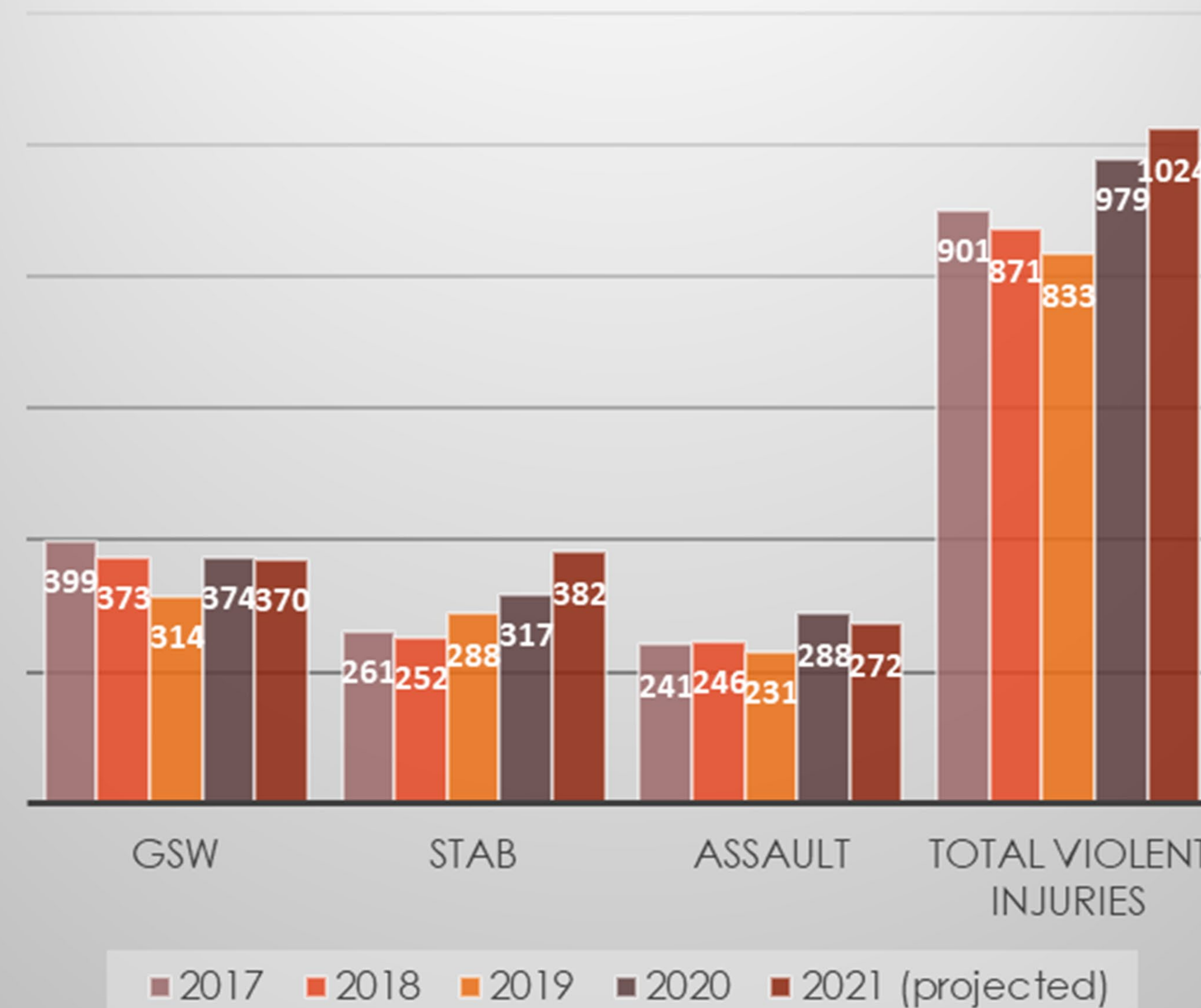
To answer two questions.

- Was there a difference in the injury mechanisms seen at UMC in 2020 when compared to other years?
- Did we see more traumatic amputations caused by ATV accidents?

## METHODS

- 4.5-year retrospective review of violent injury mechanisms and ATV trauma volumes at UMC per reports produced trauma registry.
- Traumatic amputation injuries caused by ATV accidents was manually abstracted for each year.
- 2021 data was projected based on patient volume and injury mechanisms from January to June.

## Injuries Caused through Violent Means



## RESULTS

The total number of patients seen with violently caused injuries in 2020 was 979, higher than any year we have on record and an 8.7% increase when compared to 2017 (the previously highest year for violent injuries). Our projection for 2021 has us seeing 1,024 patients with those types of injuries. ATV injuries seen in 2020 increased to 143, a 62% increase from previous years and is projected to reach 154 in 2021. We did not find a significant increase in amputations, but did find that the use of protective equipment decreased in 2020, with just 33.6% of patients with ATV injuries wearing some form of protective gear. In 2019 protective gear use was 45.5%, in 2018- 43.8% and in 2017- 36.9%. This could suggest an increase in reckless behavior in 2020.

## CONCLUSIONS

2020 was a year that did bring patients with injuries from an increased number of violent and ATV related injury mechanisms. Based on data collected thus far, this trend looks like it will continue in 2021. We also saw a decrease in the percentage of people wearing protective gear during the high risk activity of riding an ATV. More data will be needed to make any concrete conclusions in regards to 2020 being the beginning of a trend, or a year that stands on it's own.

## REFERENCE

NTRACS V5 Trauma Registry [Computer software]. (2021). Retrieved from UNTRACS network drive.

