

Locked In: The Impact of Pandemic on Suicide

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Background

For patients with self-harm, suicide attempt or completion, the trauma bay is often a single point of contact.

With the recent analysis of our trauma center's 10 year suicide rates, the aim of this study was to determine the effects of the pandemic on the rates of suicide during the year of 2020 and directly compare to pre-pandemic.

Objective

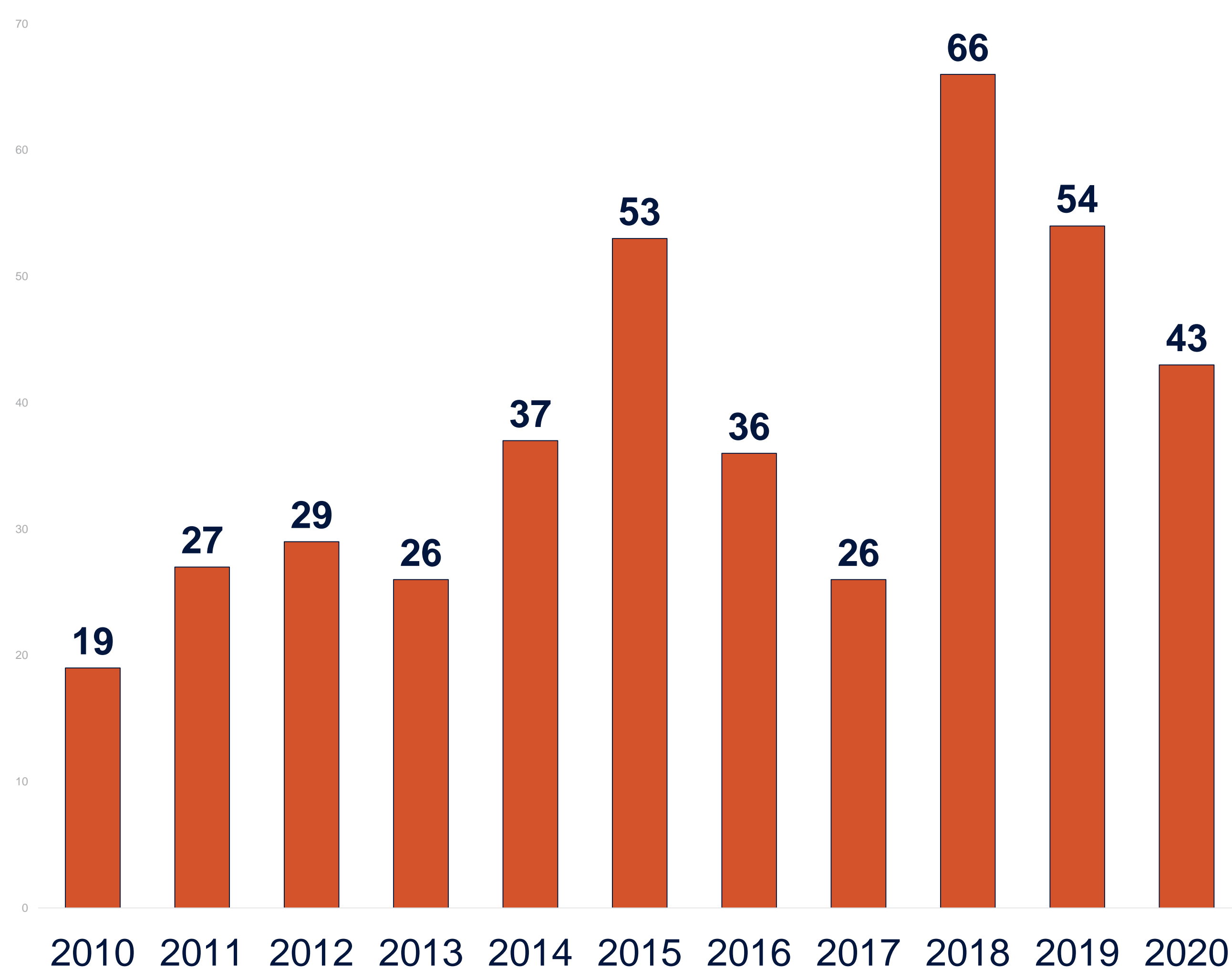
To examine the impact of the pandemic on suicide rates within our Level 1 Trauma Center's catchment area.

Methods

Retrospective Review of February 2020 through December 2020. Comparative studies to our prior 10 year suicide study (2010-2019).

Results

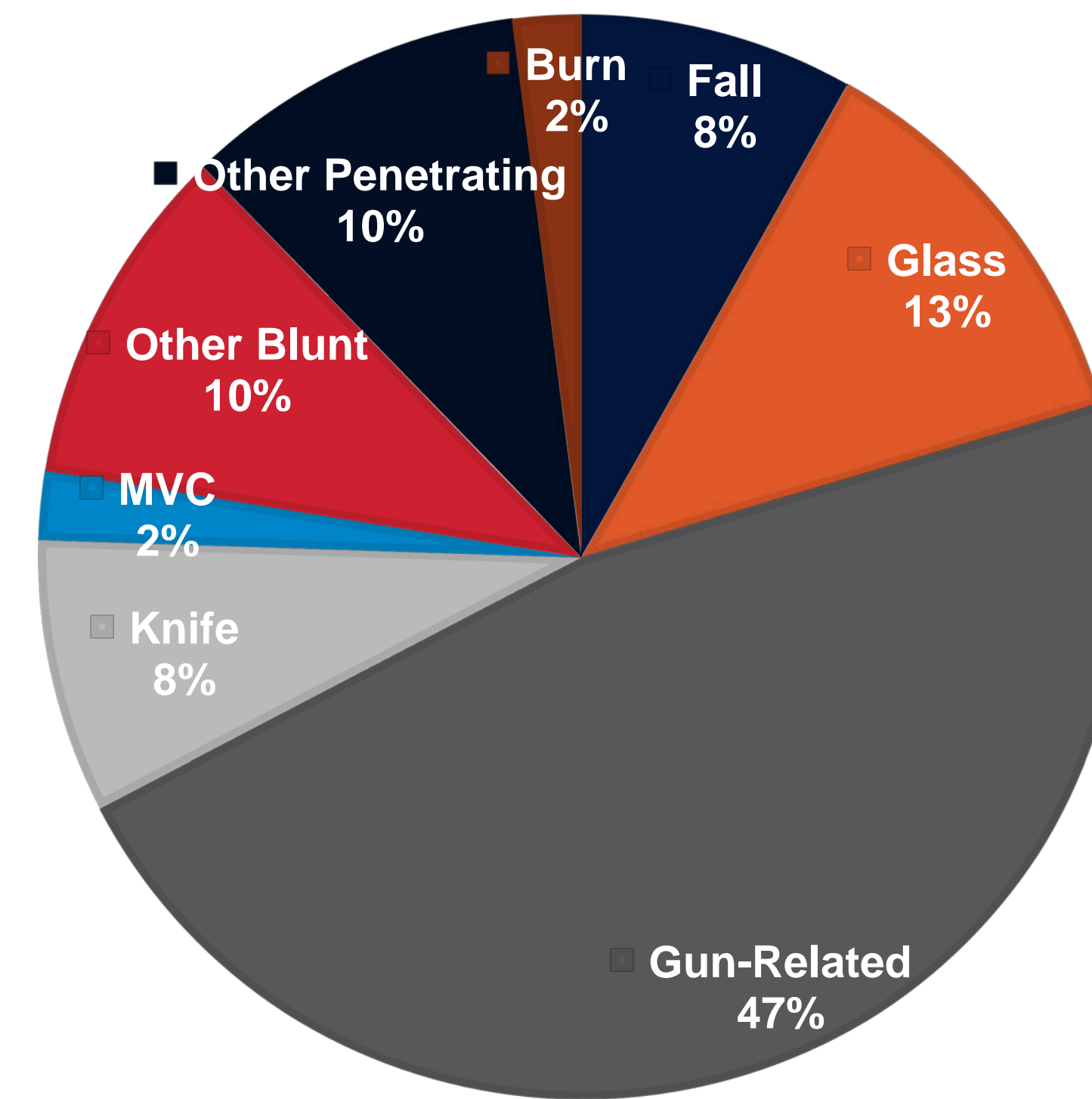
ANNUAL INCIDENCE OF SUICIDES



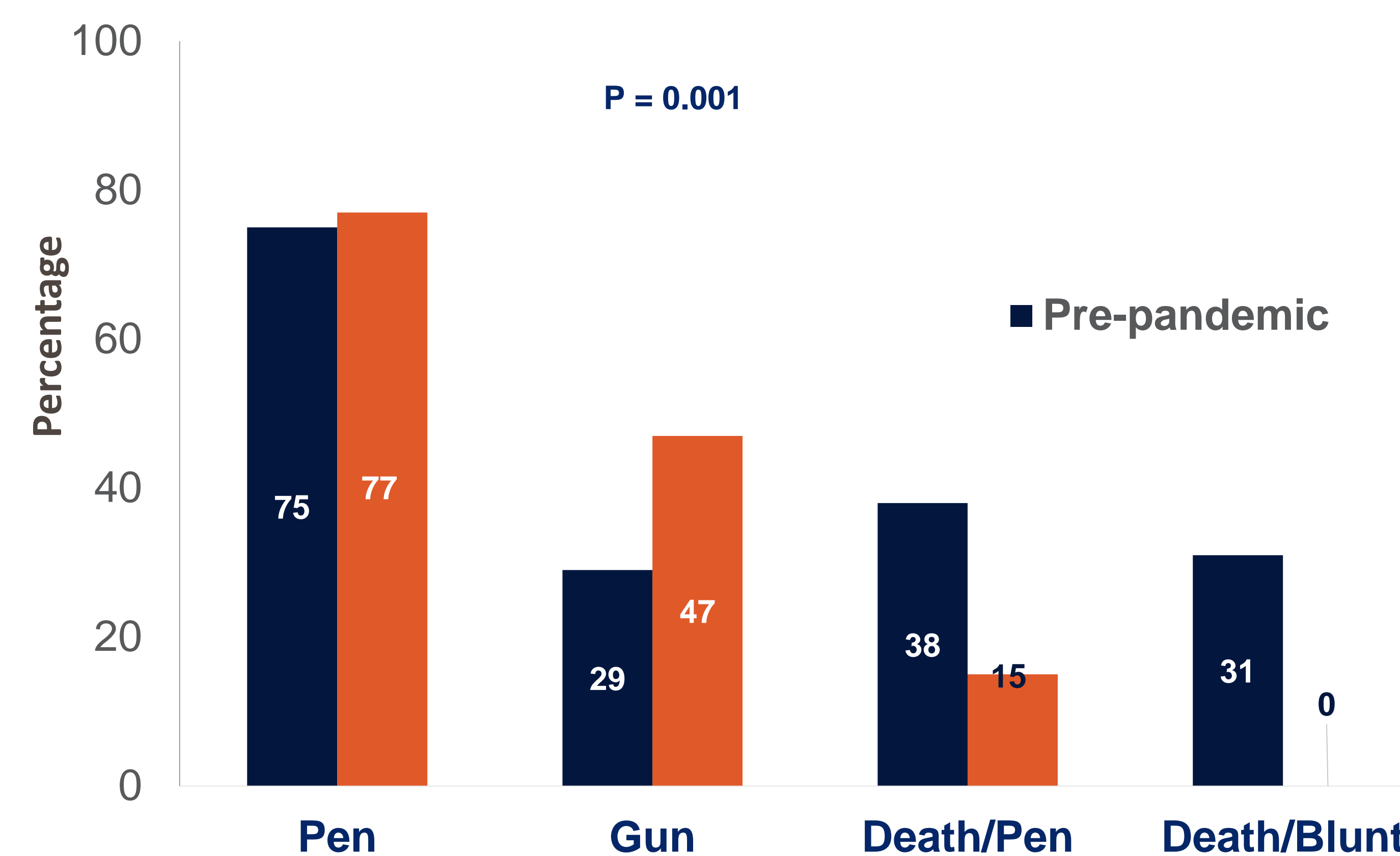
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Results

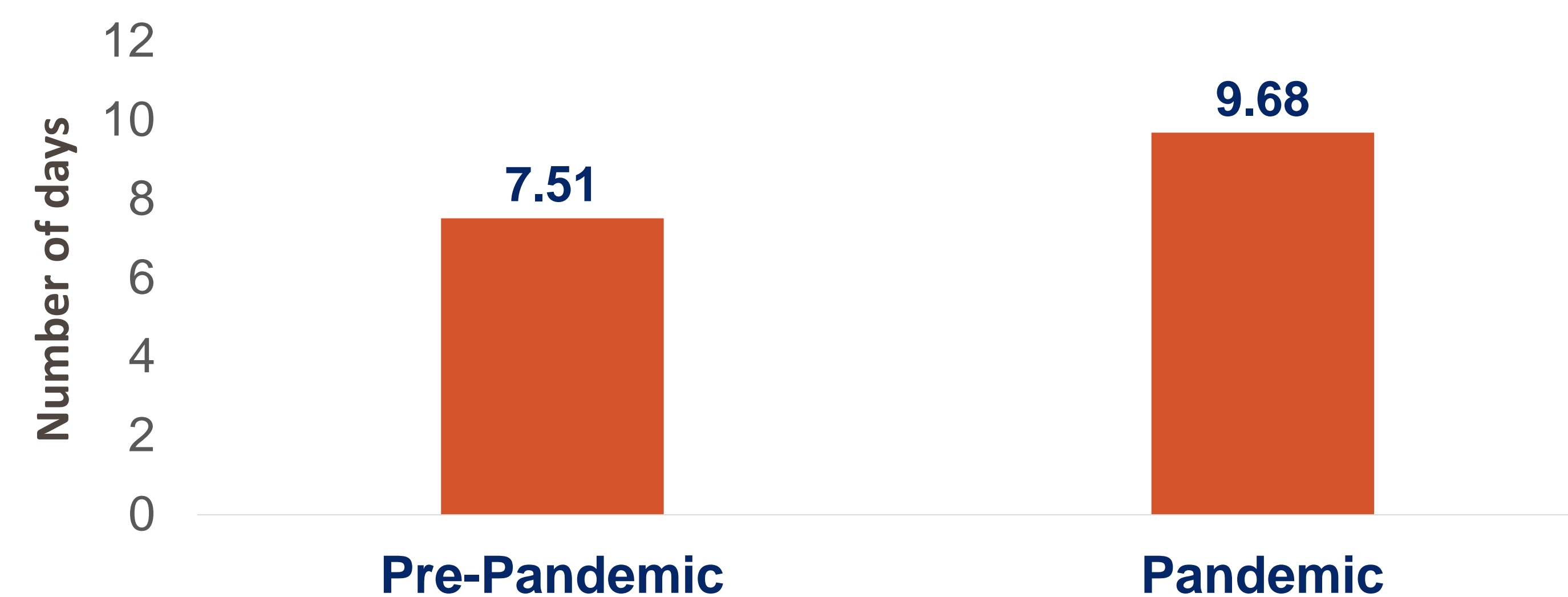
SUICIDE MECHANISM OF INJURY DURING 2020



MECHANISM AND MORTALITY



HOSPITAL LENGTH OF STAY



Discussion

- The effect of the COVID19 pandemic did not increase overall number of suicides when compared to the previous ten years, but it did change how suicides were performed. Our data demonstrates increased gun related suicides during the COVID19 pandemic.
- Suicide related drug use was also increased.
- Mechanism of injury in both studied populations were primarily penetrating with 77% in the pandemic population and 75% in the pre-pandemic arm. Penetrating gun violence was significantly higher during the COVID19 pandemic with 47% compared with 29% during the prior 10 year analysis (p = 0.001).
- If attempted suicide was by penetrating mechanism including glass, knife, or gun, there was an increased rate of death when compared to blunt mechanisms with (15% for penetrating vs. 0% in blunt mechanisms during pandemic; 38% for penetrating vs. 31% in blunt mechanisms during pre-pandemic analysis).
- All suicide deaths during the pandemic were by gun mechanism.
- Inpatient hospitalization was significantly prolonged at 9.68 days compared to 7.51 days.

Conclusion

- While overall suicide rates did not increase, gun mechanism did increase as well as drug related suicides.
- Hospital length of stay significantly increased
- All suicide deaths were by gun mechanism.
- Programs that target mental health during periods of isolation should be targeted in the future.

References

References available upon request from author.

