



TEXAS
Health and Human
Services

**Texas Department of State
Health Services**

Emergency Medical Services and Trauma Registries (EMSTR) Program Updates and Texas Trauma Deaths Over Time

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EMSTR Updates

- 2024 EMS and trauma datasets:
 - EMS – 4,990,859 total unique records.
 - Trauma – 193,056 total records.*
- Sex variable updates.
- Quarterly data requests and data sharing.

*Total unique trauma records are subject to change when final dataset is available.



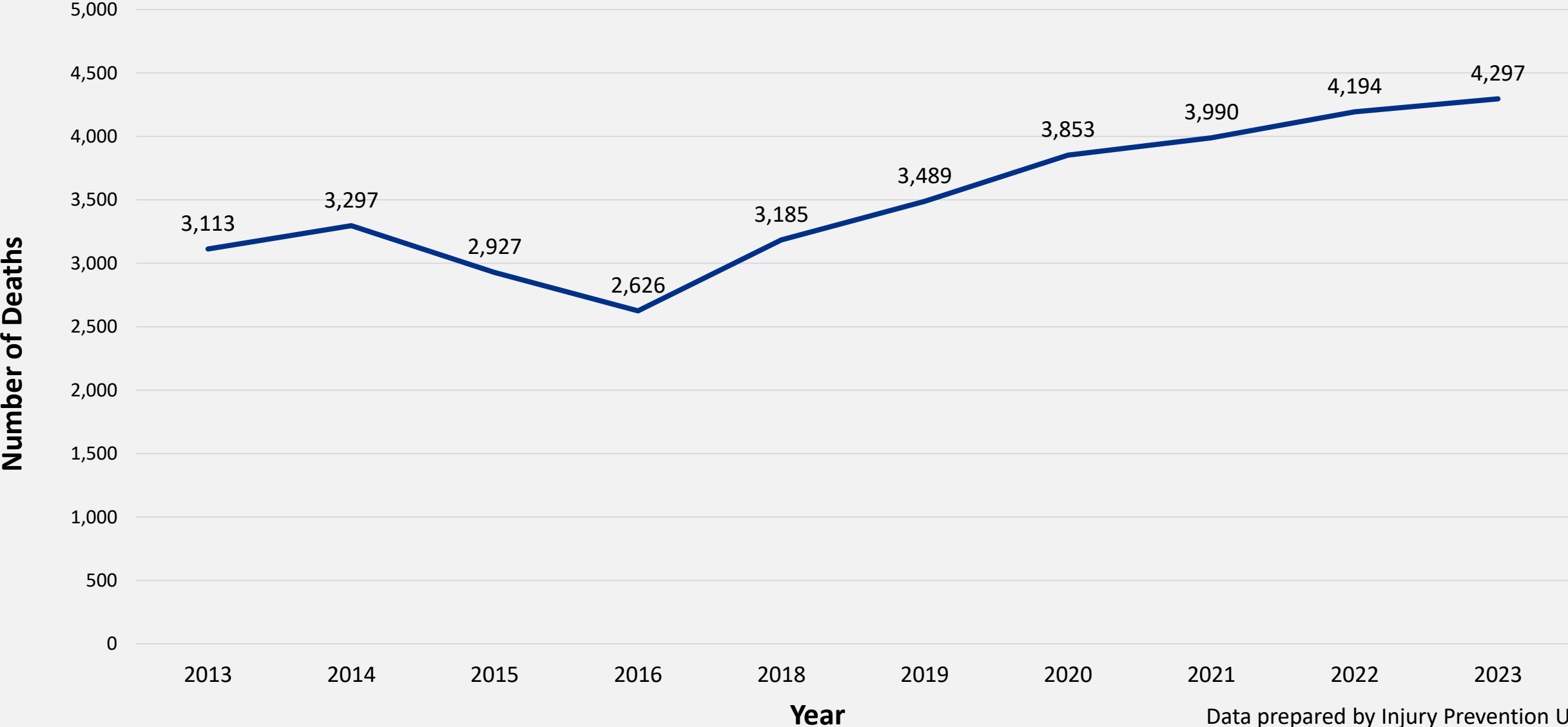
About EMSTR and Presentation Data

- EMSTR collects reportable event data from EMS providers, hospitals, justices of the peace, medical examiners, Long Term Acute Care (LTAC) facilities, and rehabilitation facilities.
- All submitters must report all runs and reportable trauma events to EMSTR under Texas Administration Code, Title 25, Chapter 103.
- Urban, rural, and frontier data was based on rural/urban criteria from the Texas Demographic Center Texas populations estimate:
 - Urban included large central metro, large fringe metro, medium metro, and small metro areas.
 - Rural included micropolitan (10,000-50,000 people) and noncore (<10,000 people) areas.
 - Frontier was defined as six or less people per square mile.
- For some data, 2013, 2014, and 2017 data were unavailable due to data standard changes and variable availability.

Texas Transfer Deaths Over Time 2013-2023

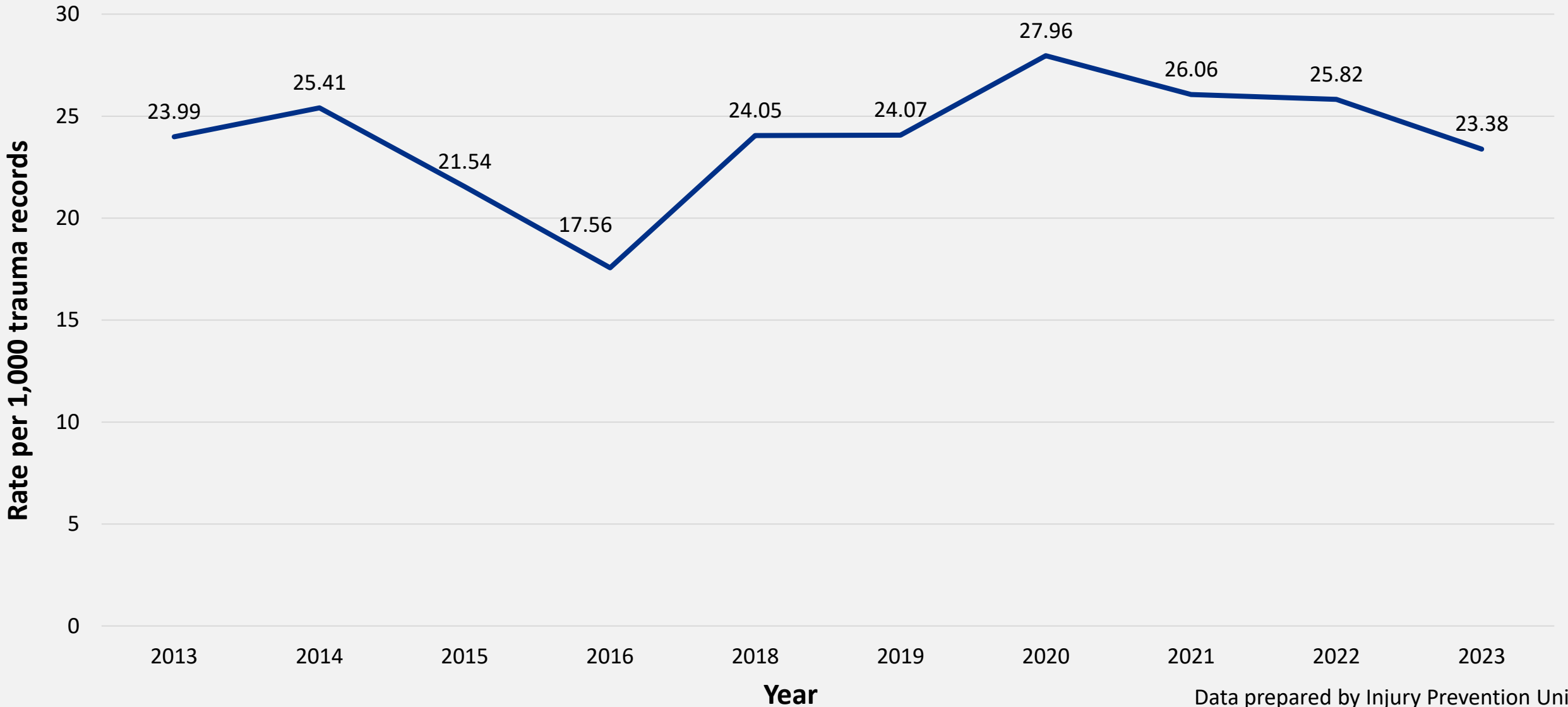


Total Trauma Deaths, Texas, 2013-2023



Data prepared by Injury Prevention Unit
Epidemiologists using EMSTR data, April 2025.

Trauma Death Rate, Texas, 2013-2023



Data prepared by Injury Prevention Unit
Epidemiologists using EMSTR data, April 2025.

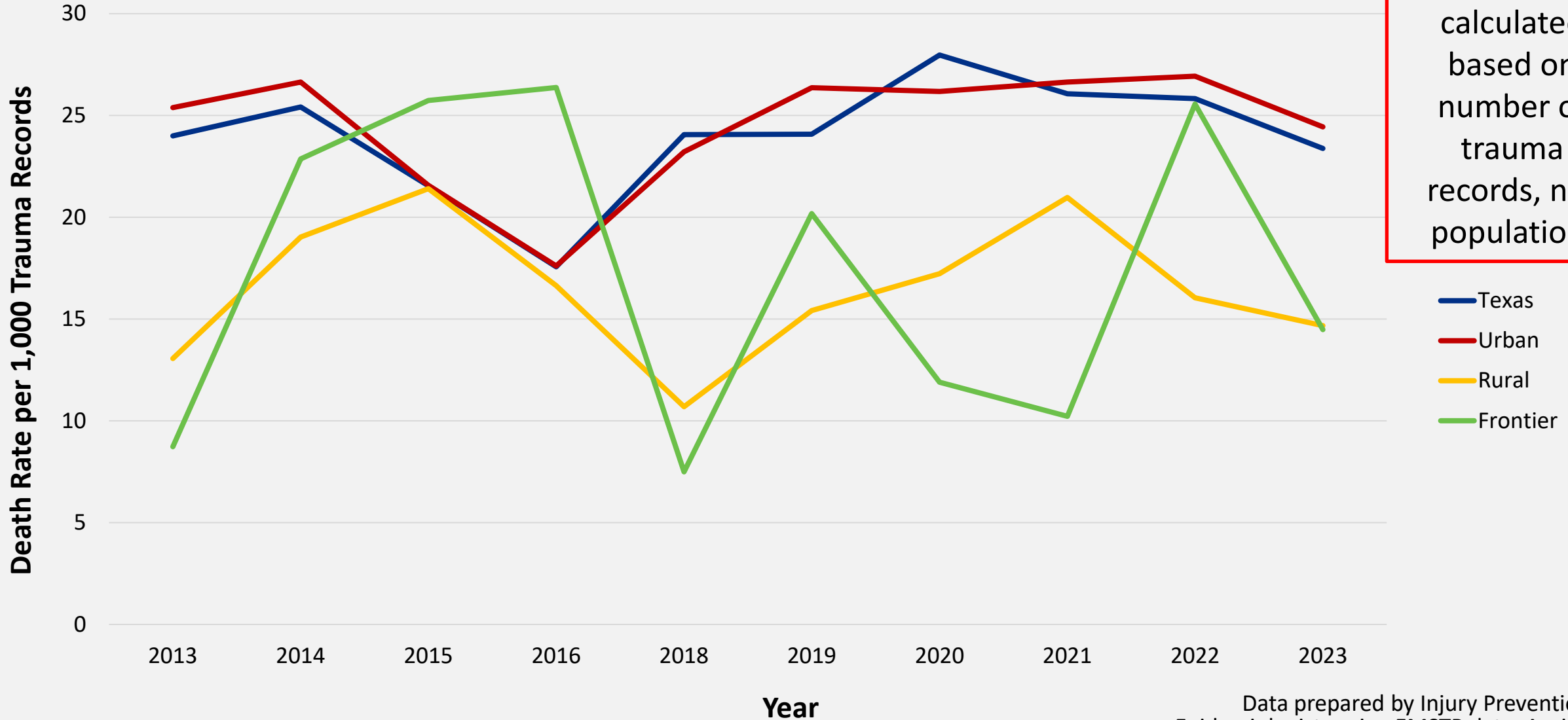
Trauma Deaths By Area Characterization, Texas, 2013-2023

Year	Total	Urban	Rural	Frontier
2013	3,113	2,793	154	8
2014	3,297	2,926	205	20
2015	2,927	2,531	248	22
2016	2,626	2,293	189	25
2018	3,185	2,870	117	8
2019	3,489	3,111	177	20
2020	3,853	3,474	193	10
2021	3,990	3,536	222	7
2022	4,194	3,802	172	17
2023	4,297	3,954	186	13

Note: The remaining deaths were missing area characterization.

Data prepared by Injury Prevention Unit Epidemiologists using EMSTR data, April 2025.

Trauma Death Rates By Area Characterization, Texas, 2013-2023



Urban Trauma Deaths, Transferred Into Trauma Facility, Texas, 2015-2023

Year	Number	Percent of Deaths
2015	395	15.61%
2016	323	14.09%
2018	432	15.05%
2019	554	17.81%
2020	590	16.98%
2021	609	17.22%
2022	699	18.39%
2023	737	18.64%

Compared to approximately 5% in rural trauma centers.

Data prepared by Injury Prevention Unit Epidemiologists using EMSTR data, April 2025.

Injury Severity Score (ISS)

The ISS is an anatomical scoring system providing an overall score for patients with multiple injuries. The ISS scoring categories are:

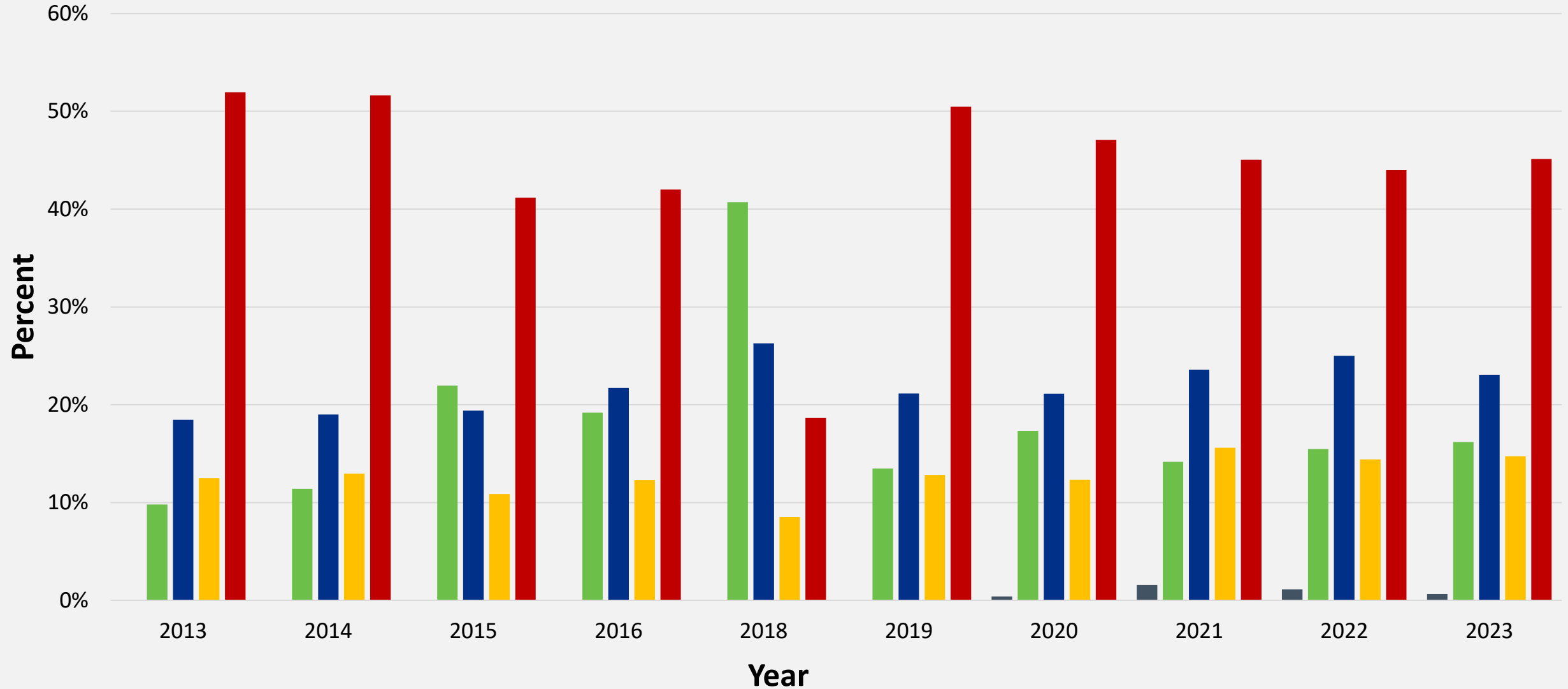
ISS 1-8 = mild trauma.

ISS 9-15 = moderate trauma.

ISS 16-24 = severe trauma.

ISS \geq 25 = profound trauma.

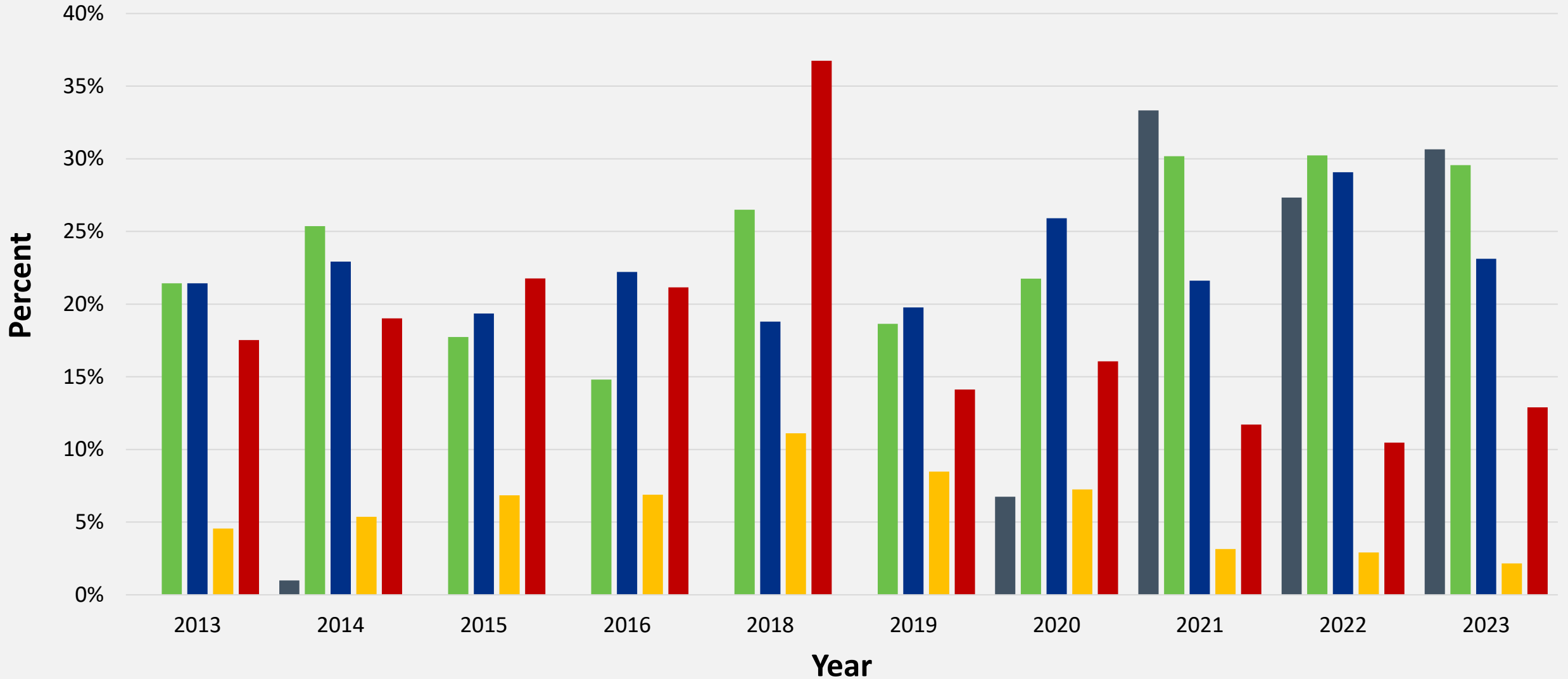
ISS - Urban Trauma Deaths, Texas, 2013-2023



■ ISS 0 ■ ISS 1-8 ■ ISS 9-15 ■ ISS 16-24 ■ ISS 25+

Data prepared by Injury Prevention Unit
Epidemiologists using EMSTR data, April 2025.

ISS – Rural Trauma Deaths, Texas, 2013-2023



Frontier ISS data was suppressed due to low numbers.

■ ISS 0 ■ ISS 1-8 ■ ISS 9-15 ■ ISS 16-24 ■ ISS 25+

Data prepared by Injury Prevention Unit Epidemiologists using EMSTR data, April 2025.

Summary

- The trauma death rate stayed relatively consistent between 2013-2023.
- Most trauma deaths occurred in urban areas, which is also where most trauma patients were seen.
- In urban areas, trauma deaths occurred most often in patients with higher ISS scores (25+), while in rural areas, trauma deaths occurred in patients with lower ISS scores (1-15).
- Future areas of focus?

Thank you!

EMSTR Program Updates and Trauma Deaths Over Time

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