



**TEXAS**  
Health and Human  
Services

**Texas Department of State  
Health Services**

# EMS and Trauma Registries

## Texas EMS Data

November 25, 2024

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# EMS and Trauma Registries (EMSTR) Current Data Progress



# About EMSTR

- Required reporting under 25 Texas Administrative Code (TAC), Chapter 103 and TAC Section 157.11:
  - EMS agencies must report all runs to EMSTR. An EMS run is a resulting action from a call for assistance where an EMS provider is dispatched to, responds to, provides care to, and may transport a person.
  - Trauma facilities must report traumatic brain injuries (TBIs), spinal cord injuries (SCIs), and other traumatic injuries that meet the National Trauma Data Bank (NTDB) criteria to EMSTR.
  - EMS agencies and hospitals must submit data to EMSTR within 90 calendar days.
- EMS providers may submit data through an authorized business associate. EMS providers must submit a business associate agreement (BAA) before EMSTR will accept records from a third-party source.

# EMSTR Scope and Growth

- There are 736 EMS agencies and 299 trauma facilities in Texas.
- Texas EMSTR collection accounts for 9% of national EMS runs.
- EMS runs collected increased from 300,000 EMS runs in 2012 to nearly 5 million (projected) in 2024.

# EMSTR Reporting System Upgrade

Reporting system went live November 2023. The launch included:

- Transition from NEMESIS version 3.3.4 to version 3.5.
- Update to NTDB and International Trauma Data Exchange (IDTX) 2020/2023 from 2017/ 2020.
- Implementation of Identity and Access Management Online (IAMOnline) for security purposes.

# Initial Challenges

- Onboarding EMS agencies, trauma facilities, and third-party vendors.
- Establishing a Business Associate Agreement (BAA) between EMS agencies and vendors as required to allow vendors to submit for agencies:
  - Around 570 of the 736 Texas EMS agencies (>75%) submit through a vendor.
  - There are multiple available vendors and agencies can select any vendor they want.
- Provider confusion with IAMOnline security requirements and challenges getting an account and logging into the system.

**On 5/31/2024, NEMSIS removed Texas from all national dashboards.**

# Successes

- 8/2/2024 – NEMESIS added Texas data back to their dashboards!
- BAA progress:
  - June – 151 EMS providers missing a BAA.
  - Currently – 7 EMS providers missing a BAA.
- Records per month:
  - June – collecting 80,000 records per month.
  - Currently – collecting 350,000 records per month.
- Final 2023 datasets:
  - 4,839,748 unique EMS patient care records.
  - 218,961 unique trauma patient care records.



# EMSTR Current Data Status

EMS 2022 Unique Records	EMS 2023 Unique Records	EMS 2024 Records*
4,603,934	4,839,748	3,916,382*

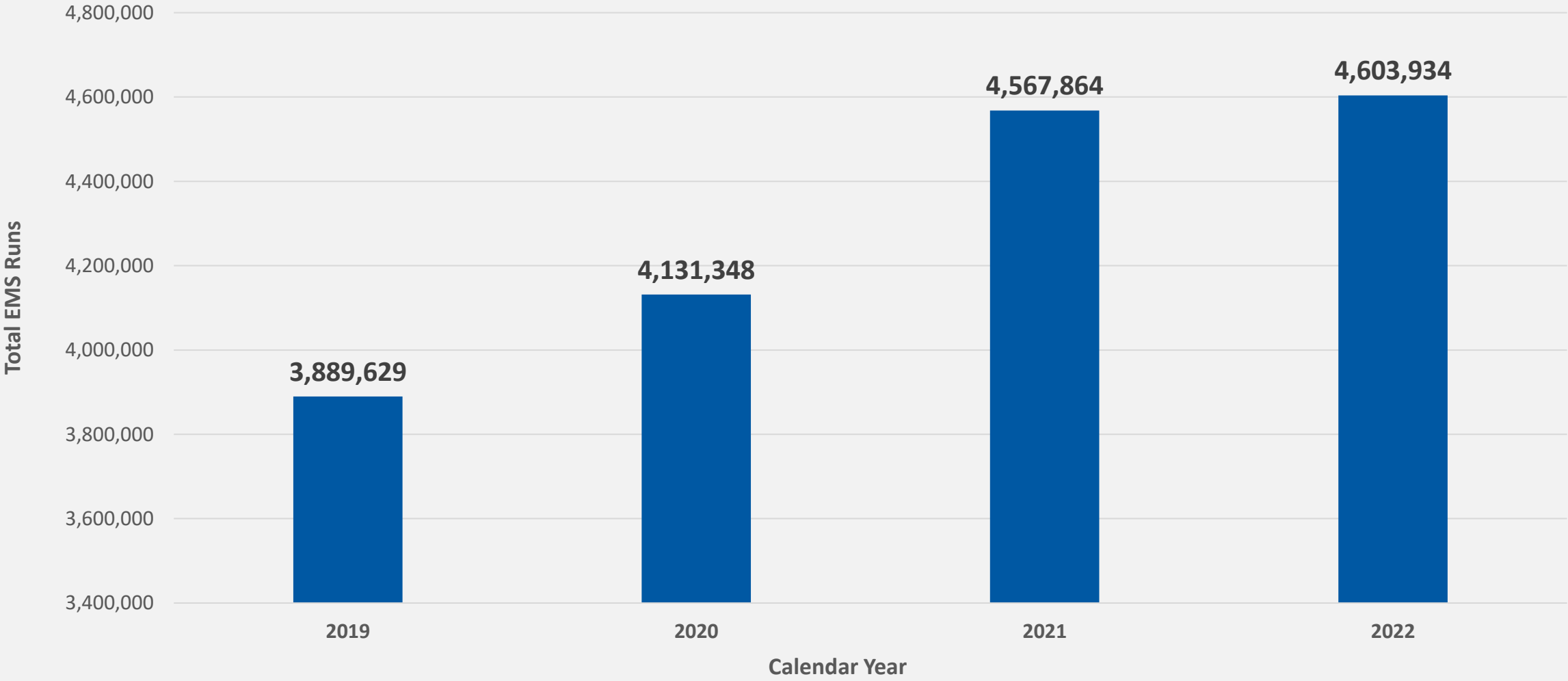
Trauma 2022 Unique Records	Trauma 2023 Unique Records	Trauma 2024 Records*
162,409	218,961	132,404*

\*Record count as of 11/13/2024. **NOTE:** Record counts are not final as these datasets are not closed yet.

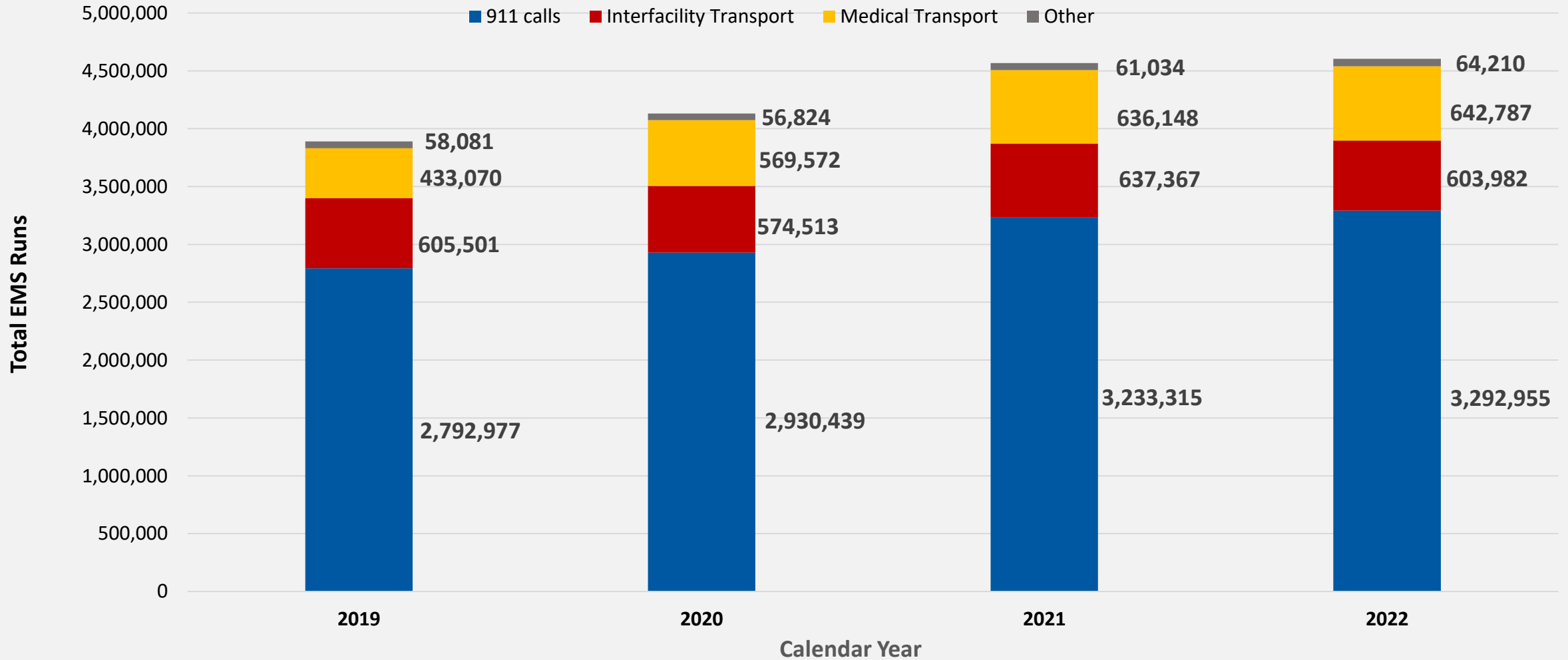
# EMS Data From EMSTR



# Total EMS Runs

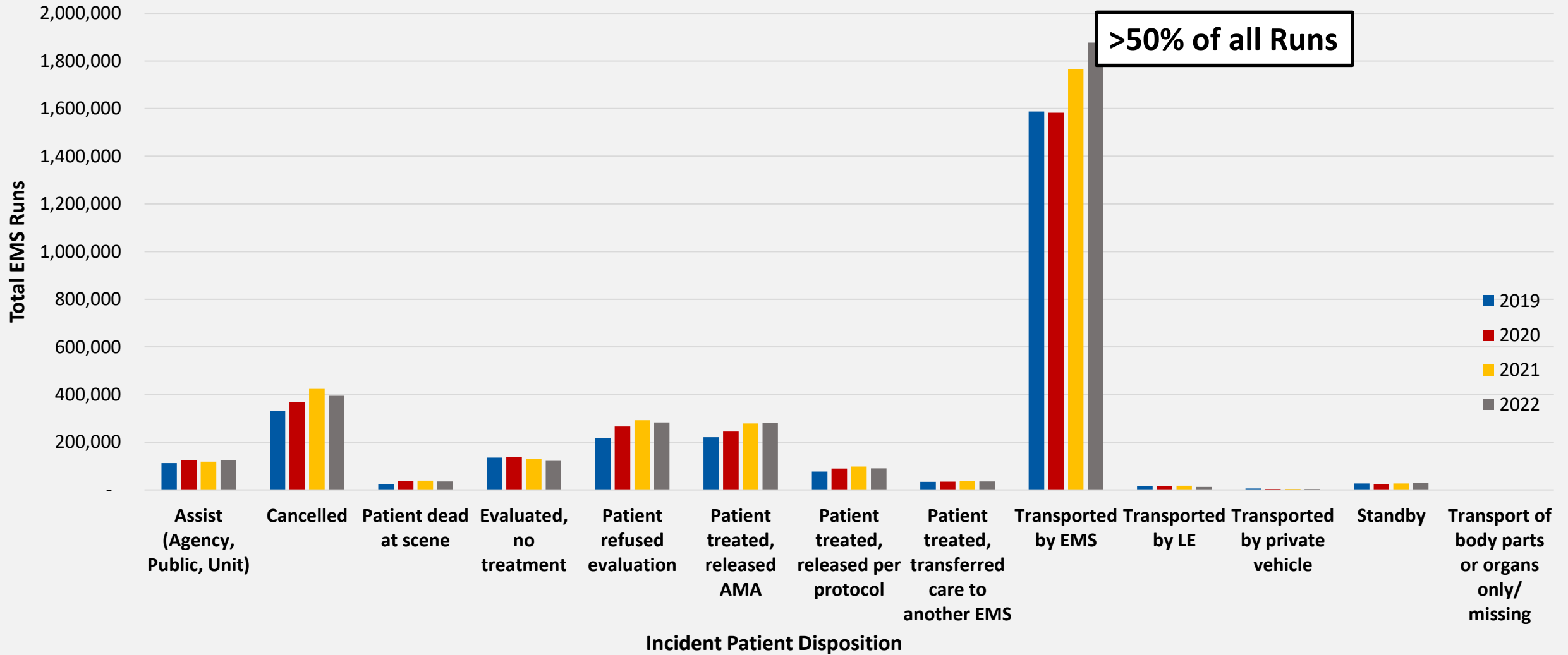


# EMS Call Type

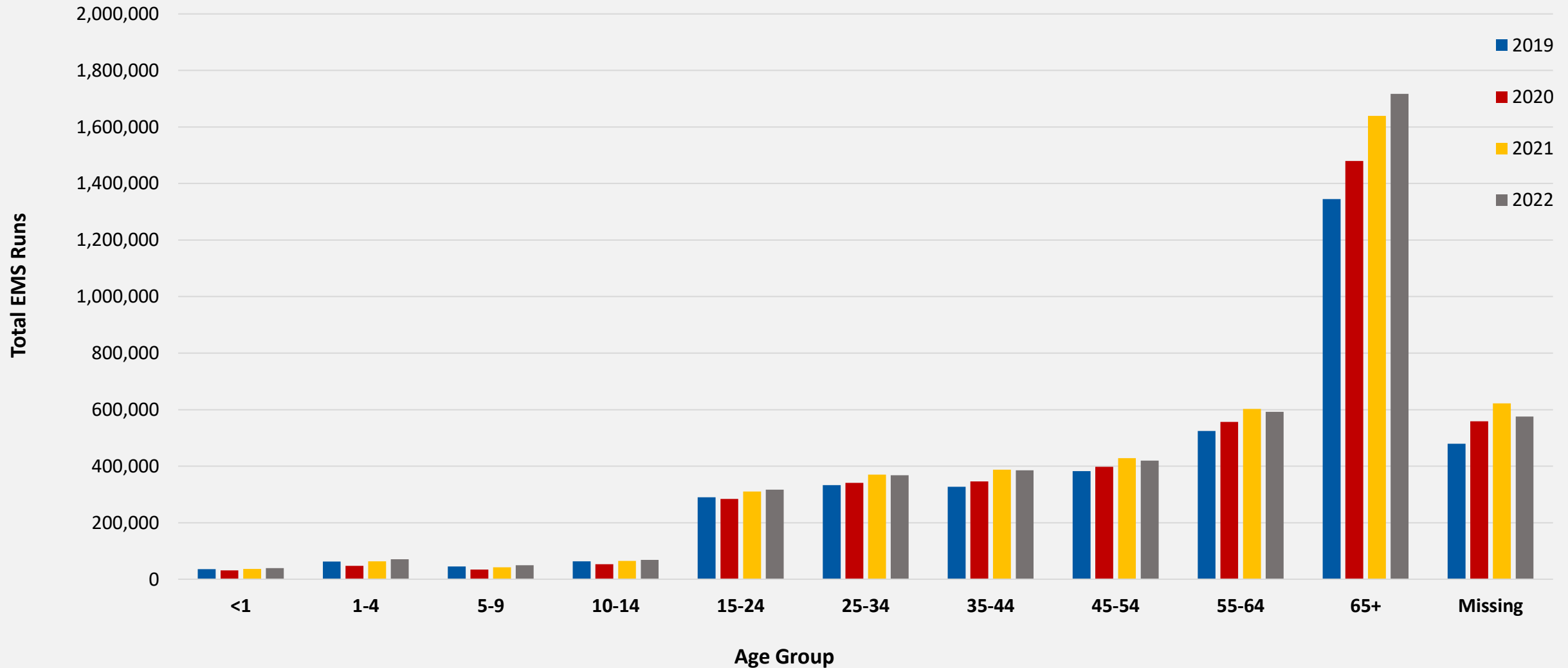


\*Other includes mutual aid, intercept, public assistance, standby, and missing.

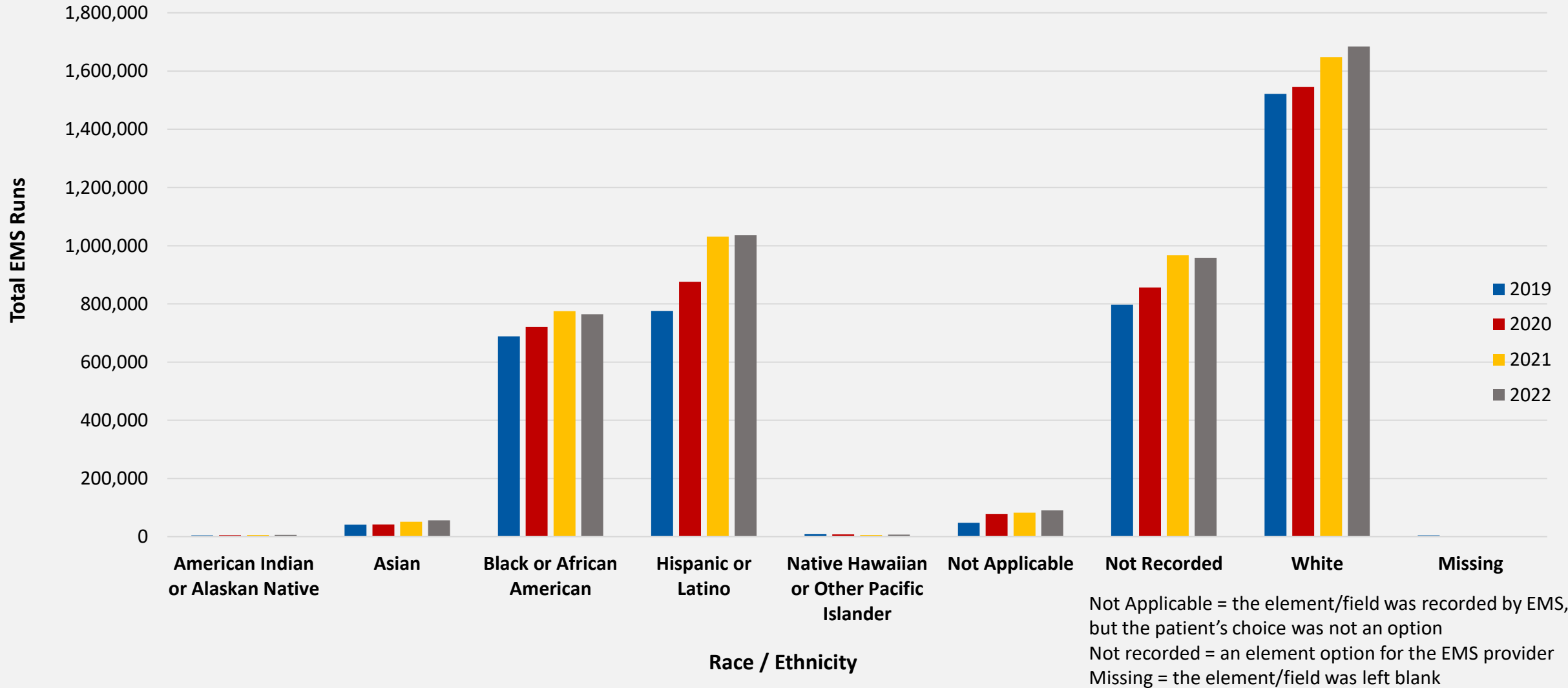
# 911 Call Incident Patient Disposition



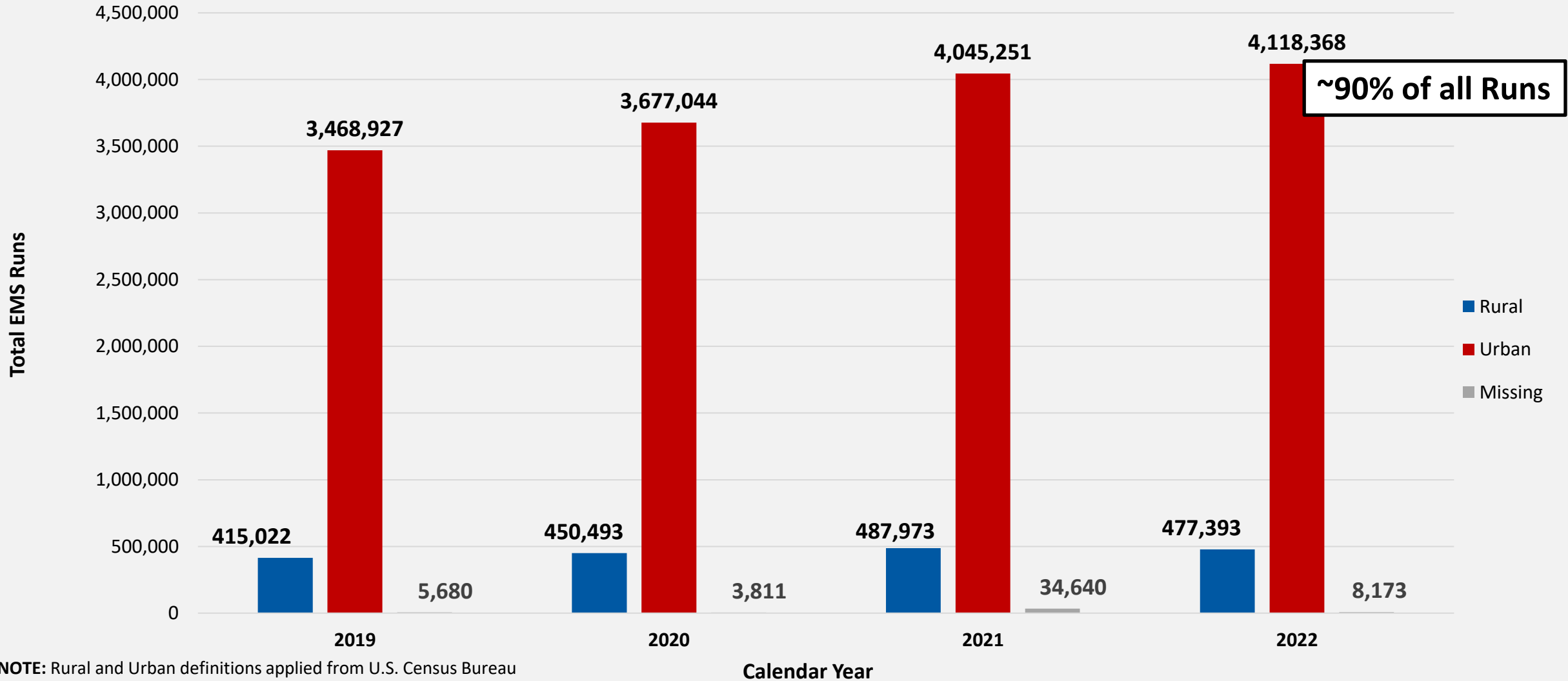
# EMS Data by Age



# EMS Data by Race

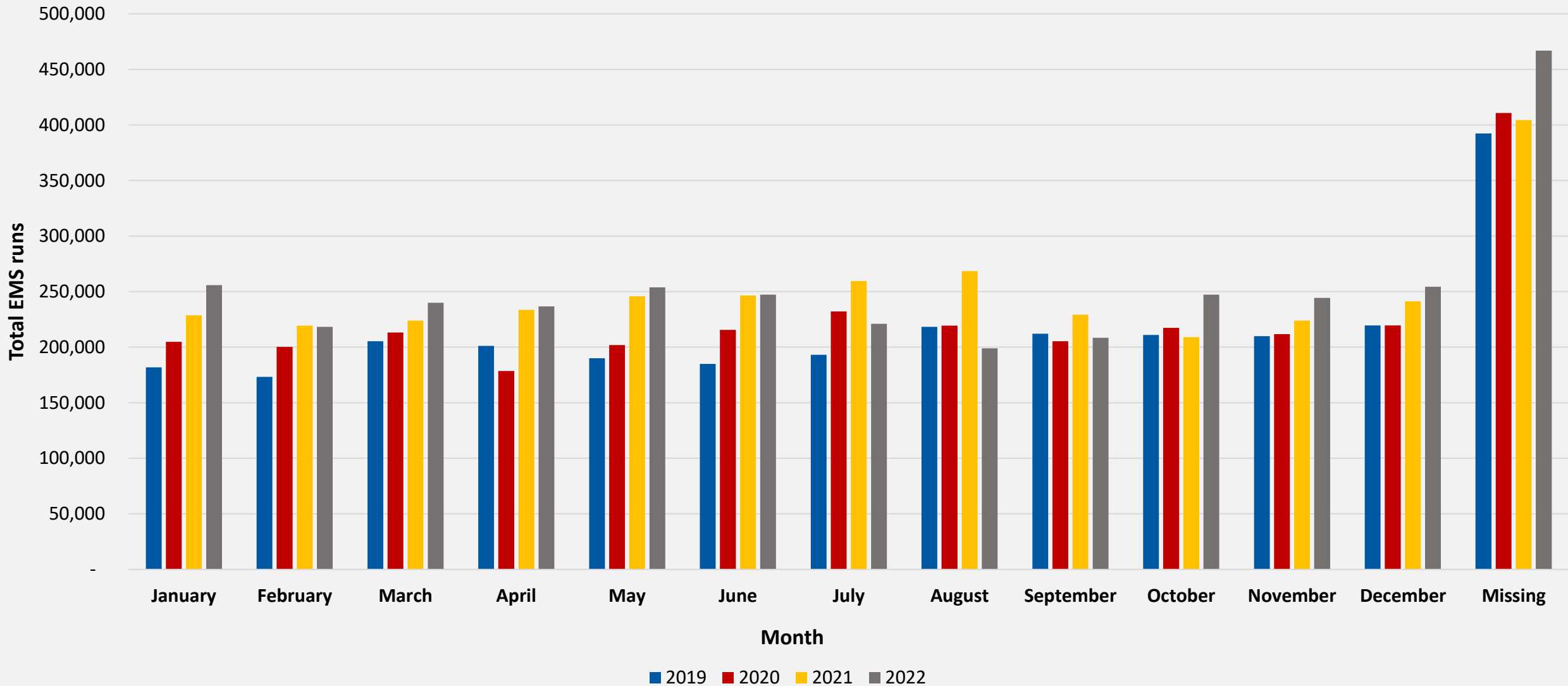


# EMS Data by Rural and Urban

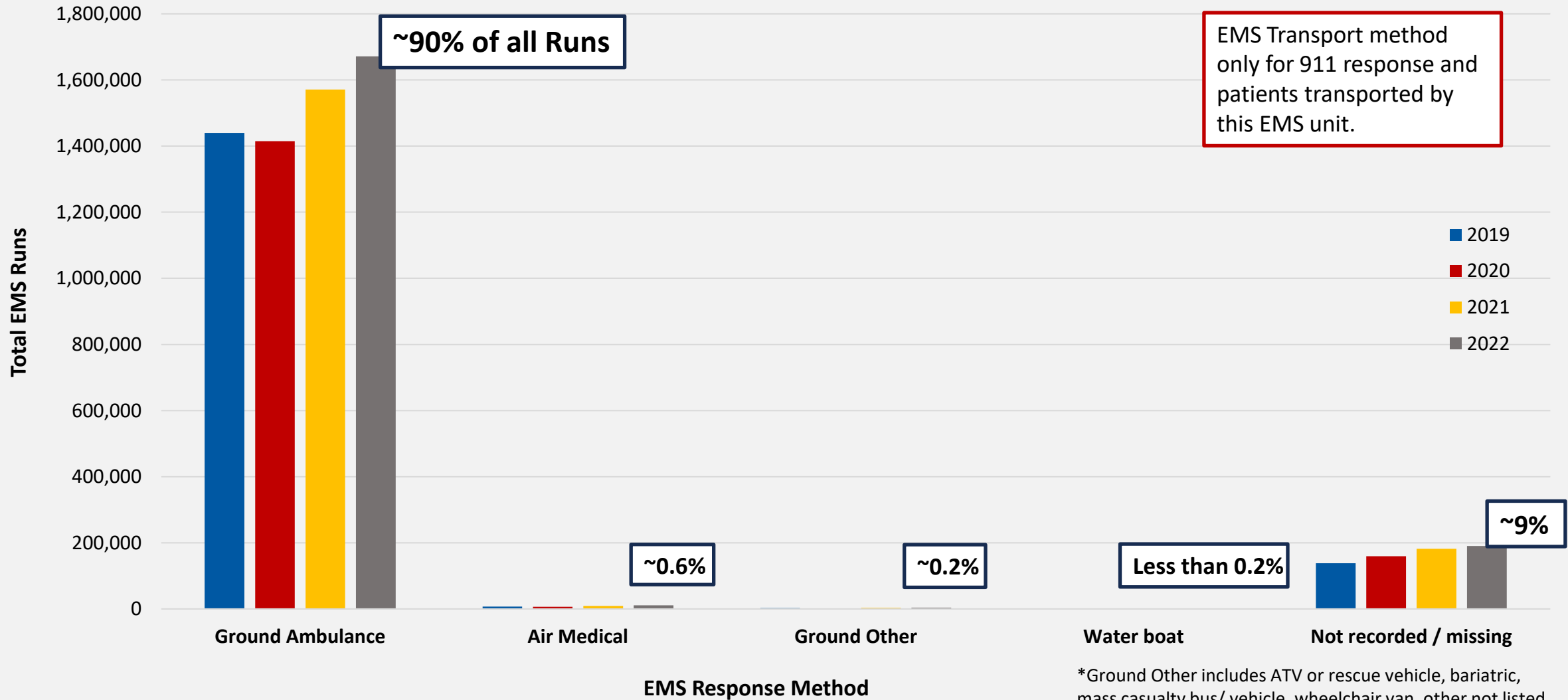




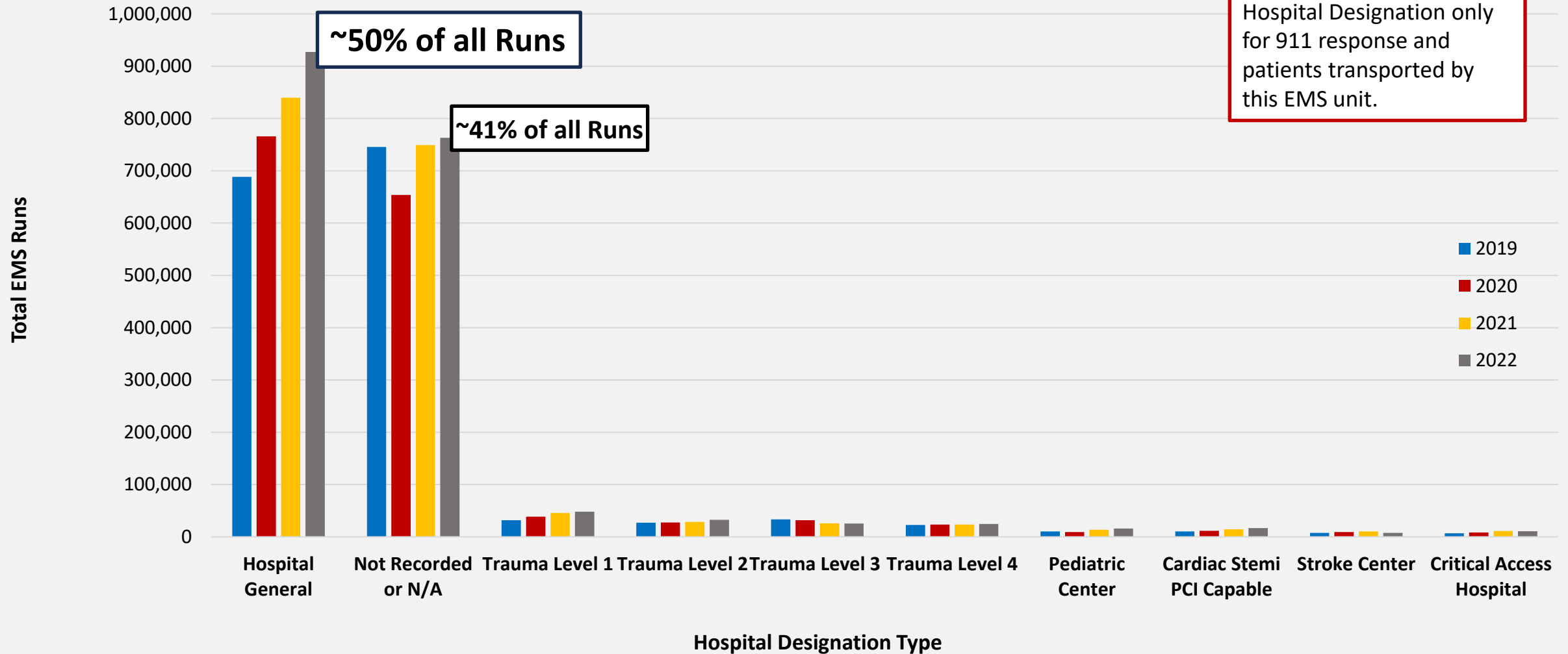
# Incident Month for 911 Calls



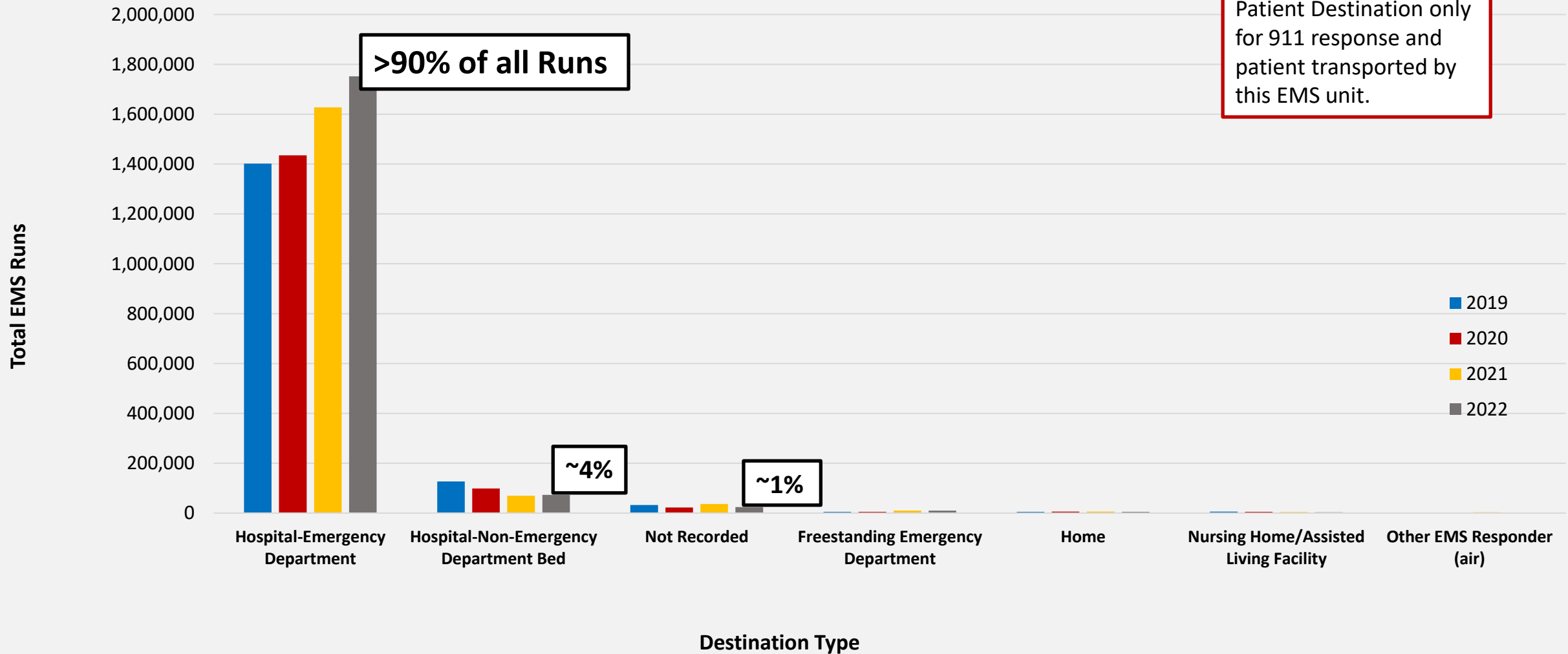
# EMS Transport Method



# Hospital Designation



# Patient Destination Type



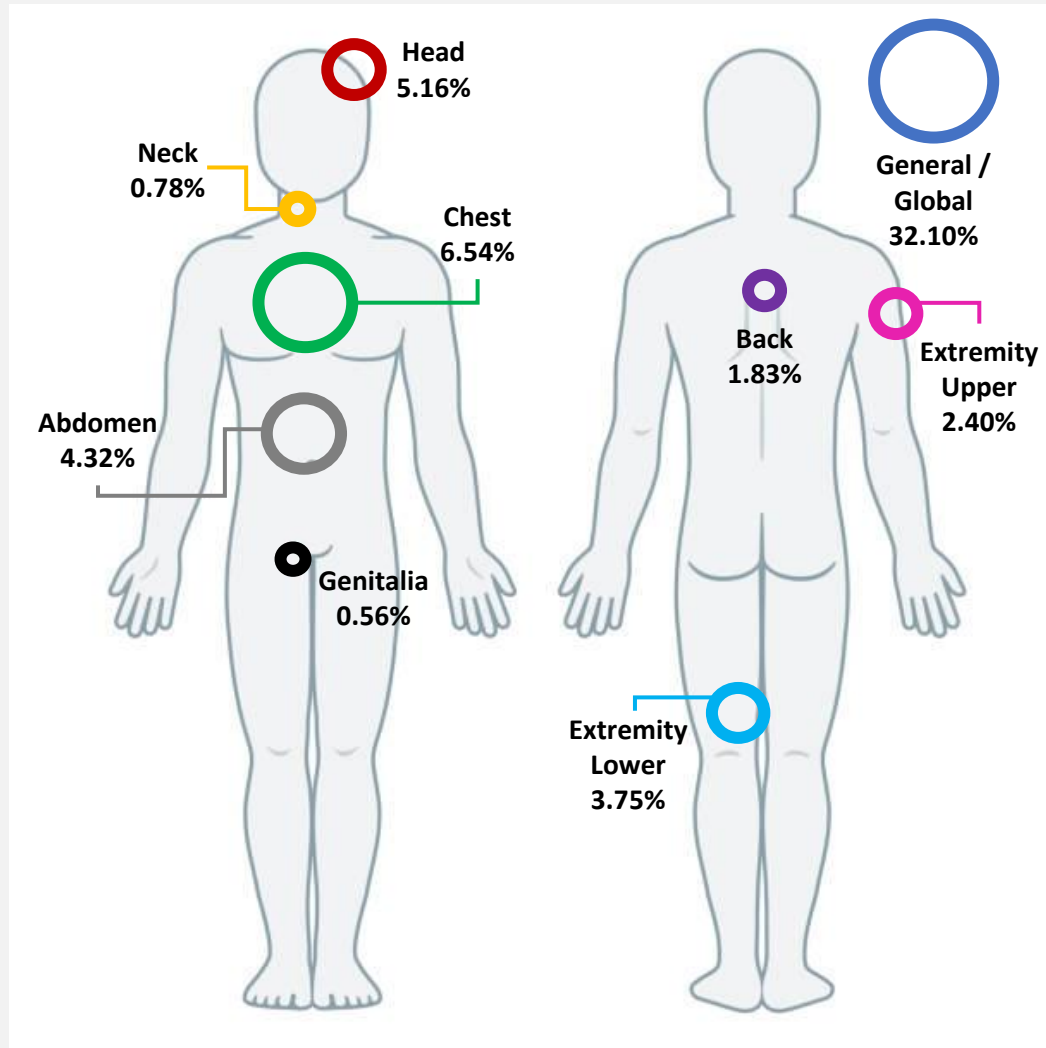
# 911 Call Complaint Reported Dispatch (1 of 2)

	2019	2020	2021	2022
<b>Sick person (Undefined)</b>	480,079 (17.2%)	506,577 (17.3%)	582,950 (18.0%)	613,275 (18.6%)
<b>Traffic</b>	363,116 (13.0%)	341,051 (11.6%)	393,976 (12.2%)	393,661 (12.0%)
<b>Breathing problems</b>	253,736 (9.1%)	291,539 (10.0%)	343,793 (10.6%)	310,293 (9.4%)
<b>Falls</b>	245,760 (8.8%)	263,429 (9.0%)	292,748 (9.1%)	309,749 (9.4%)
<b>No other category</b>	159,894 (5.7%)	141,278 (4.8%)	149,932 (4.6%)	159,743 (4.9%)
<b>Fainting / Near fainting</b>	142,415 (5.1%)	153,795 (5.3%)	169,683 (5.3%)	175,175 (5.3%)
<b>Chest pain</b>	142,095 (5.1%)	136,993 (4.7%)	152,582 (4.7%)	163,558 (5.0%)
<b>Seizures / Convulsions</b>	104,039 (3.7%)	102,570 (3.5%)	109,476 (3.4%)	116,220 (3.5%)

# 911 Call Complaint Reported Dispatch (2 of 2)

	2019	2020	2021	2022
<b>Unknown problem / Person down</b>	86,808 (3.1%)	94,165 (3.2%)	99,908 (3.1%)	96,915 (2.9%)
<b>Abdominal pain</b>	75,014 (2.7%)	79,726 (2.7%)	88,818 (2.8%)	92,170 (2.8%)
<b>Heart problems</b>	73,934 (2.7%)	73,218 (2.5%)	77,949 (2.4%)	74,522 (2.3%)
<b>Assault</b>	70,855 (2.5%)	78,945 (2.7%)	75,261 (2.3%)	73,002 (2.2%)
<b>Psychiatric problems / Abnormal behavior / Suicide attempt</b>	62,250 (2.2%)	67,626 (2.3%)	72,498 (2.2%)	69,544 (2.1%)
<b>Traumatic injury</b>	57,705 (2.1%)	62,167 (2.1%)	65,640 (2.0%)	70,908 (2.2%)
<b>Transfer interfacility palliative care</b>	52,210 (1.9%)	62,578 (2.1%)	71,292 (2.2%)	86,381 (2.6%)
<b>Stroke</b>	51,749 (1.9%)	58,345 (2.0%)	62,242 (1.9%)	65,081 (2.0%)

# Chief Complaint Location in 2022



In 2022, the majority of chief complaint locations reported during Texas EMS runs were **general/global (32.10%)**, followed by the **chest (6.54%)** and the **head (5.16%)**. For **42.55%** of EMS runs where patient contact was made, the chief complaint location was not recorded.

# Response Times - All Runs and 911 Calls

Year	All EMS Runs	911 Calls
2019	19.40 minutes	8.87 minutes
2020	20.56 minutes	9.13 minutes
2021	18.27 minutes	8.91 minutes
2022	16.16 minutes	8.65 minutes



# Thank you!

EMS and Trauma Registries Texas EMS Data

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