

TEXAS Health and Human Services

Texas Department of State Health Services

EMS and Trauma Registries Texas EMS Data

November 25, 2024 Jia Benno, MPH Injury Prevention Unit Director

EMS and Trauma Registries (EMSTR) Current Data Progress



Texas Department of State Health Services

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 NEMSIS 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 NEMSIS 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*

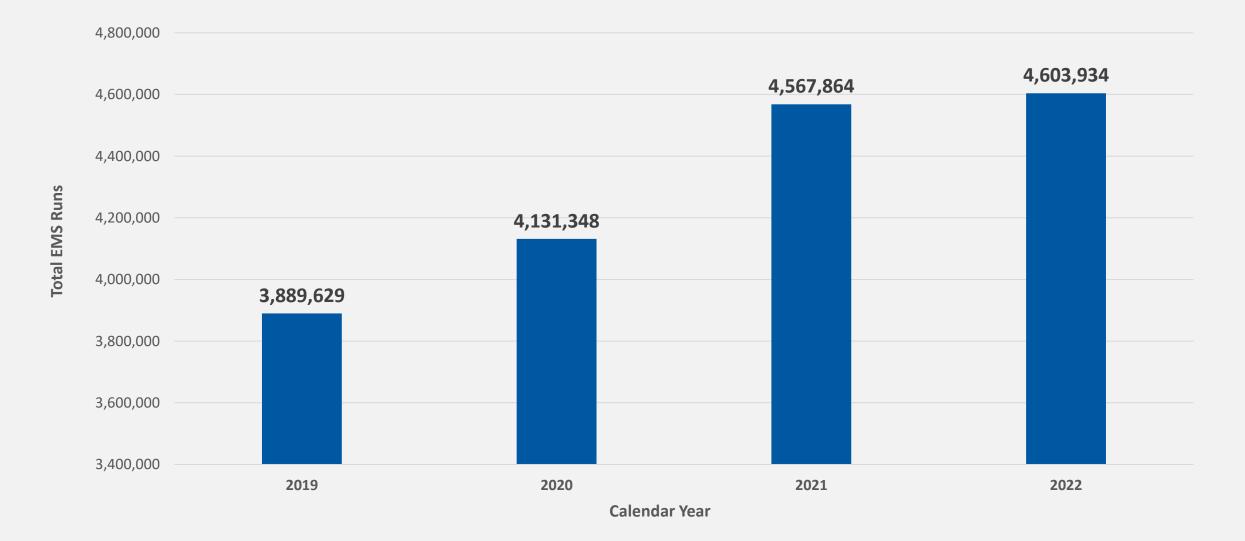
*Record count as of 11/13/2024. NOTE: Record counts are not final as these datasets are not closed yet.

EMS Data From EMSTR



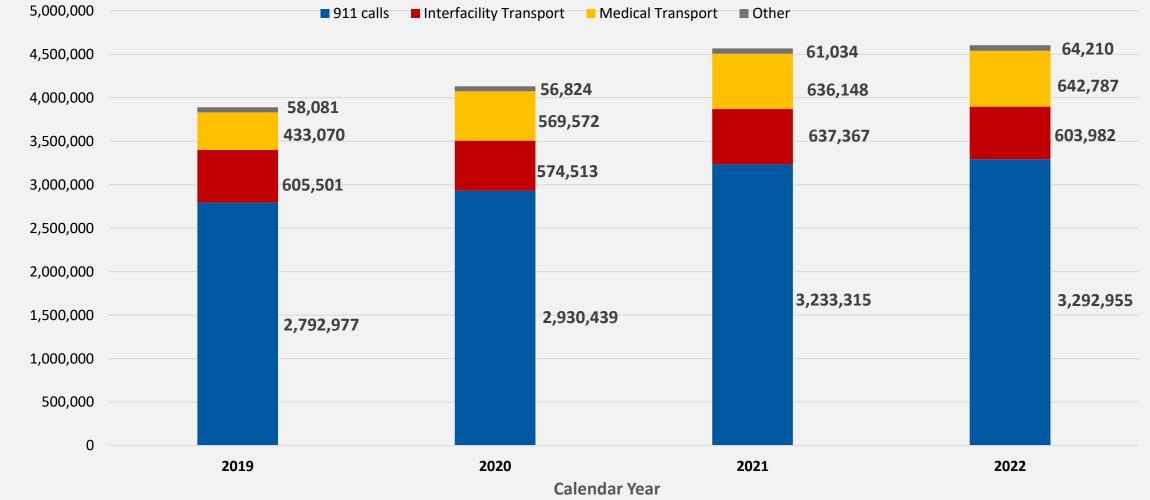
Texas Department of State Health Services

Total EMS Runs



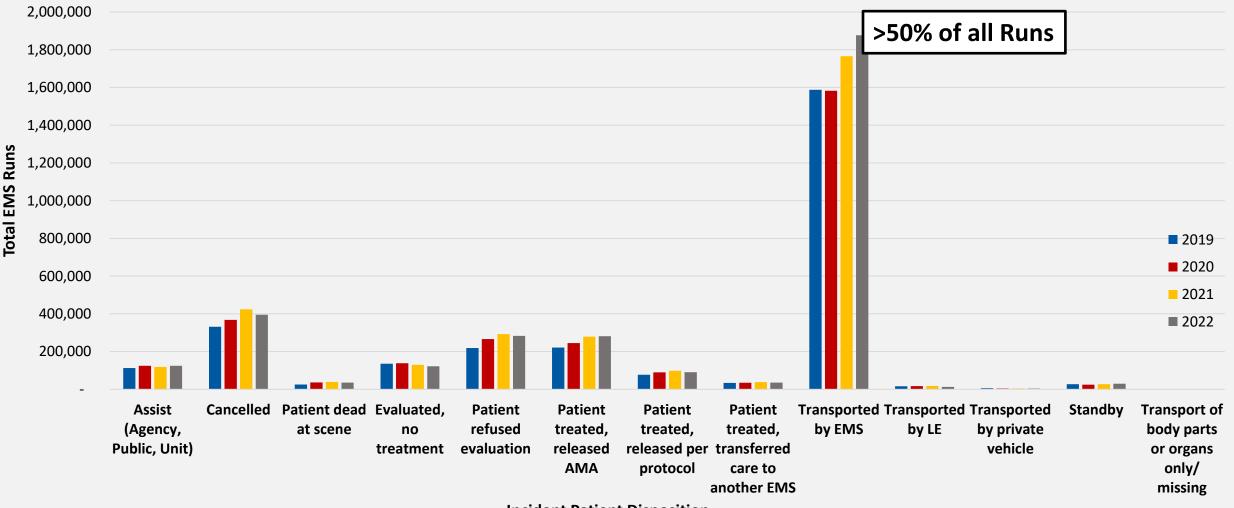
EMS Call Type

Total EMS Runs



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

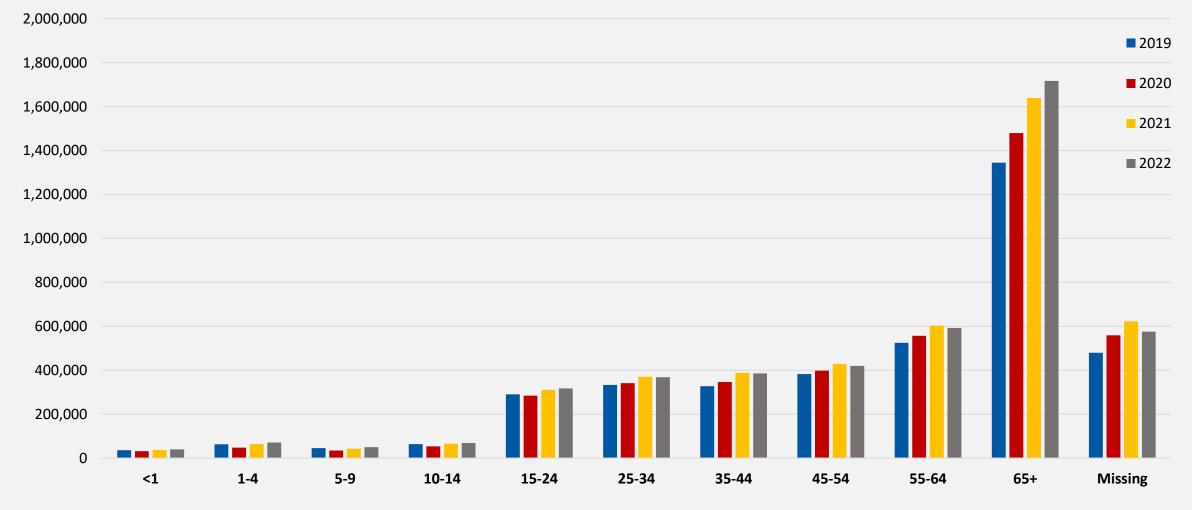
911 Call Incident Patient Disposition



Incident Patient Disposition

EMS Data by Age

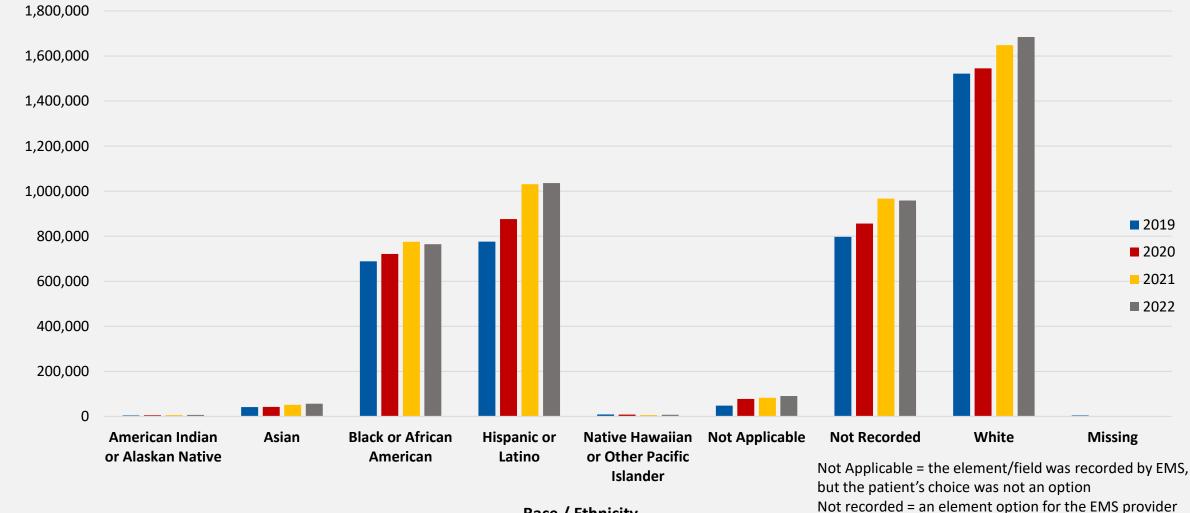
Total EMS Runs



Age Group

EMS Data by Race

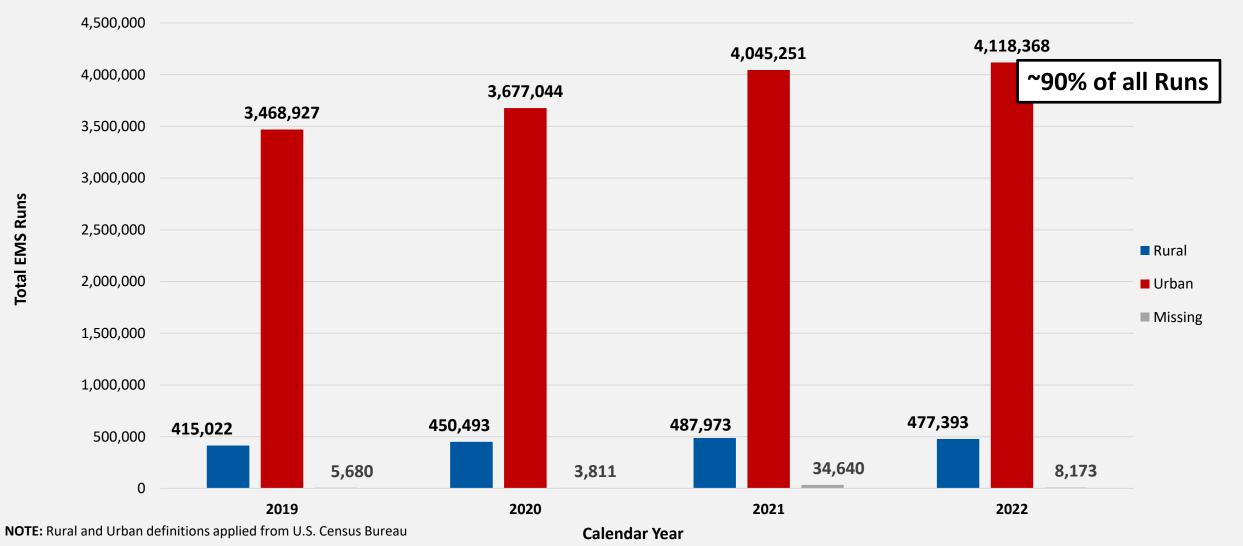
Total EMS Runs



Race / Ethnicity

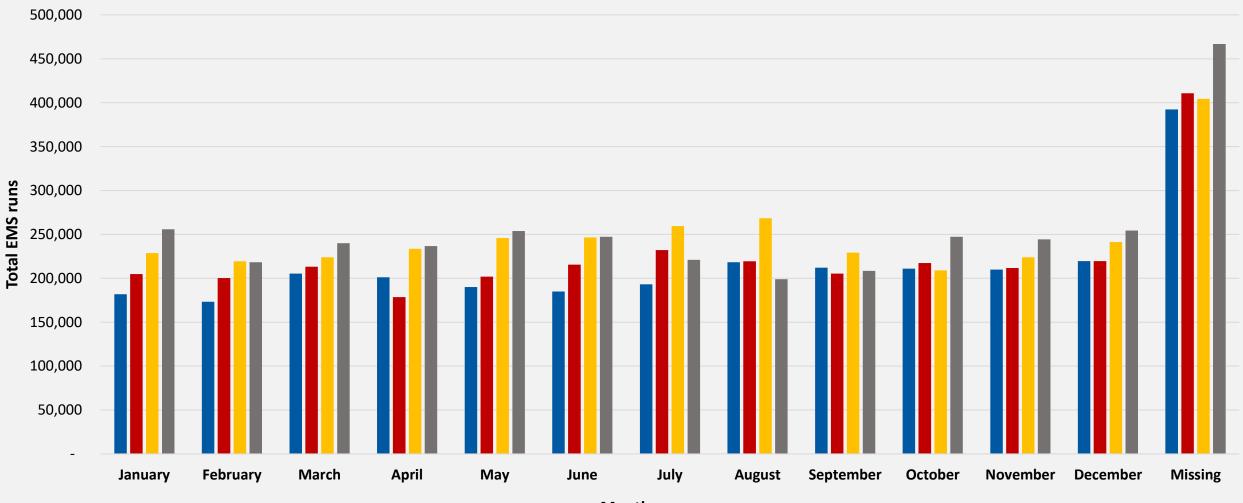
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EMS Data by Rural and Urban



Total EMS Runs

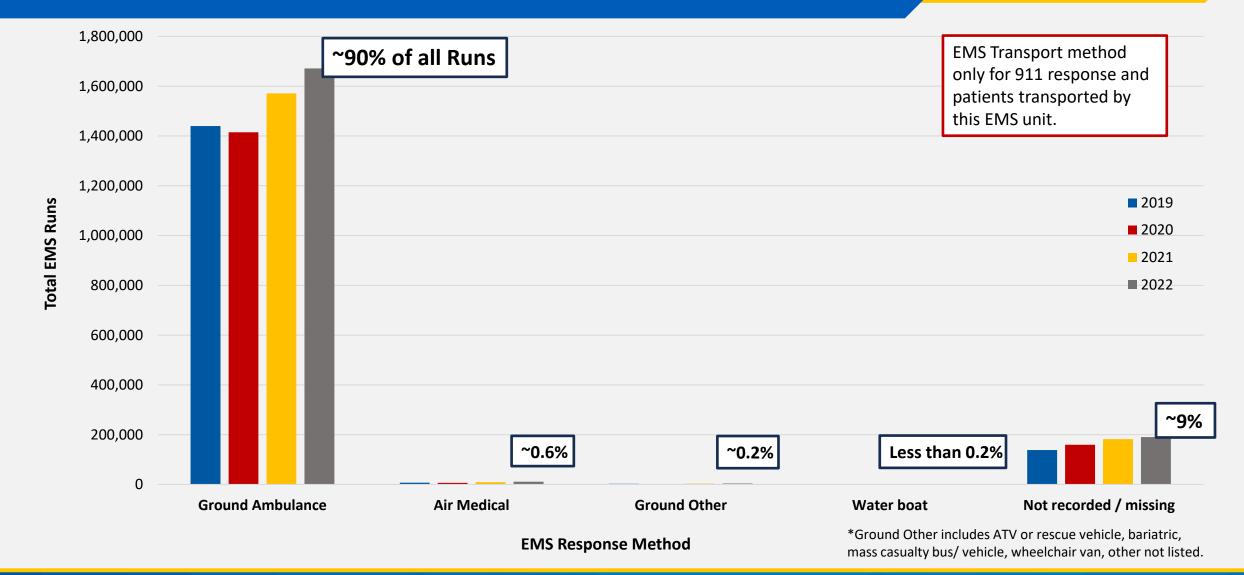
Incident Month for 911 Calls



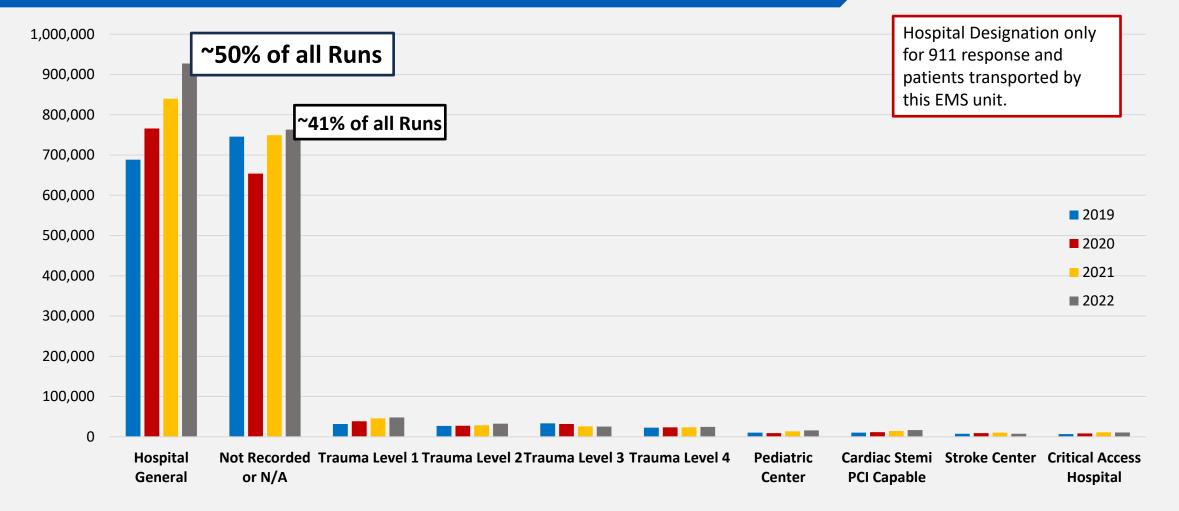
Month

■ 2019 ■ 2020 ■ 2021 ■ 2022

EMS Transport Method



Hospital Designation

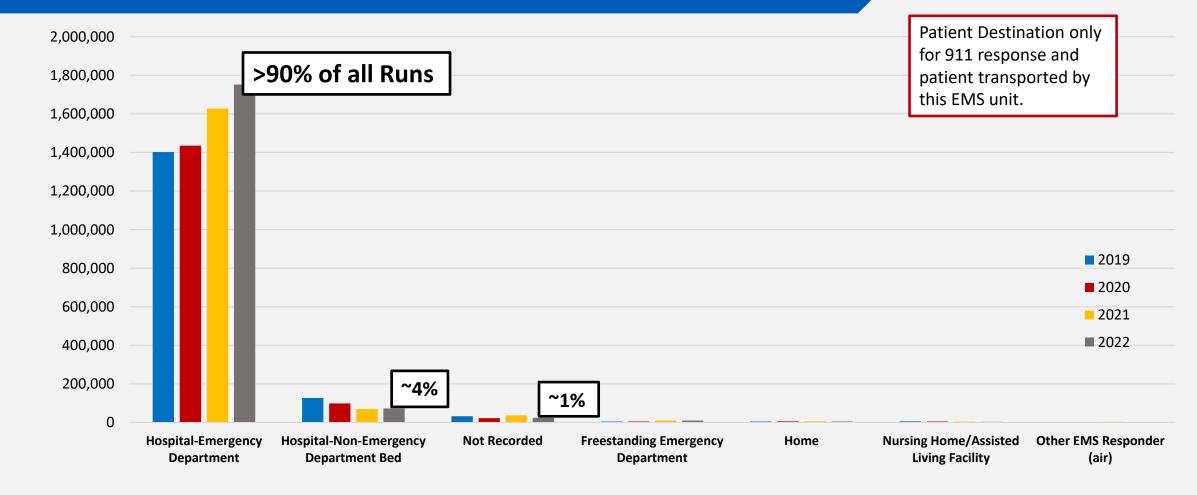


Hospital Designation Type

Total EMS Runs

Patient Destination Type

Total EMS Runs



Destination Type

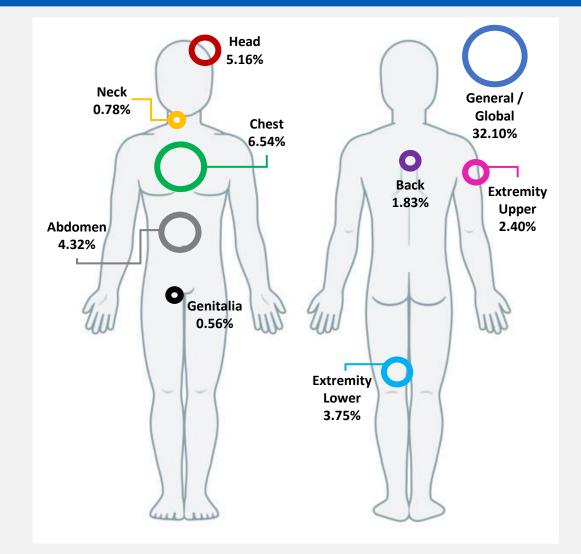
911 Call Complaint Reported Dispatch (1 of 2)

	2019	2020	2021	2022
Sick person (Undefined)	480,079 (17.2%)	506,577 (17.3%)	582,950 (18.0%)	613,275 (18.6%)
Traffic	363,116 (13.0%)	341,051 (11.6%)	393,976 (12.2%)	393,661 (12.0%)
Breathing problems	253,736 (9.1%)	291,539 (10.0%)	343,793 (10.6%)	310,293 (9.4%)
Falls	245,760 (8.8%)	263,429 (9.0%)	292,748 (9.1%)	309,749 (9.4%)
No other category	159,894 (5.7%)	141,278 (4.8%)	149,932 (4.6%)	159,743 (4.9%)
Fainting / Near fainting	142,415 (5.1%)	153,795 (5.3%)	169,683 (5.3%)	175,175 (5.3%)
Chest pain	142,095 (5.1%)	136,993 (4.7%)	152,582 (4.7%)	163,558 (5.0%)
Seizures / Convulsions	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
Unknown problem / Person down	86,808 (3.1%)	94,165 (3.2%)	99,908 (3.1%)	96,915 (2.9%)
Abdominal pain	75,014 (2.7%)	79,726 (2.7%)	88,818 (2.8%)	92,170 (2.8%)
Heart problems	73,934 (2.7%)	73,218 (2.5%)	77,949 (2.4%)	74,522 (2.3%)
Assault	70,855 (2.5%)	78,945 (2.7%)	75,261 (2.3%)	73,002 (2.2%)
Psychiatric problems / Abnormal behavior / Suicide attempt	62,250 (2.2%)	67,626 (2.3%)	72,498 (2.2%)	69,544 (2.1%)
Traumatic injury	57,705 (2.1%)	62,167 (2.1%)	65,640 (2.0%)	70,908 (2.2%)
Transfer interfacility palliative care	52,210 (1.9%)	62,578 (2.1%)	71,292 (2.2%)	86,381 (2.6%)
Stroke	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!

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Injury.web@dshs.texas.gov