

Texas EMS & Trauma Registries Pediatric Summary Report – 2013 Final

Injury Epidemiology & Surveillance Branch

Environmental & Injury Epidemiology & Toxicology Unit

Environmental Epidemiology and Disease Registries Section

Department of State Health Services



Outline

- Pediatric EMS Runs
- Pediatric Trauma Hospitalizations
- Pediatric Submersions

Pediatric EMS Runs



Inclusion Criteria (EMS)

EMS providers are to report all runs to the Texas EMS/Trauma Registry in accordance to Texas Administrative Code, Title 25, Part 1, Chapter 103, Rule § 103.4

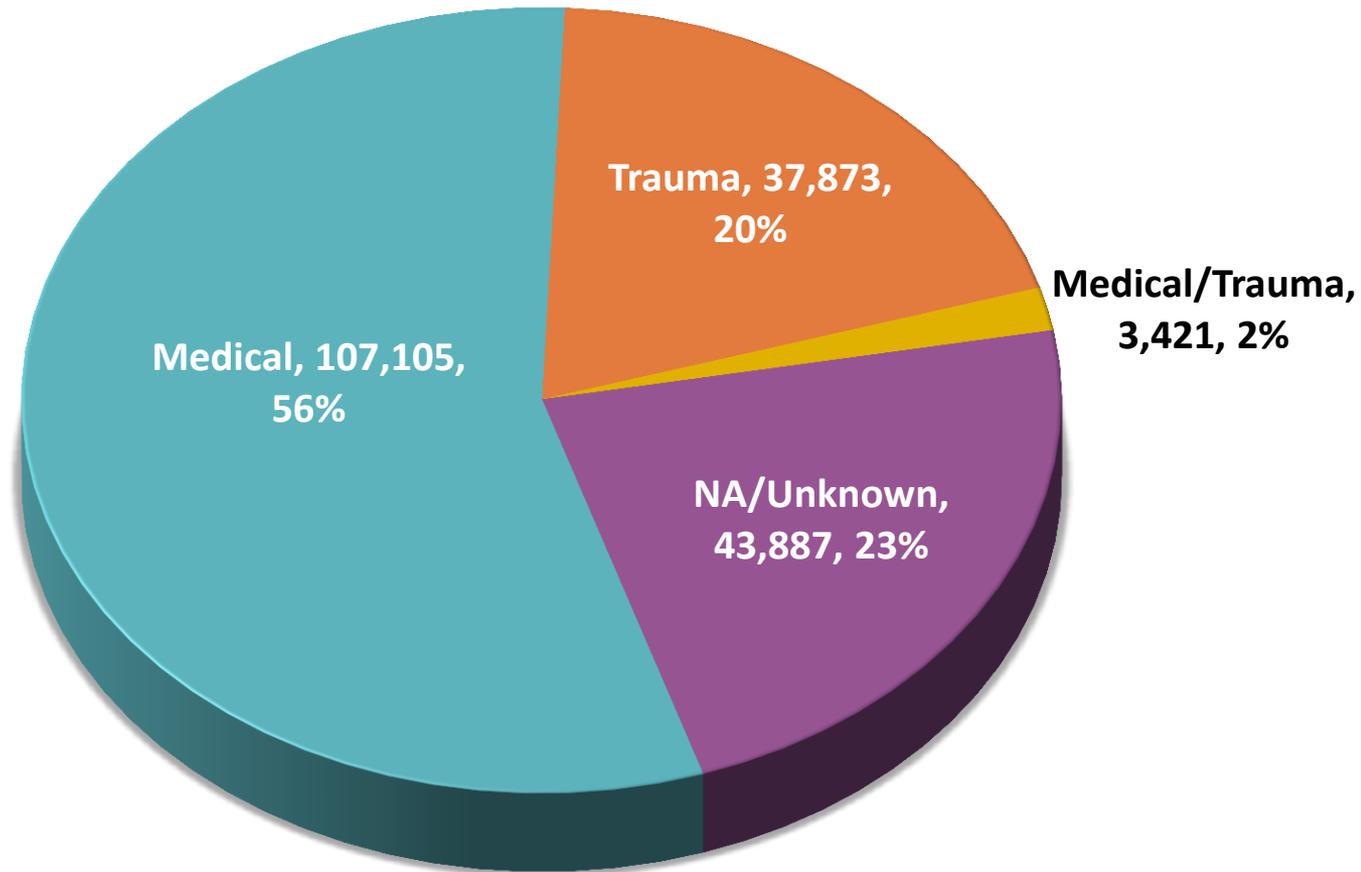
Pediatric EMS Runs (Ages 0 – 17), Texas 2013

Overall Statistics

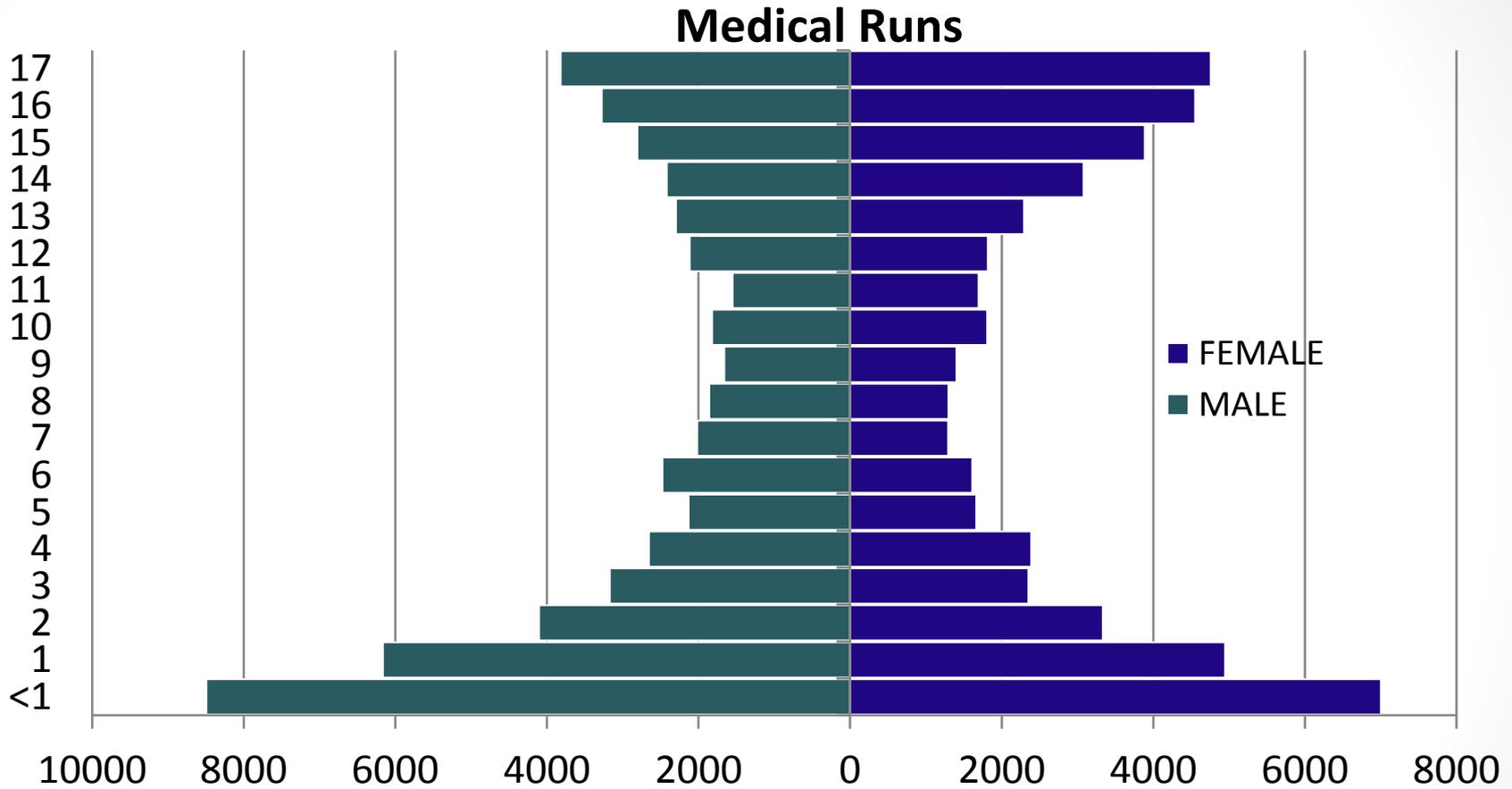
- 192,286 Pediatric EMS runs (7.3% of all EMS runs)
 - 52.3% Male
 - 22.4% White
 - 56.6% Transported to Hospital
 - 15.8% Runs Diverted

Pediatric EMS Runs by Call Type, Texas 2013

(n=192,286)



Pediatric EMS Runs by Age and Sex, Texas 2013



When Age and Sex were known:

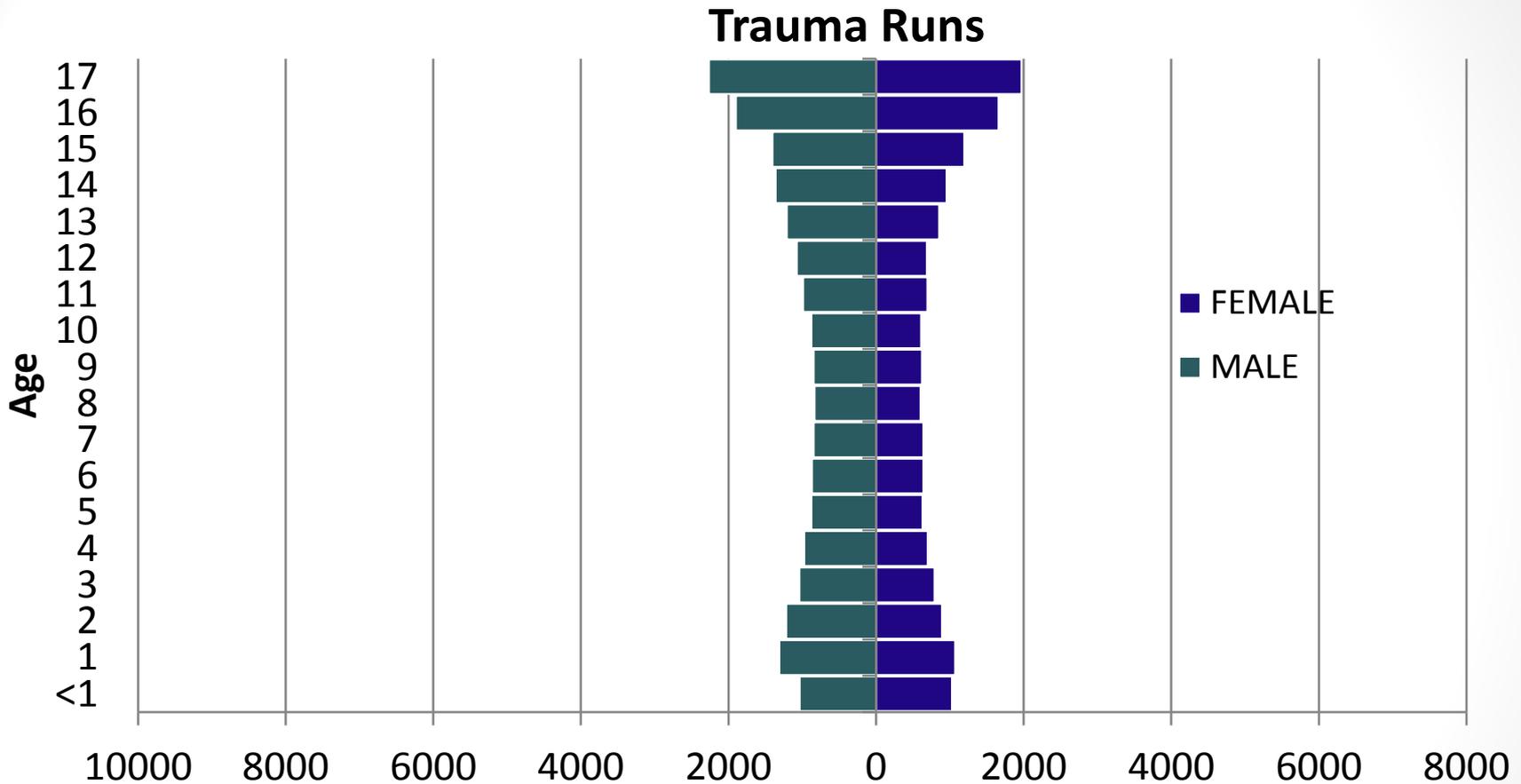
- 49% of Male runs occurred in children less than 5 year olds
- 48% of Female runs occurred in children less than 8 year olds

Total EMS Runs: 192,286

Medical Runs: 107,105



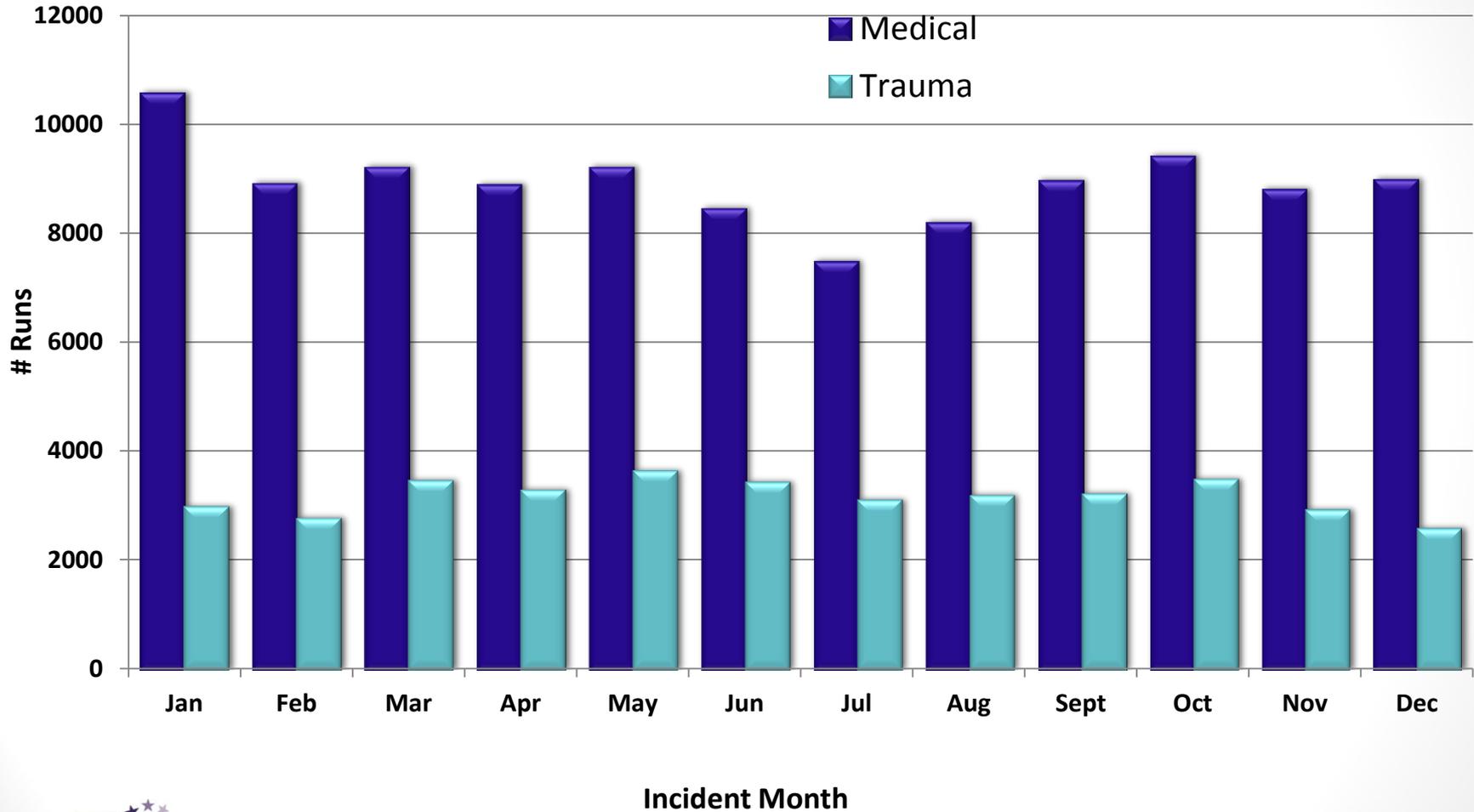
Pediatric EMS Runs by Age and Sex, Texas 2013



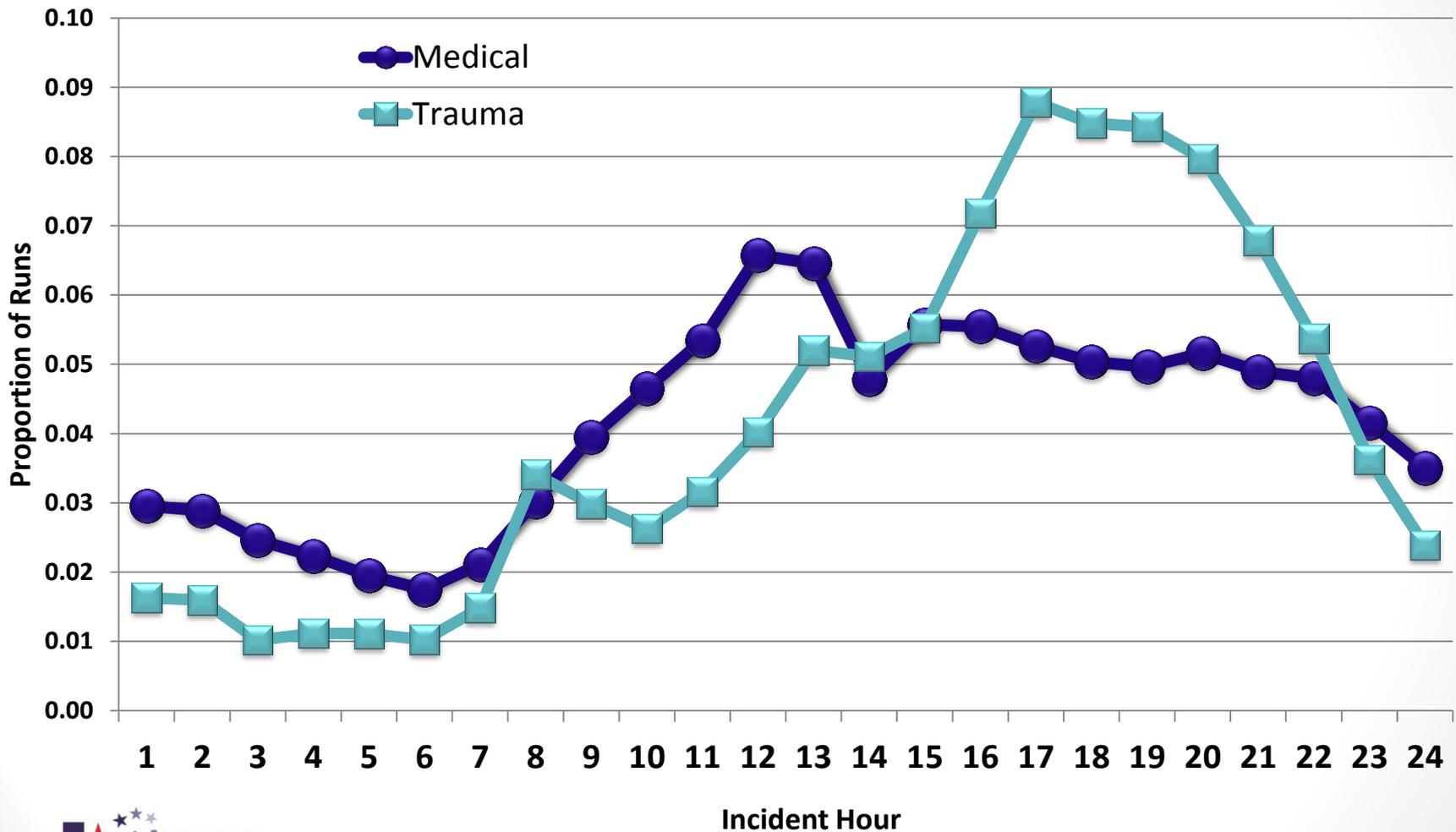
When Age and Sex were known:

- 51% of Male and Female runs occurred in children less than 11 year olds

Pediatric EMS Runs by Incident Month, Texas 2013



Pediatric EMS Runs by Time of Day and Call Type, Texas 2013



Note: The Chart indicates the proportion of EMS runs at the incident hour for each type of EMS runs.

Top 5 Leading Mechanisms of Injury by Intent, Pediatric EMS Trauma Runs, Texas 2013

	MECHANISM	INTENT				
		Unintentional	Self-Inflicted	Assault	Undetermined	Other
1	Motor Vehicle Traffic	9,208	0	0	0	0
2	Fall	5,193	135	1	1,229	0
3	Unspecified	920	30	924	136	56
4	Struck by, against	911	0	347	0	5
5	Other specified & Classifiable	1,003	0	223	15	2

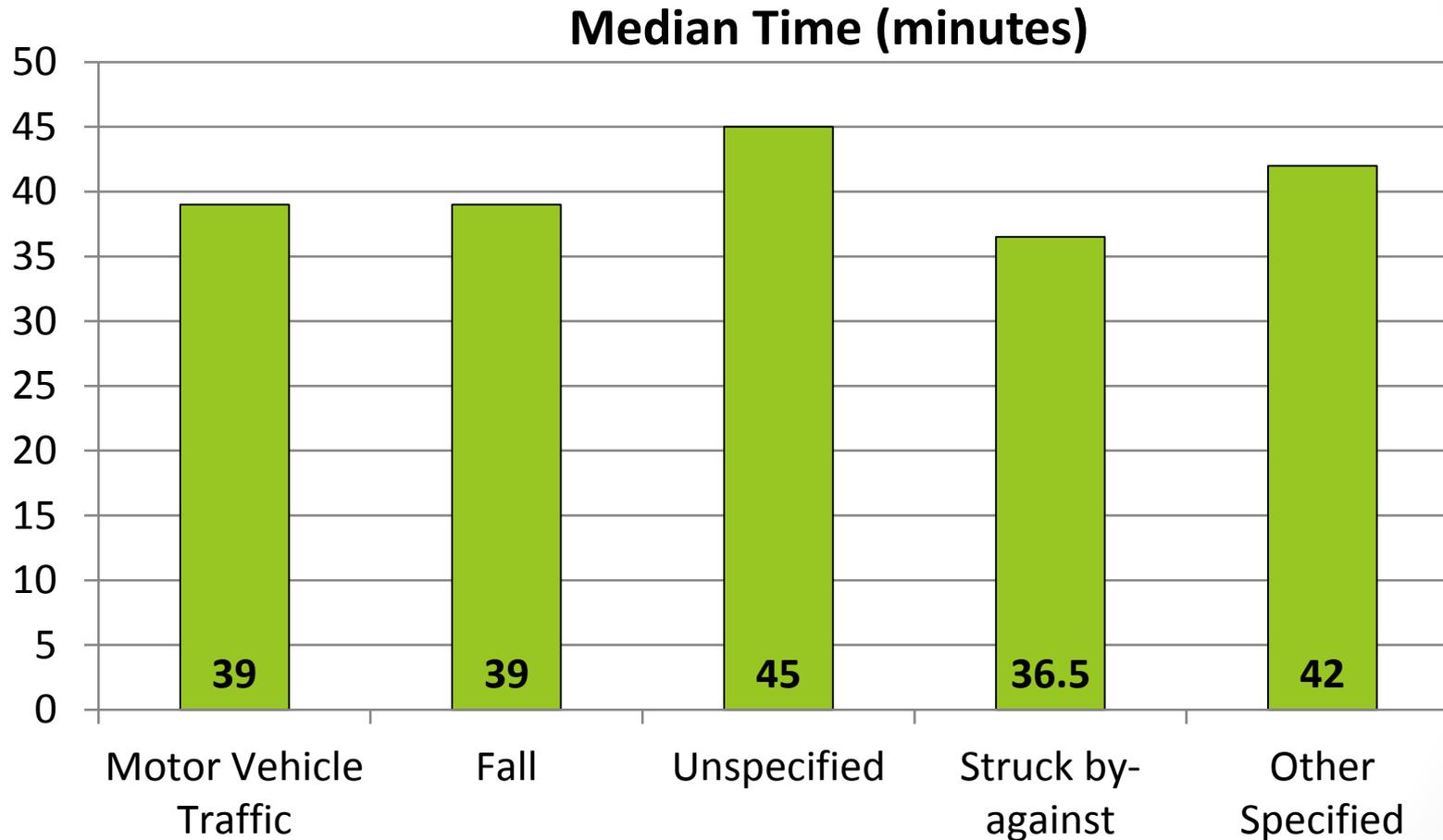


Among all reported injuries:

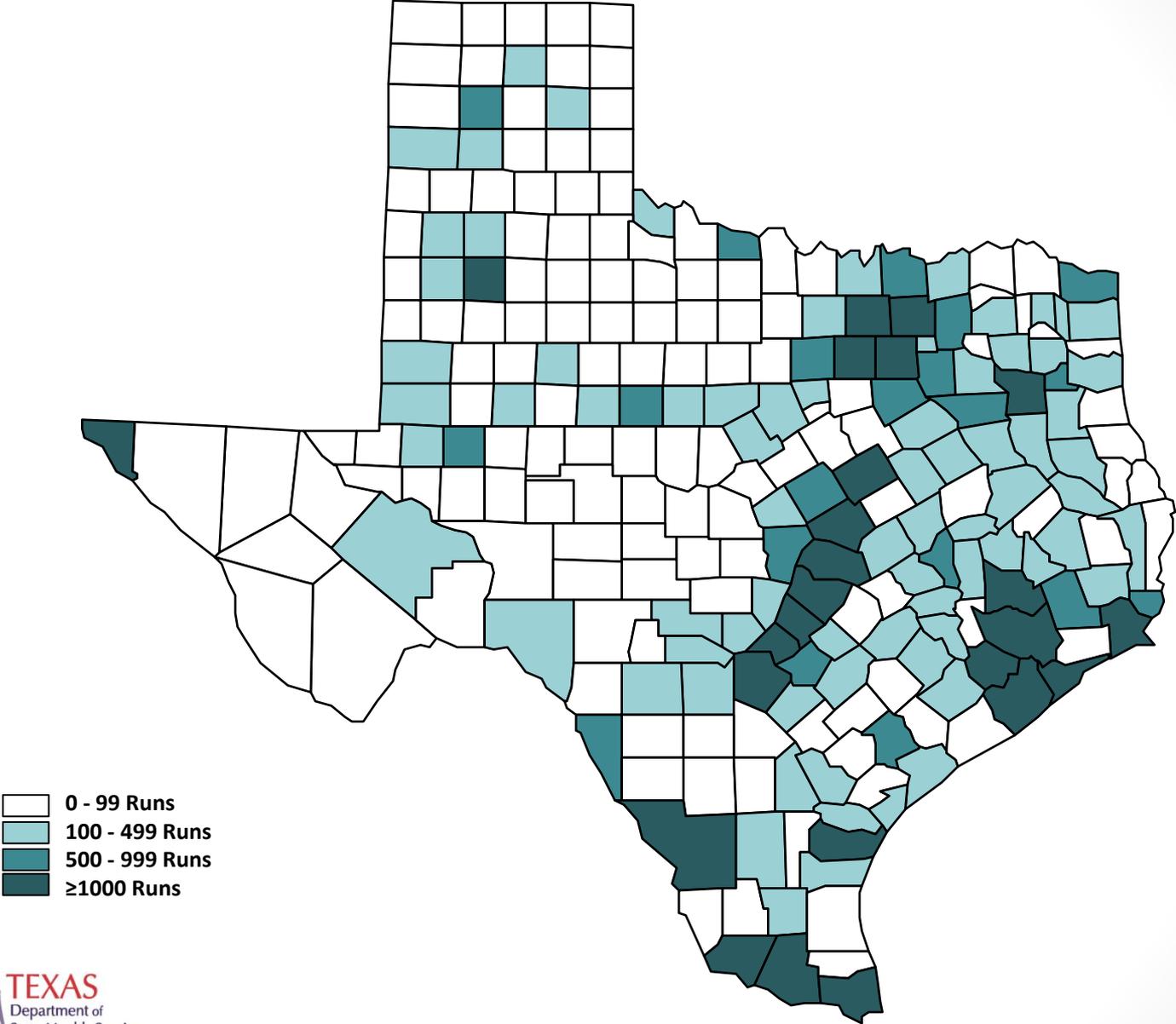
- 67% were associated with either Motor Vehicle Traffic or Falls
- 6.9% were classified as Assault/Homicide

Pediatric EMS Trauma Runs

Median Total Pre-Hospital Time by Top 5 Mechanisms of Injury, Texas 2013



Pediatric EMS Runs by County of Incident, Texas 2013



Pediatric Hospitalizations

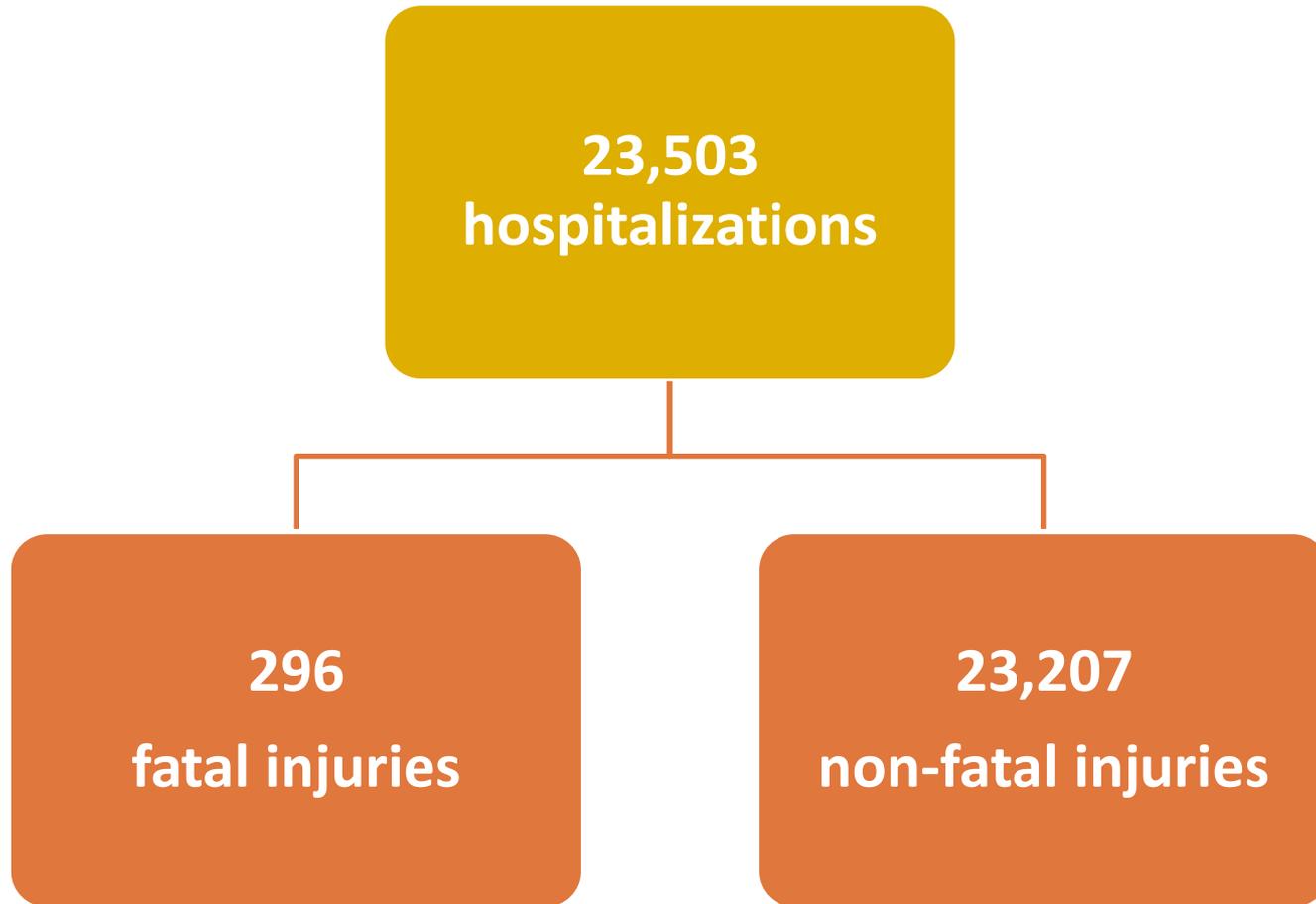


Inclusion Criteria (Hospitals)

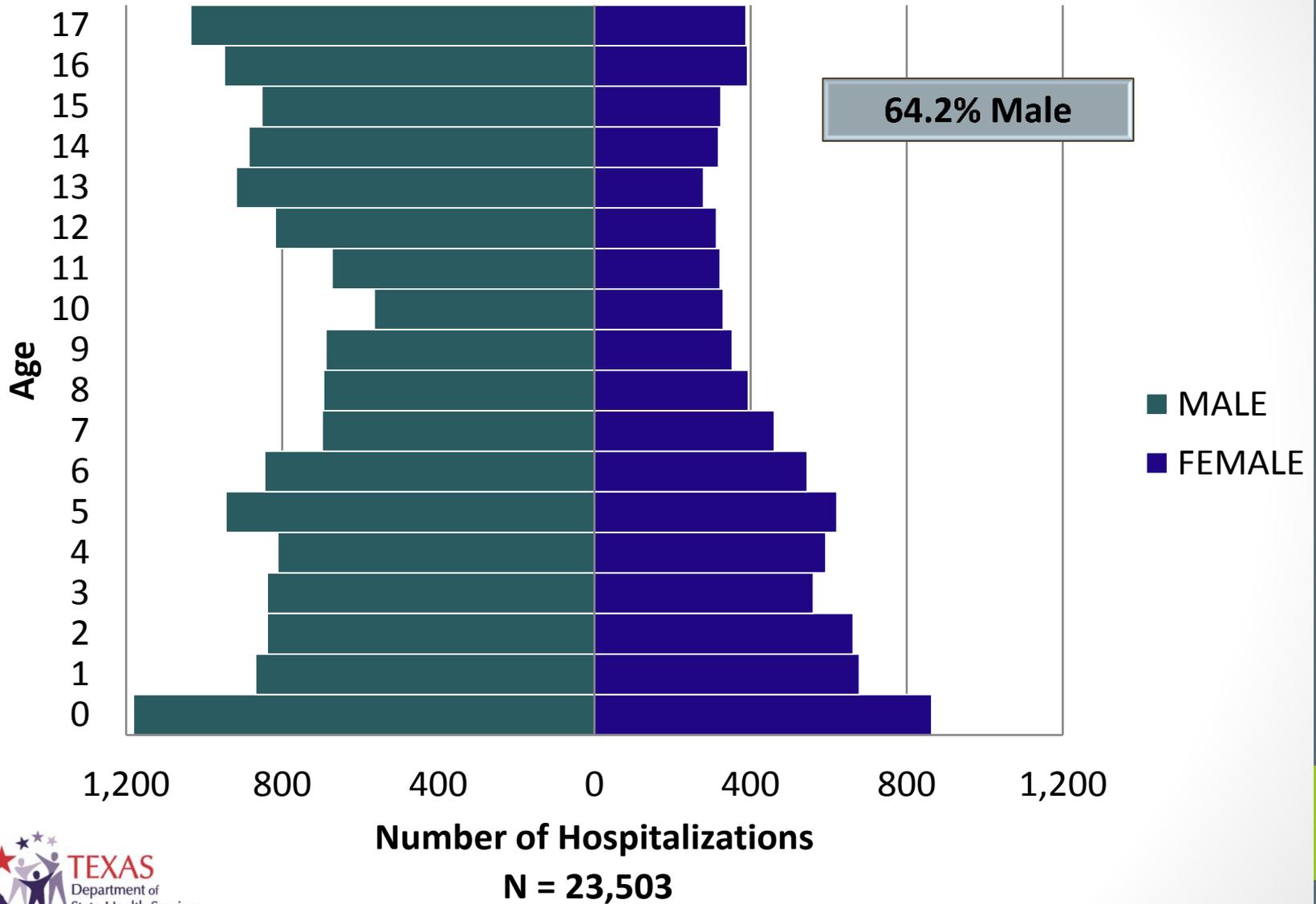
Per Texas Administrative Code, Title 25, Chapter 103, Rule § 103.7, hospitals shall report hospitalizations meeting the following criteria:

- A **spinal cord injury**, (ICD-9-CM **diagnosis codes** 806.0-806.9 and 952.0-952.9) **OR...**
- A **traumatic brain injury**, (ICD-9-CM **diagnosis codes** 348.1, 800.0-801.9, 803.0-804.9, 850.0-854.1, and 994.1) **OR...**
- Another **traumatic injury**, (ICD-9-CM **diagnosis codes** 800-959.9 excluding 905-909, 910-924, and 930-939), **AND** at least one of the following:
 - admitted to a hospital inpatient setting (for >48 hours)
 - died after receiving any evaluation or treatment or was dead on arrival
 - transferred into or out of the hospital

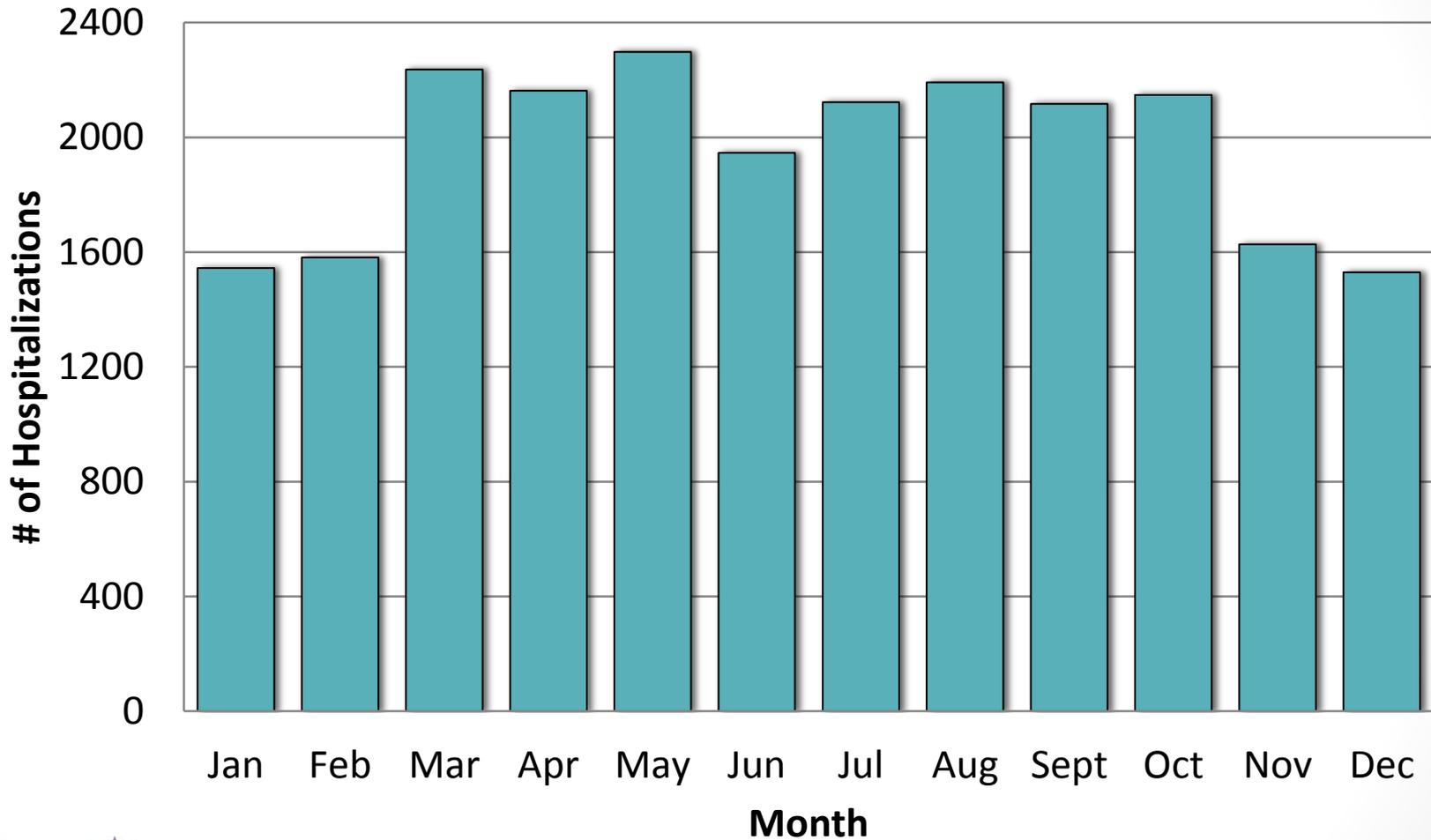
Texas Pediatric Hospitalizations (Ages 0-17), 2013



Texas Pediatric Hospitalizations by Age and Sex, 2013



Pediatric Hospitalizations by Month, Texas 2013



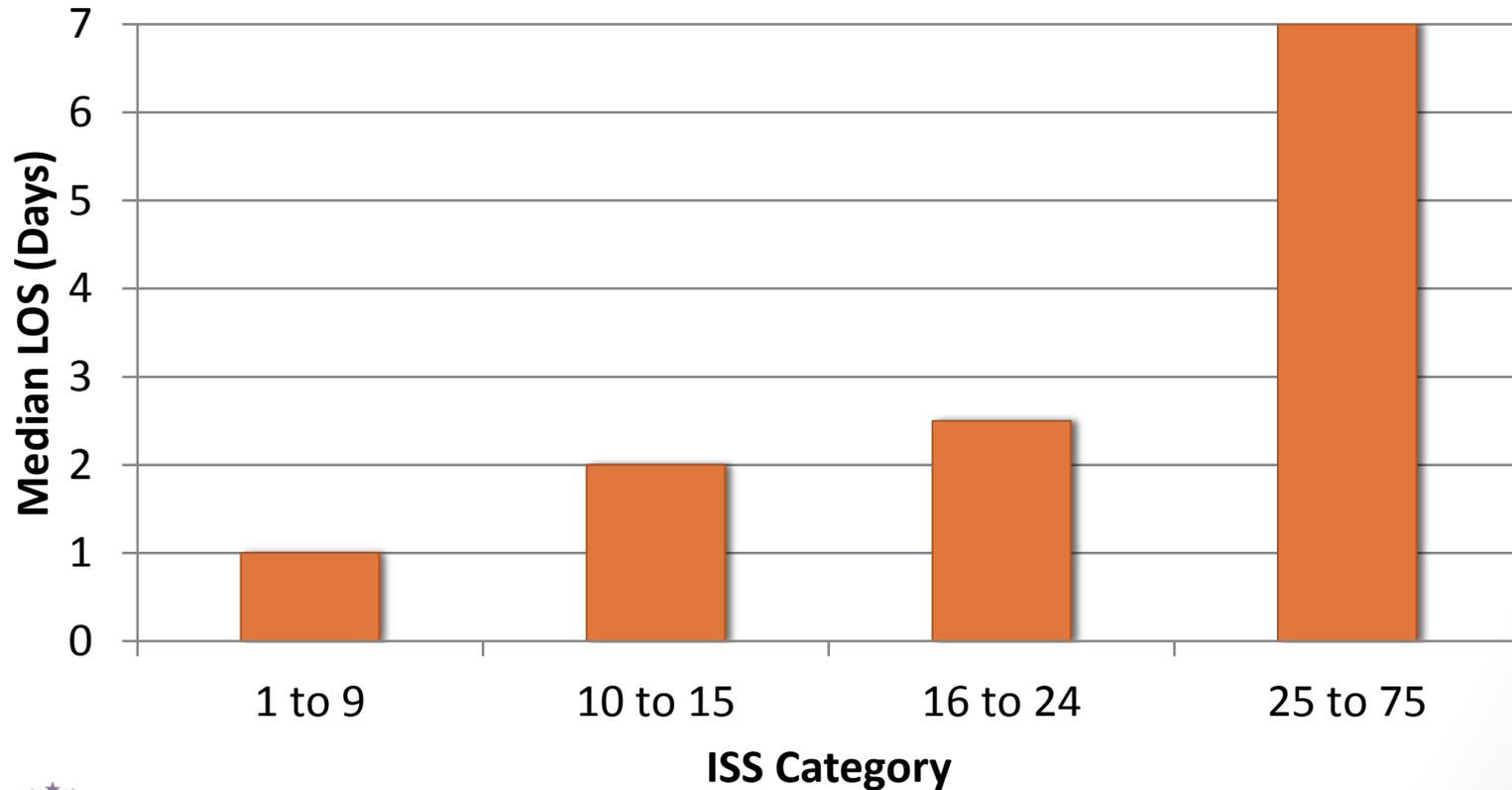
Pediatric Hospitalizations (N = 23,503), Texas 2013

	Fatal (N = 296)		Non-Fatal (N = 23,207)	
	n	%	n	%
TBI only	158	53.4	5,209	22.4
SCI only	3	1.0	70	0.3
TBI & SCI	11	3.7	24	0.1
Other Traumas	124	41.9	17,904	77.2
ISS Category				
1-9	63	21.3	17,787	76.6
10-15	18	6.1	1,420	6.1
16-24	26	8.7	1,161	5.0
25-75	162	54.7	537	2.3

54.6% of *all* pediatric TBI had an ISS ≥16

Non-Fatal Pediatric Hospitalizations, Texas 2013

Median Length of Stay (LOS) by Injury Severity Score (ISS) Category

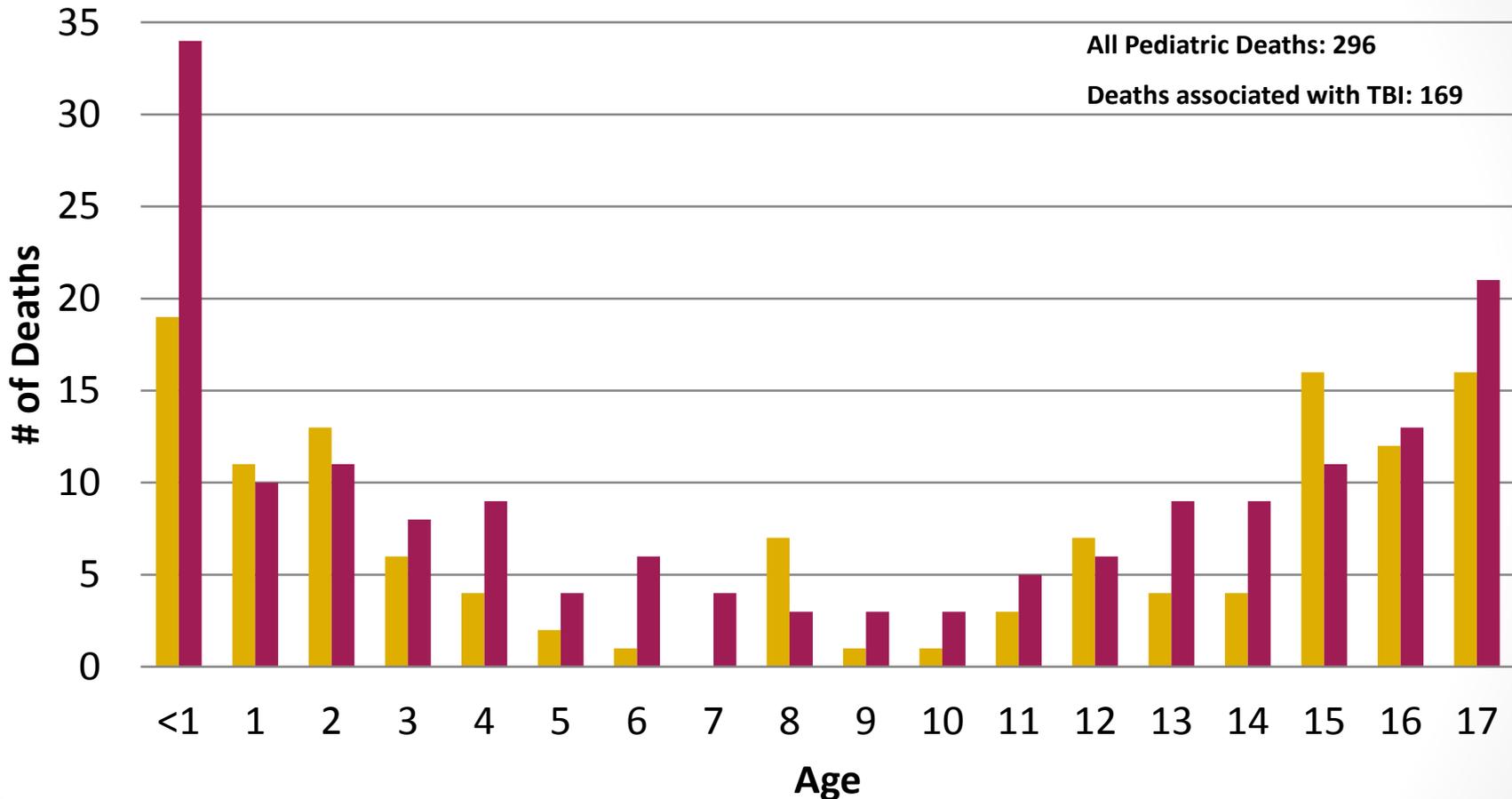


Top 5 Leading Mechanisms of Injury by Intent, Pediatric Hospitalizations, Texas 2013

	MECHANISM	INTENT				
		Unintentional	Self-Inflicted	Assault	Undetermined	Other
1	Fall	9,554	8	3	6	0
2	Motor Vehicle Traffic	3,793	0	3	3	0
3	Struck by, against	2,549	35	241	7	7
4	Transport, other	1,454	0	0	0	0
5	Fire/burn	1,107	3	5	17	0

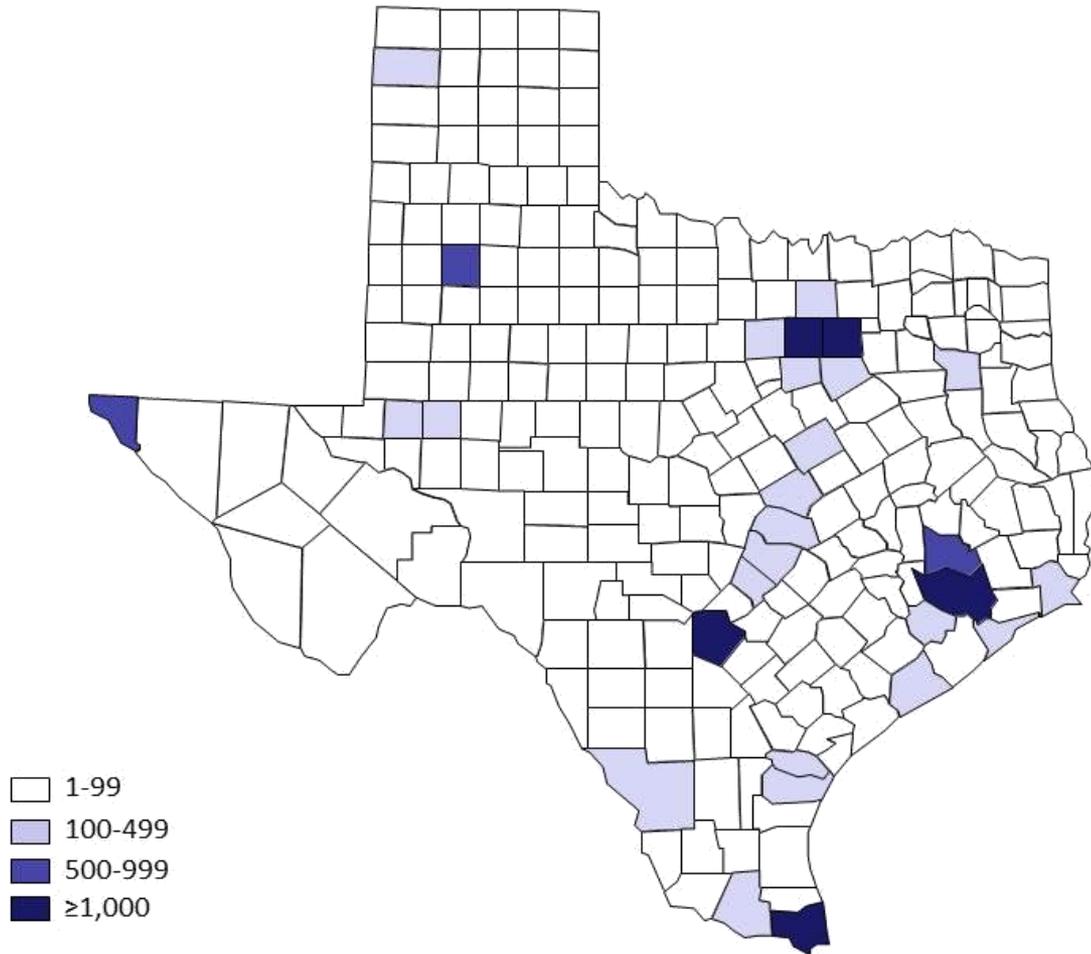
61.4% of *all* unintentional injuries were associated with either Falls or Motor Vehicles

Pediatric Deaths by Age & Injury Type, Texas 2013



■ All Other Injuries ■ TBI

Pediatric Hospitalizations by County of Incident, Texas 2013



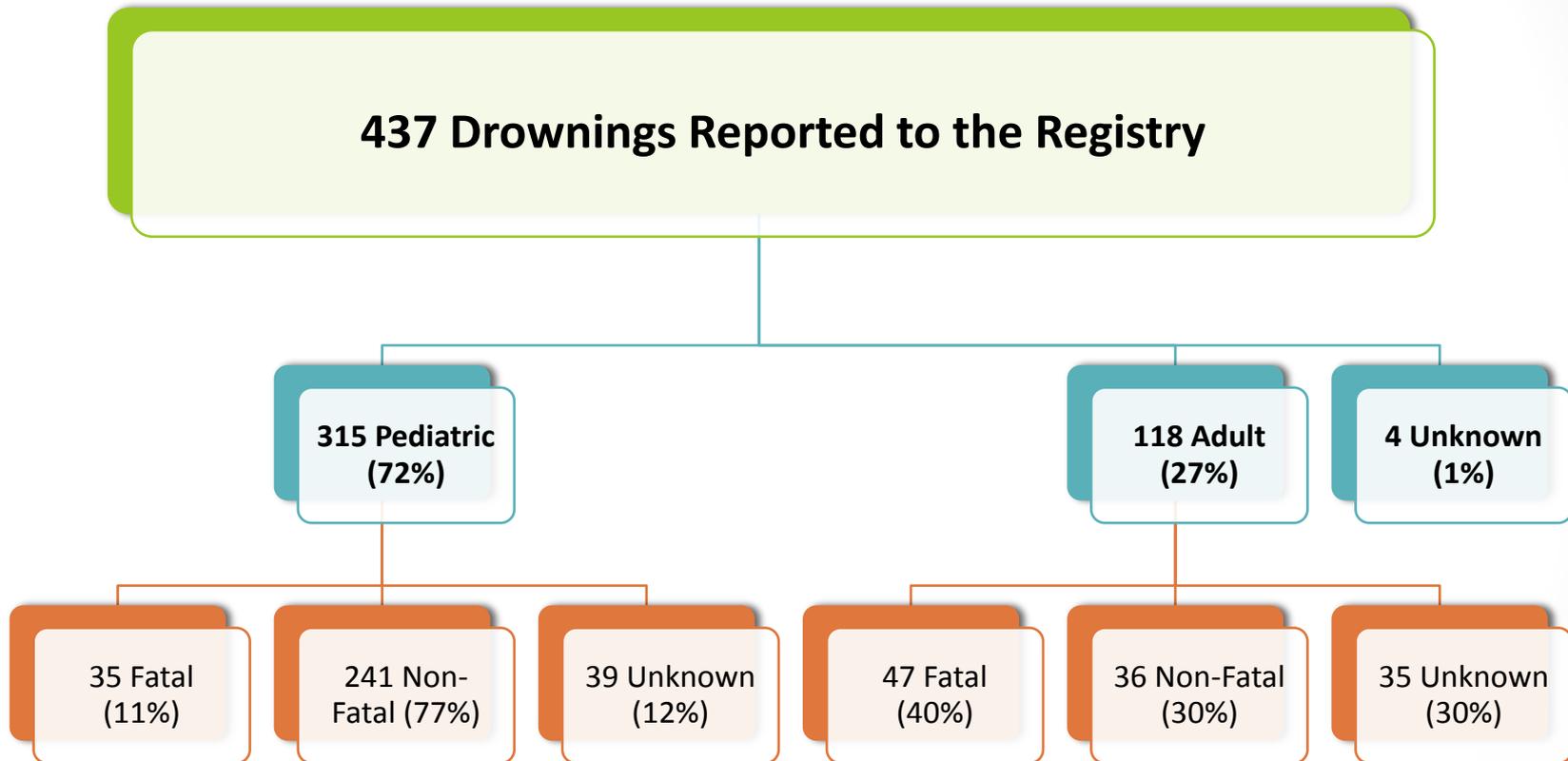
Pediatric Drownings



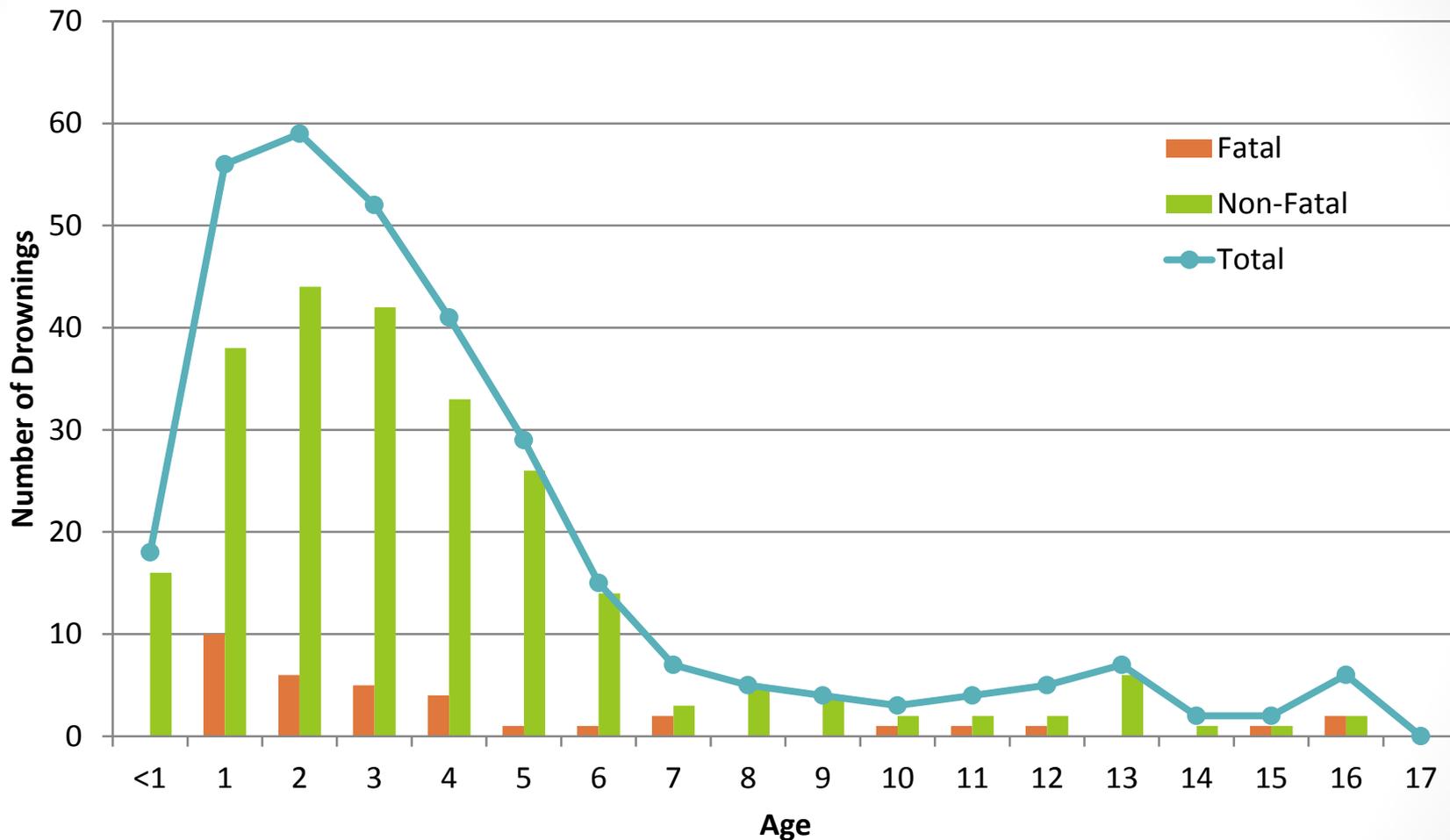
Inclusion Criteria (Submersion Registry)

- As per Texas Administrative Code, Title 25, Chapter 103, **ALL** submersion injuries must be reported by physicians, hospitals, medical examiners, and justices of the peace (§103.4).
- A submersion injury (or drowning) is defined as the process of experiencing respiratory impairment from submersion/immersion in liquid.
 - This can be fatal **OR** non-fatal

Drownings in Texas, 2013

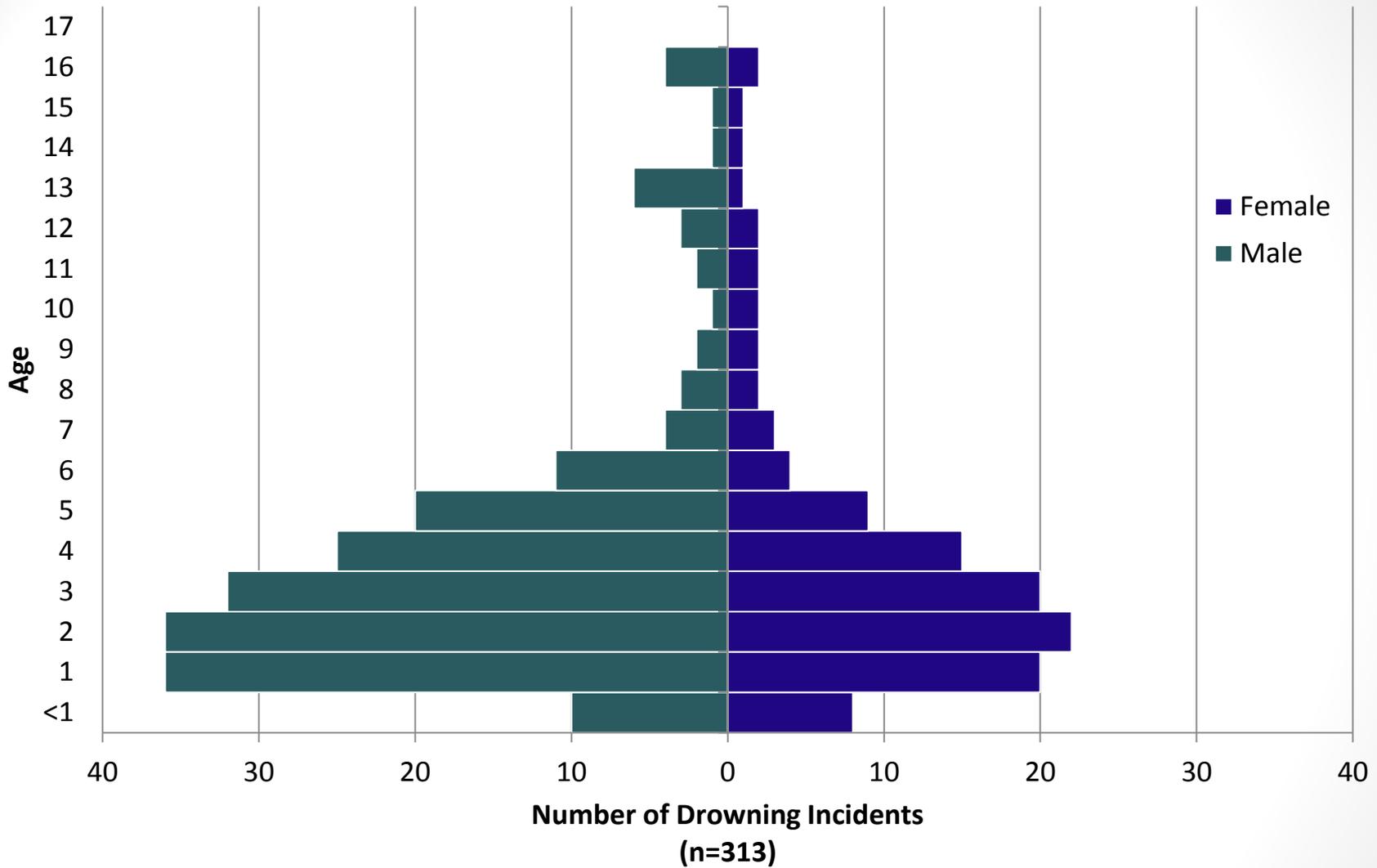


Pediatric Drownings by Age and Outcome, Texas, 2013 (n=315)



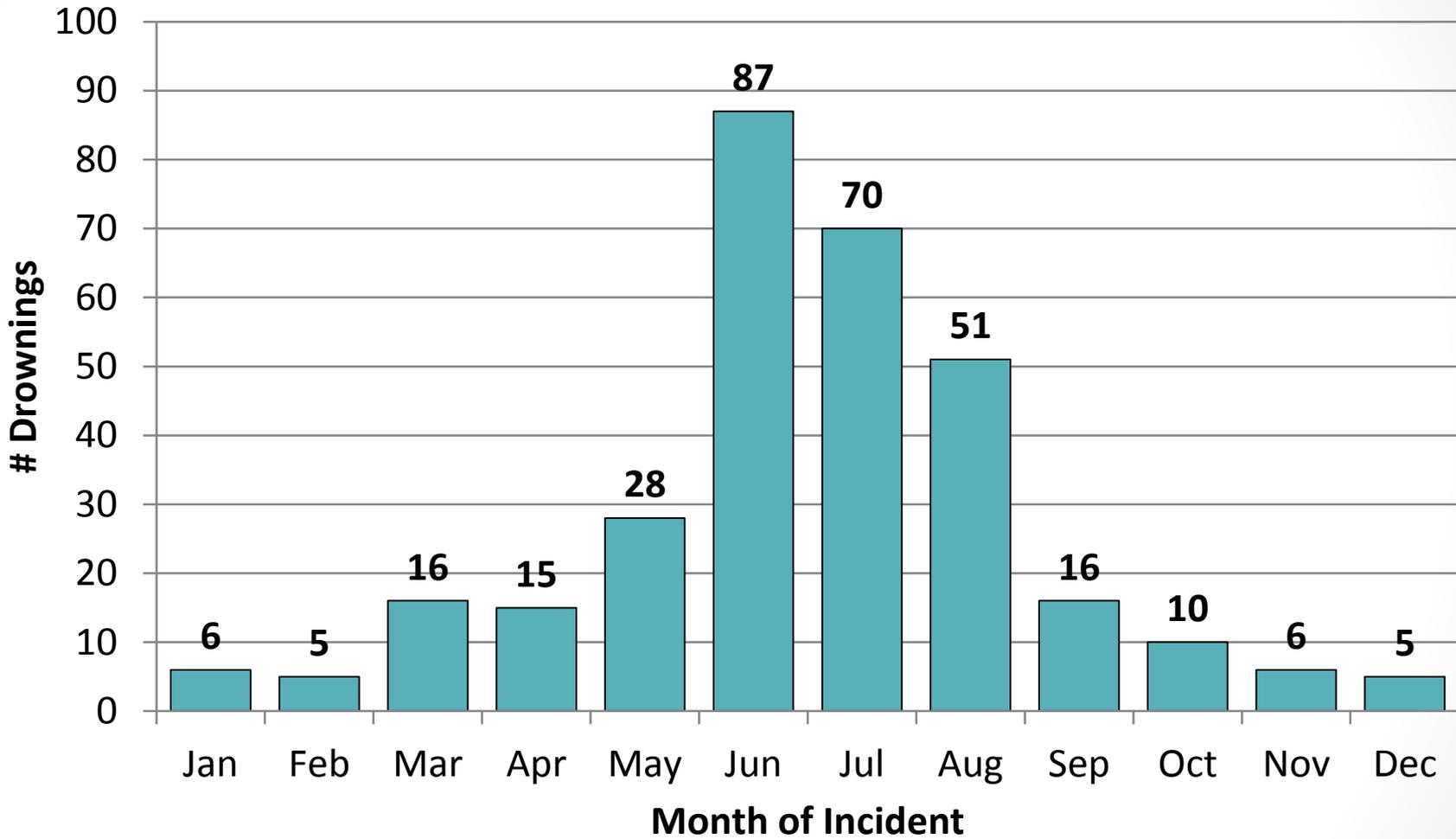
There were 39 drownings in 2013 with an unknown outcome. These are included in the total count.

Pediatric Drownings by Age and Sex, Texas 2013

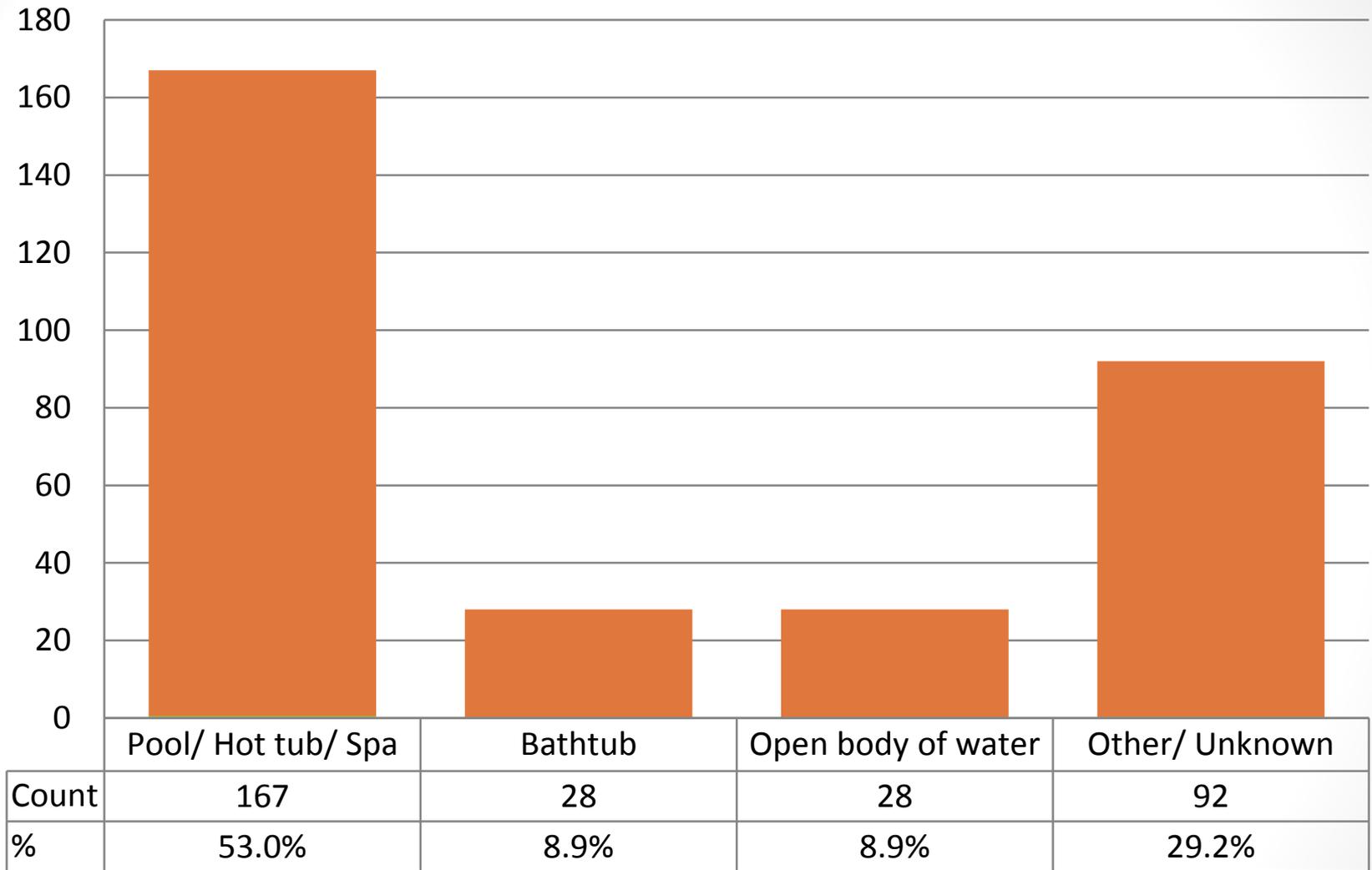


- 62.5% in males
- 81.0% in children 5 and younger

Pediatric Drownings by Month of Incident, Texas 2013 (n=315)



Pediatric Drownings by Scene, Texas 2013 (n=315)

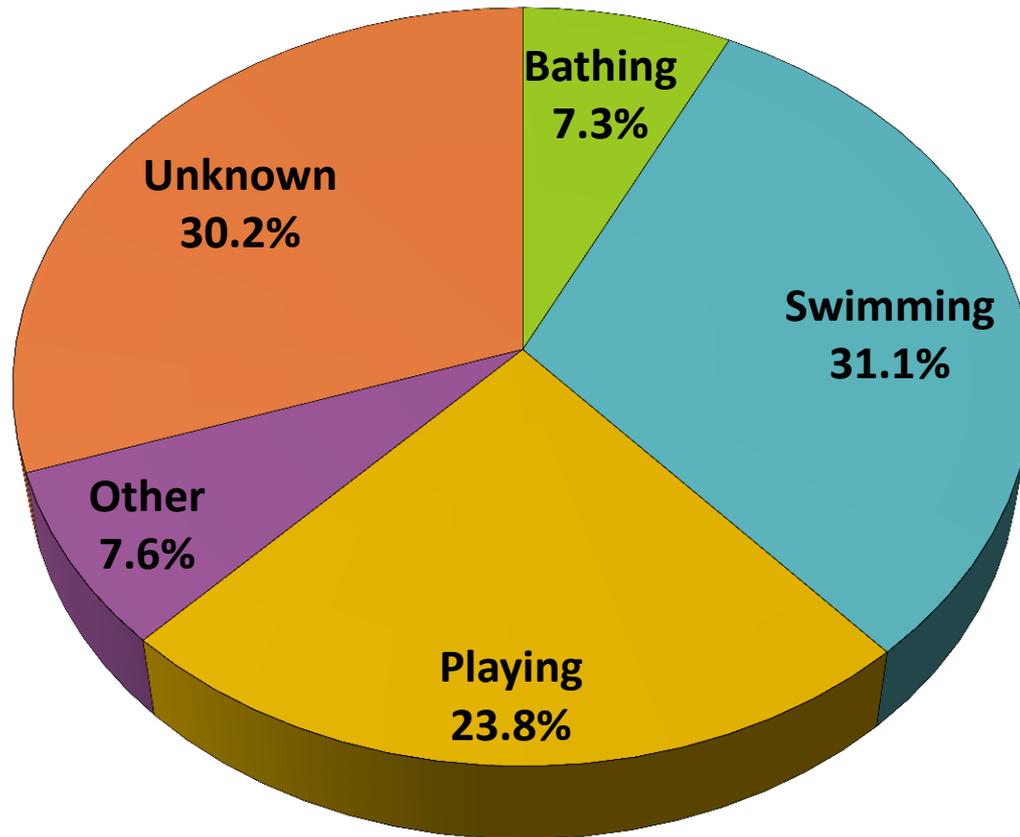


Supervision during the Drowning Incident

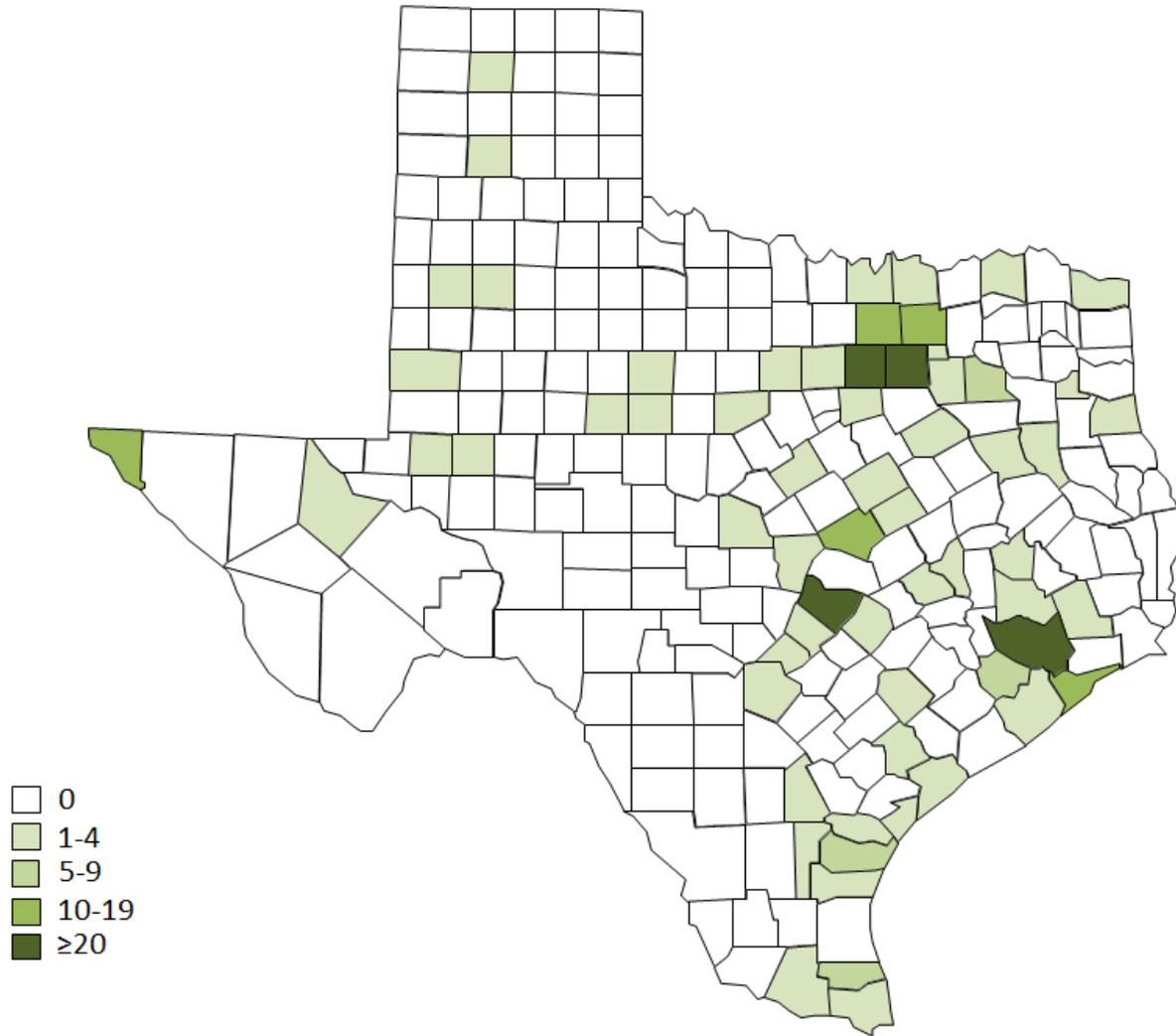
If the child was less than 15 years old, was he/she supervised?

- Of the 307 children <15 years old, 77.8% (239) of the children were being supervised during the drowning incident
- Out of these:
 - 48.1% (115) of the supervisors were aware the child was involved in a water activity
 - 19.7% (47) witnessed the drowning event

Pediatric Drownings by Activity at Time of Incident, Texas 2013 (n=315)



Pediatric Drownings by County of Incident, Texas 2013



Injury Epidemiology & Surveillance Branch

WEBSITE: www.dshs.state.tx.us/injury

EMAIL: injury.web@dshs.state.tx.us

DATA: www.dshs.state.tx.us/injury/data/

