

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

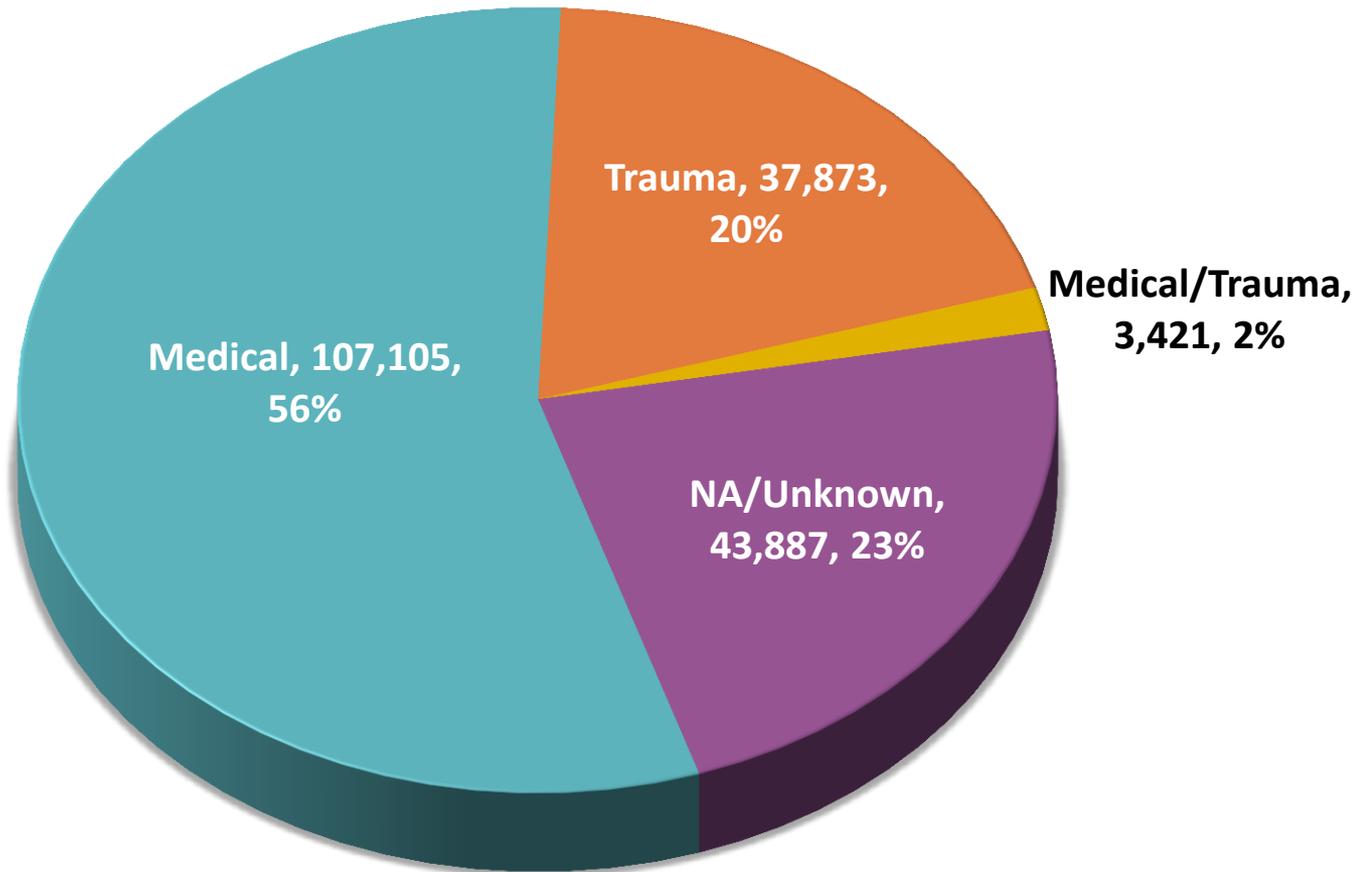
Pediatric EMS Runs (Ages 0 – 17), Texas 2013

Overall Statistics

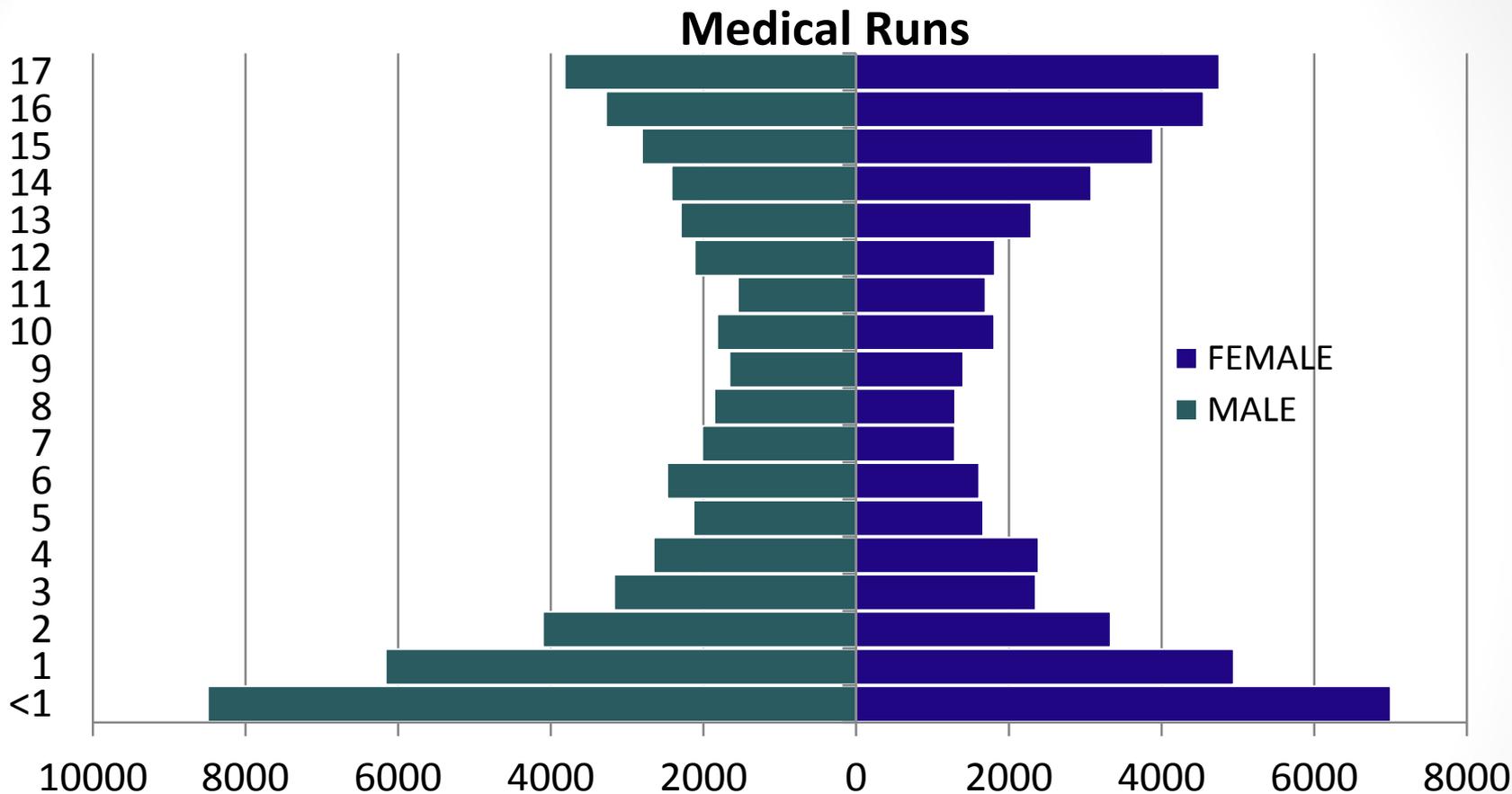
- 192,286 Pediatric EMS runs (7.3% of all EMS runs)
 - 52.3% Male
 - 22.4% White
 - 56.6% Transported to Hospital
 - 15.8% Runs Diverted

Pediatric EMS Runs by Call Type, Texas 2013

(n=192,286)



Pediatric EMS Runs by Age and Sex, Texas 2013



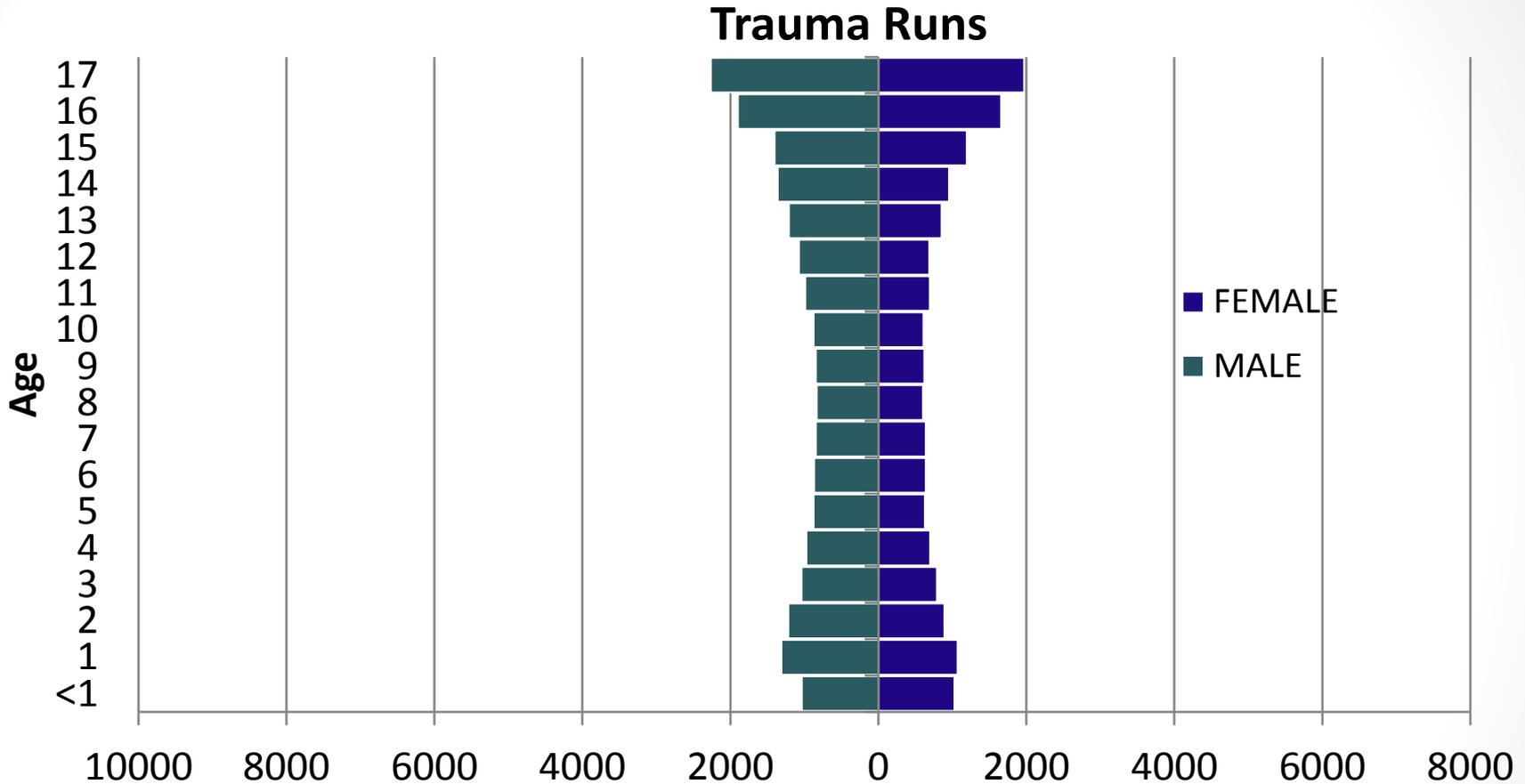
When Age and Sex were known:

- 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

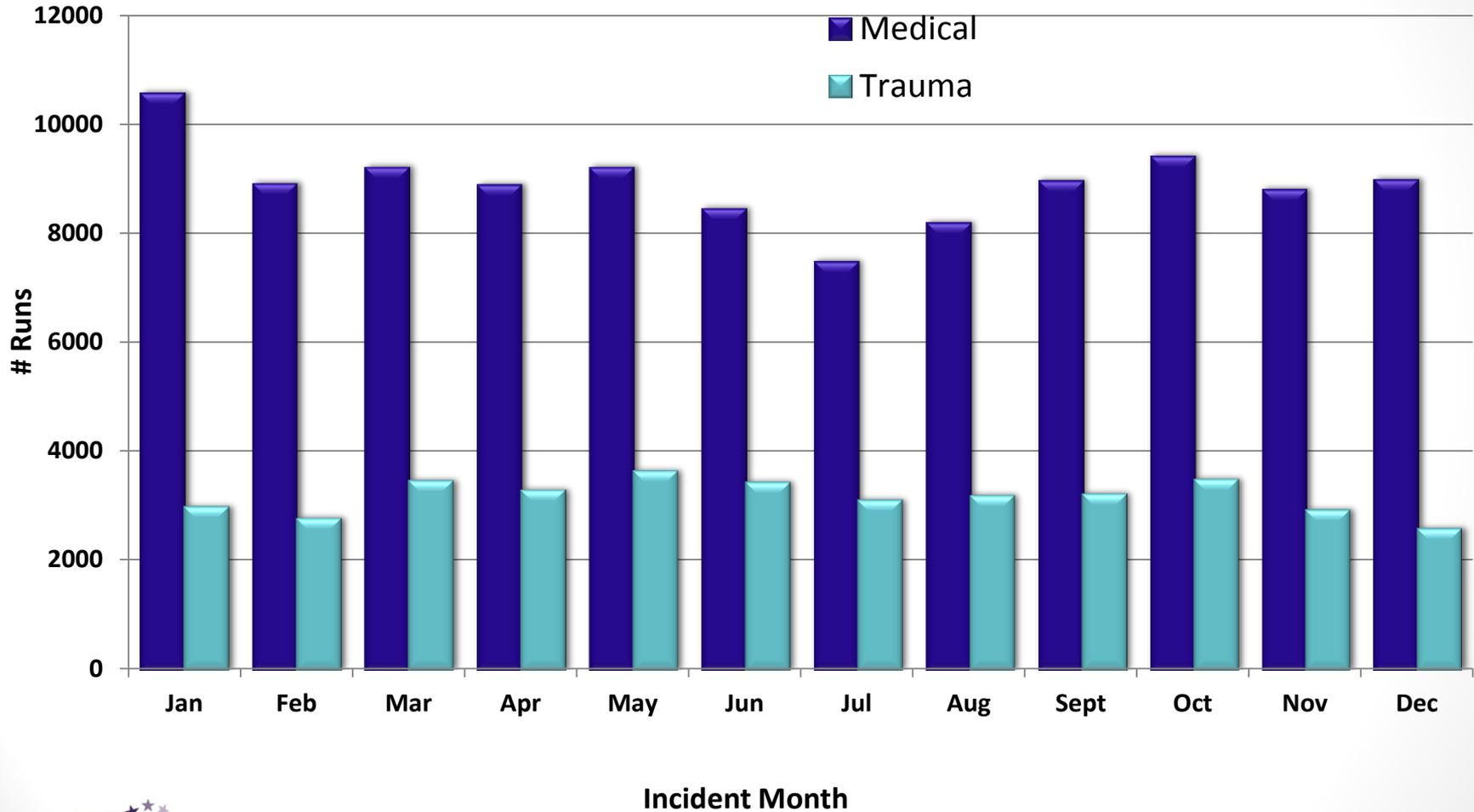


Total EMS Runs: 192,286

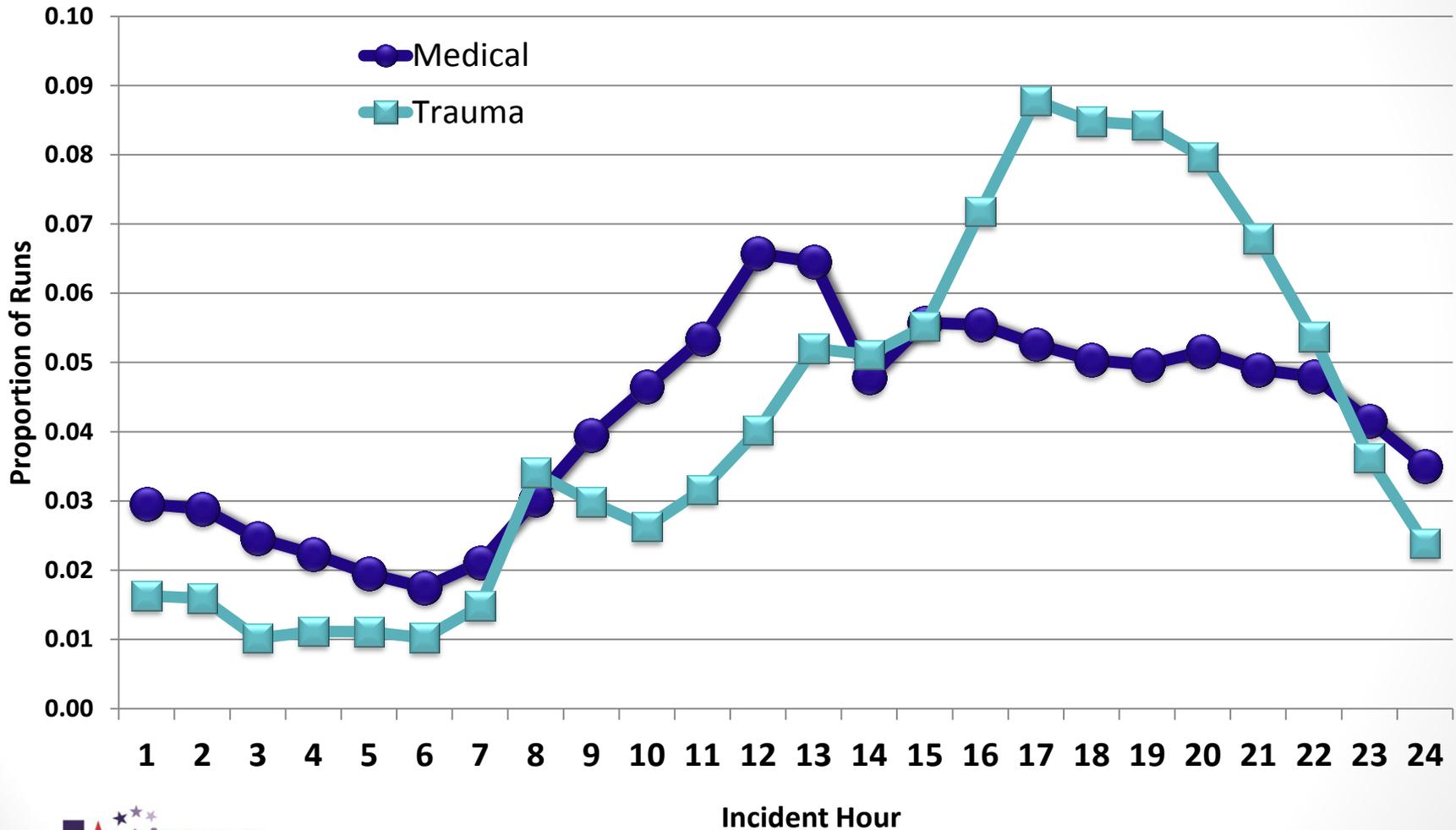
Trauma Runs: 37,873



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

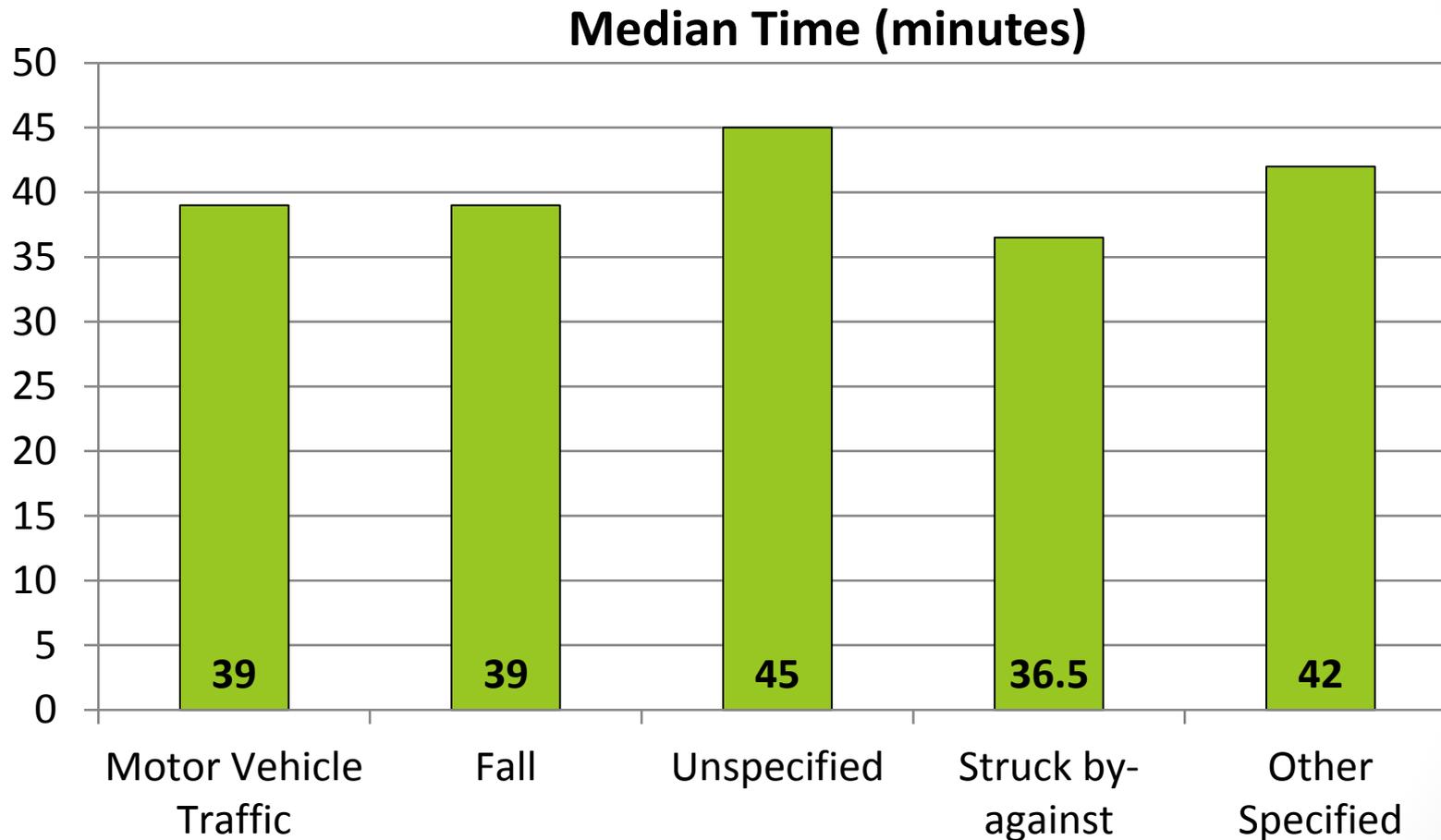


Among all reported injuries:

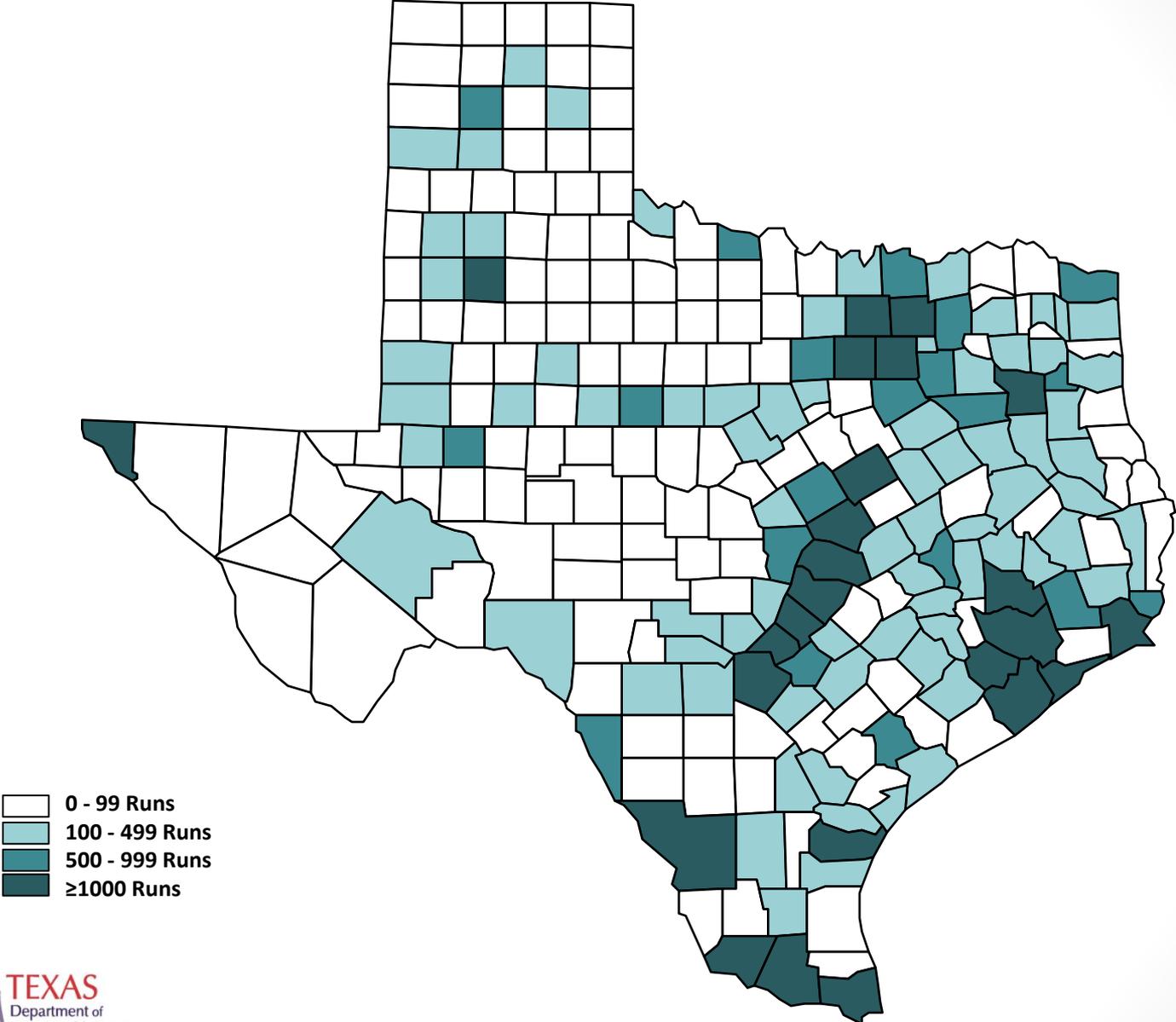
- 67% were associated with either Motor Vehicle Traffic or Falls
- 6.9% were classified as Assault/Homicide

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

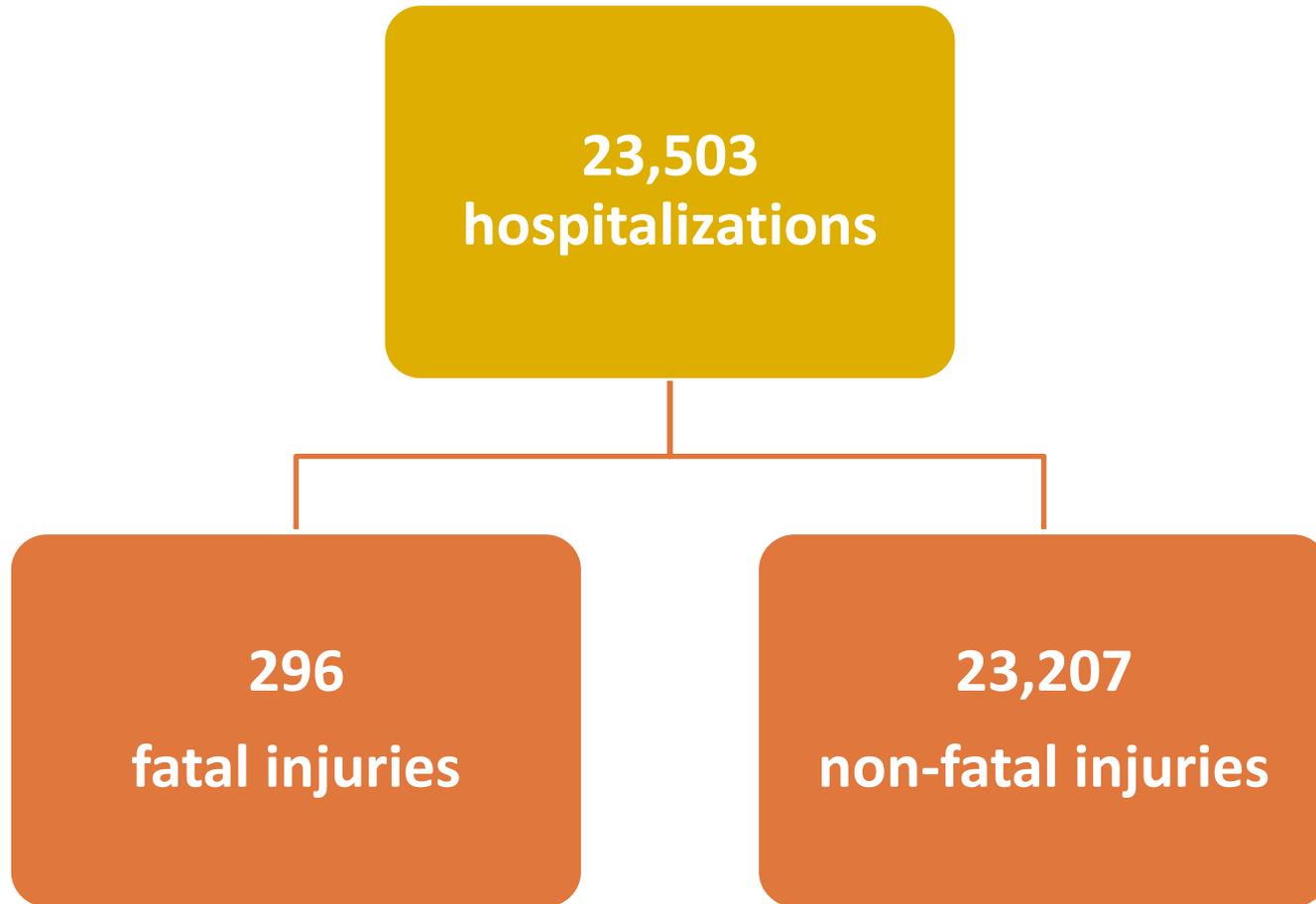


Inclusion Criteria (Hospitals)

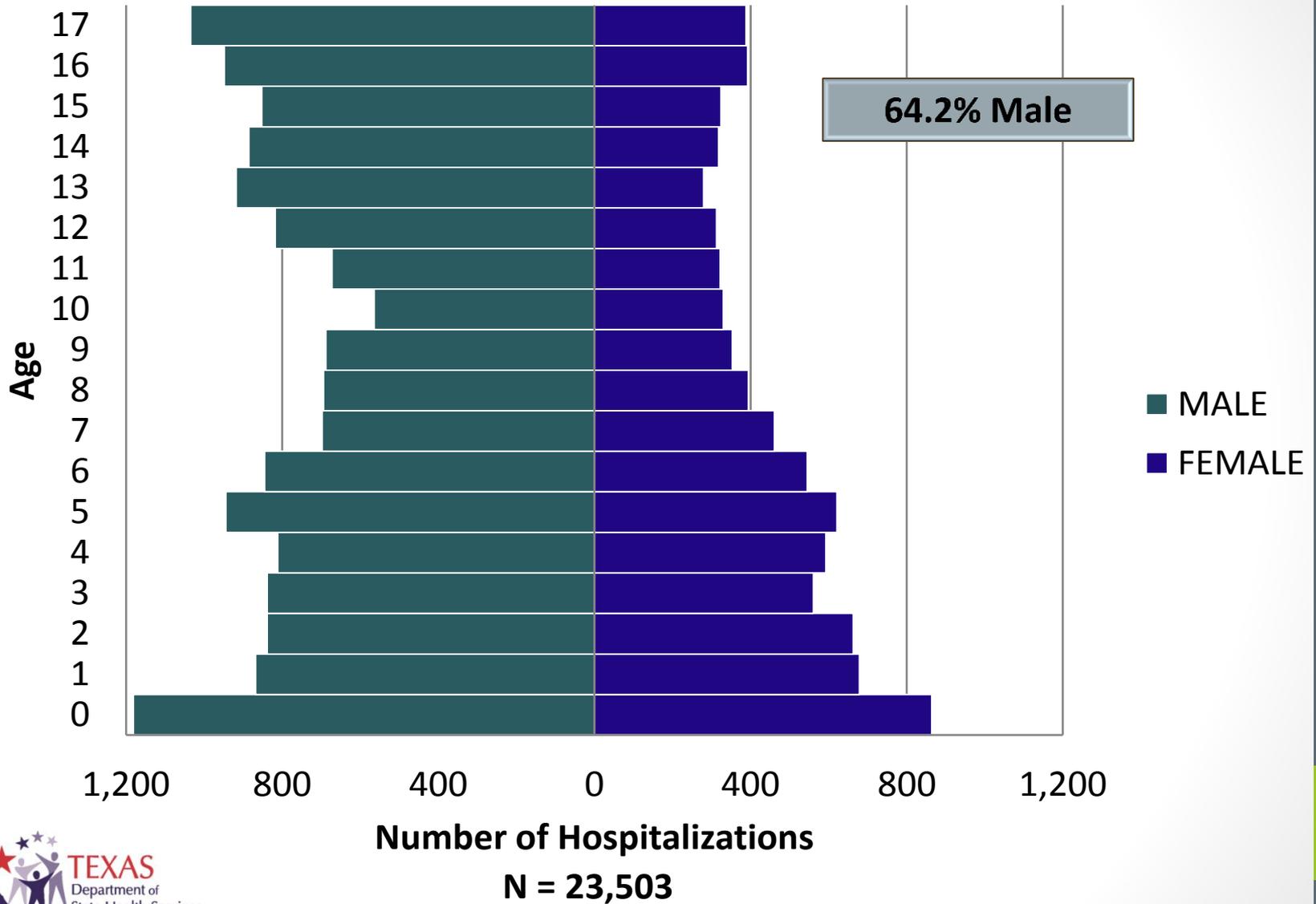
Per Texas Administrative Code, Title 25, Chapter 103, Rule § 103.7, hospitals shall report hospitalizations meeting the following criteria:

- 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

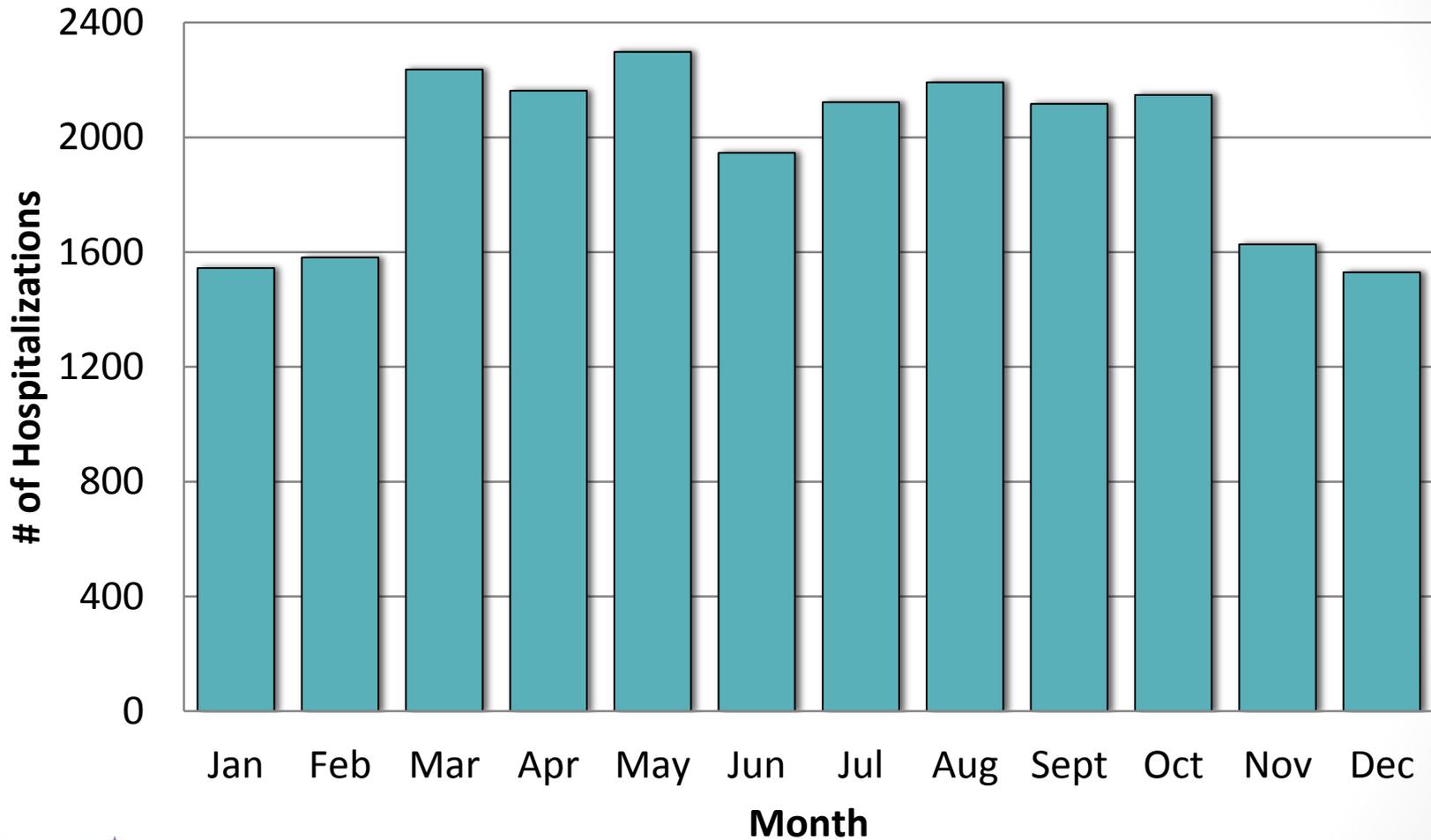
Texas Pediatric Hospitalizations (Ages 0-17), 2013



Texas Pediatric Hospitalizations by Age and Sex, 2013



Pediatric Hospitalizations by Month, Texas 2013



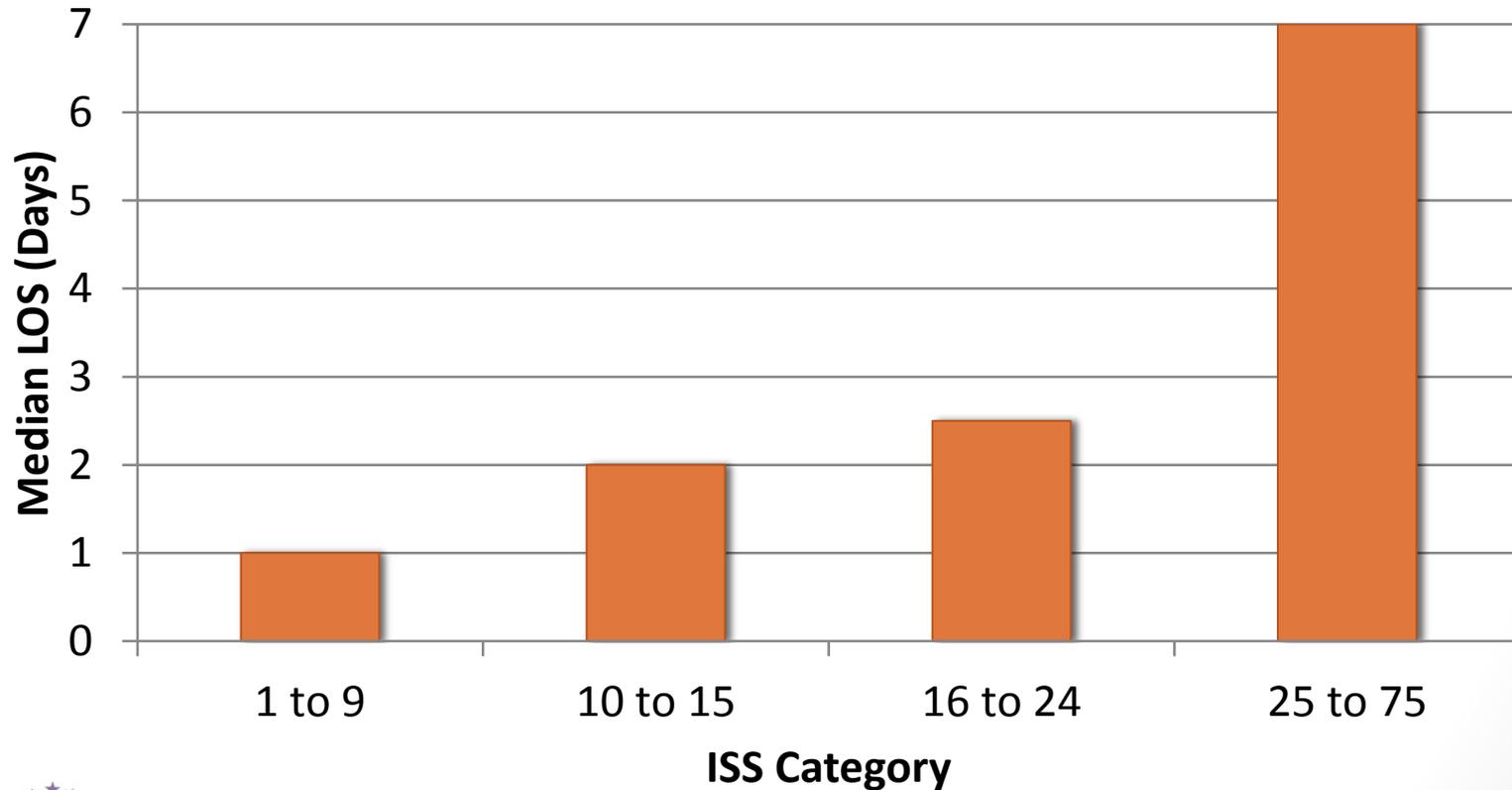
Pediatric Hospitalizations (N = 23,503), Texas 2013

	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 \geq 16

Non-Fatal Pediatric Hospitalizations, Texas 2013

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

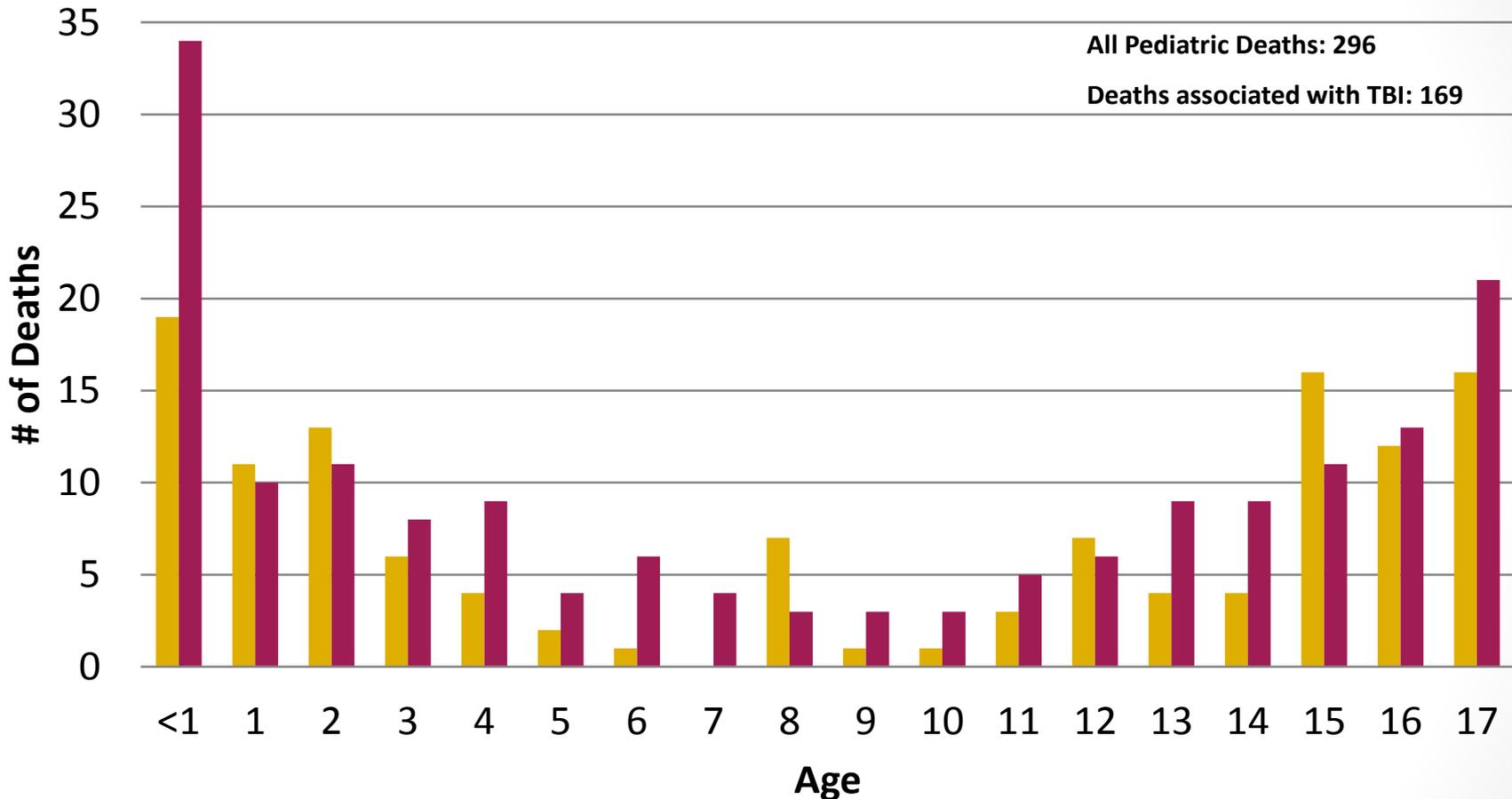


Top 5 Leading Mechanisms of Injury by Intent, Pediatric Hospitalizations, Texas 2013

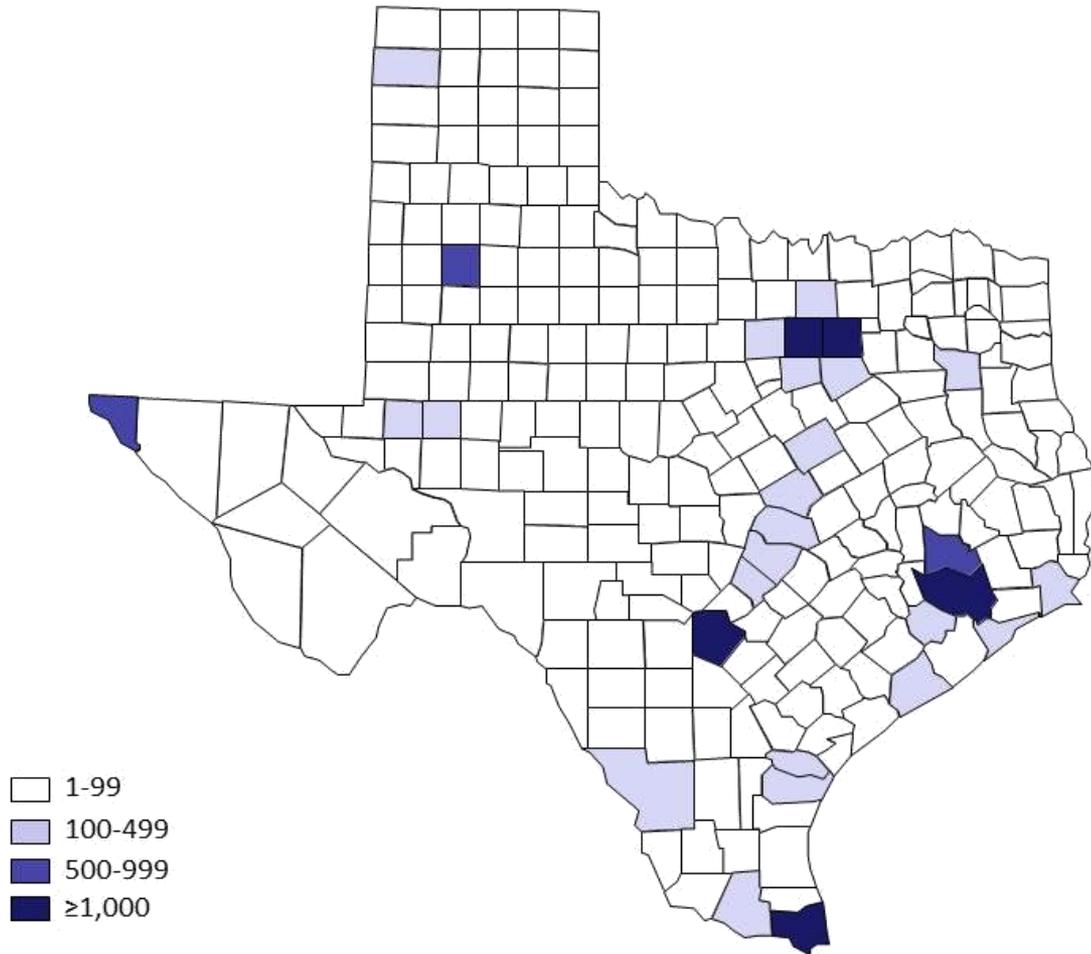
	MECHANISM	INTENT				
		Unintentional	Self-Inflicted	Assault	Undetermined	Other
1	Fall	9,554	8	3	6	0
2	Motor Vehicle Traffic	3,793	0	3	3	0
3	Struck by, against	2,549	35	241	7	7
4	Transport, other	1,454	0	0	0	0
5	Fire/burn	1,107	3	5	17	0

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

Pediatric Deaths by Age & Injury Type, Texas 2013



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

470 Total Drownings

345 Pediatric
(73%)

120 Adult
(26%)

5 Unknown
(1%)

36 Fatal
(11%)

253 Non-Fatal
(73%)

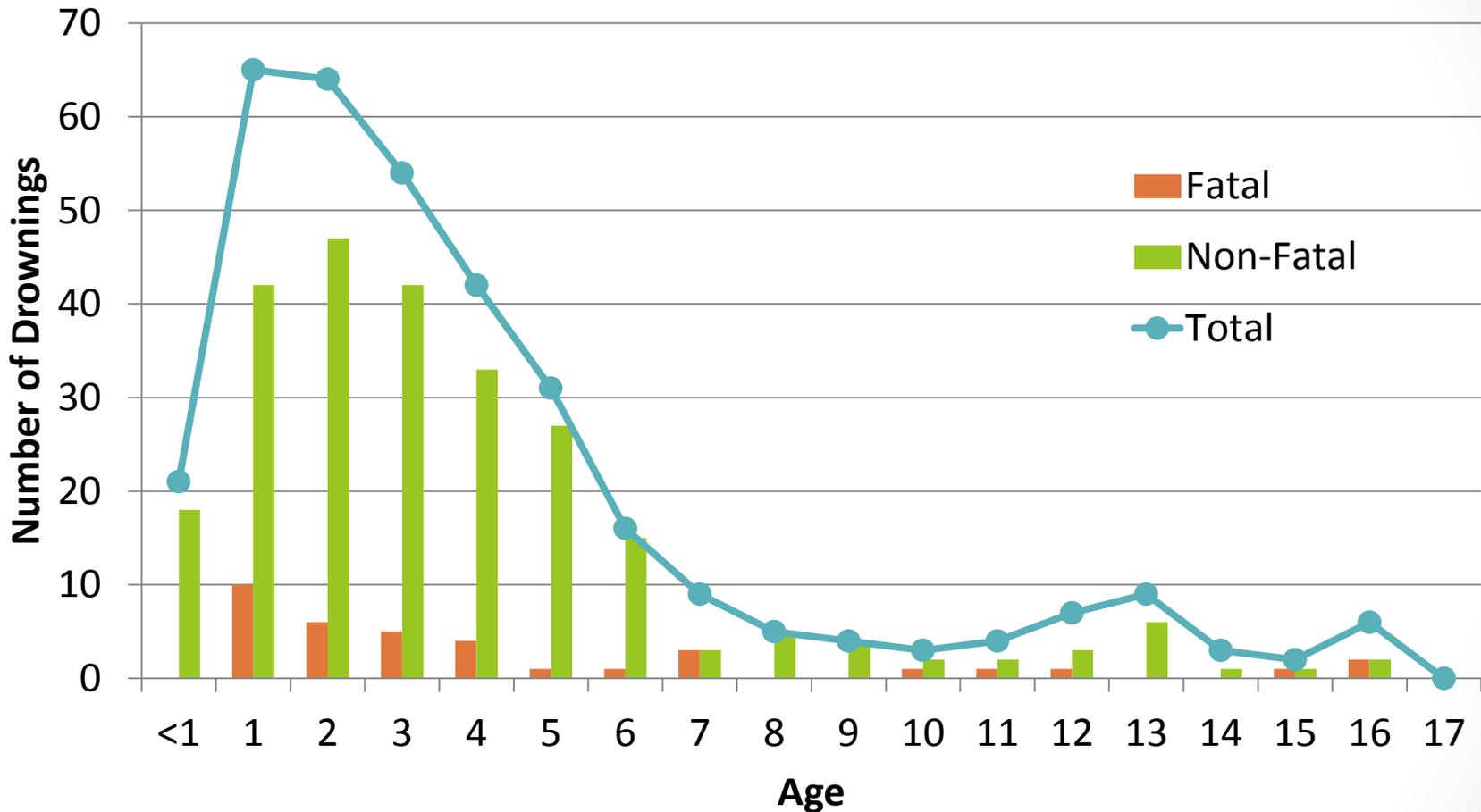
56 Unknown
(16%)

47 Fatal
(39%)

36 Non-Fatal
(30%)

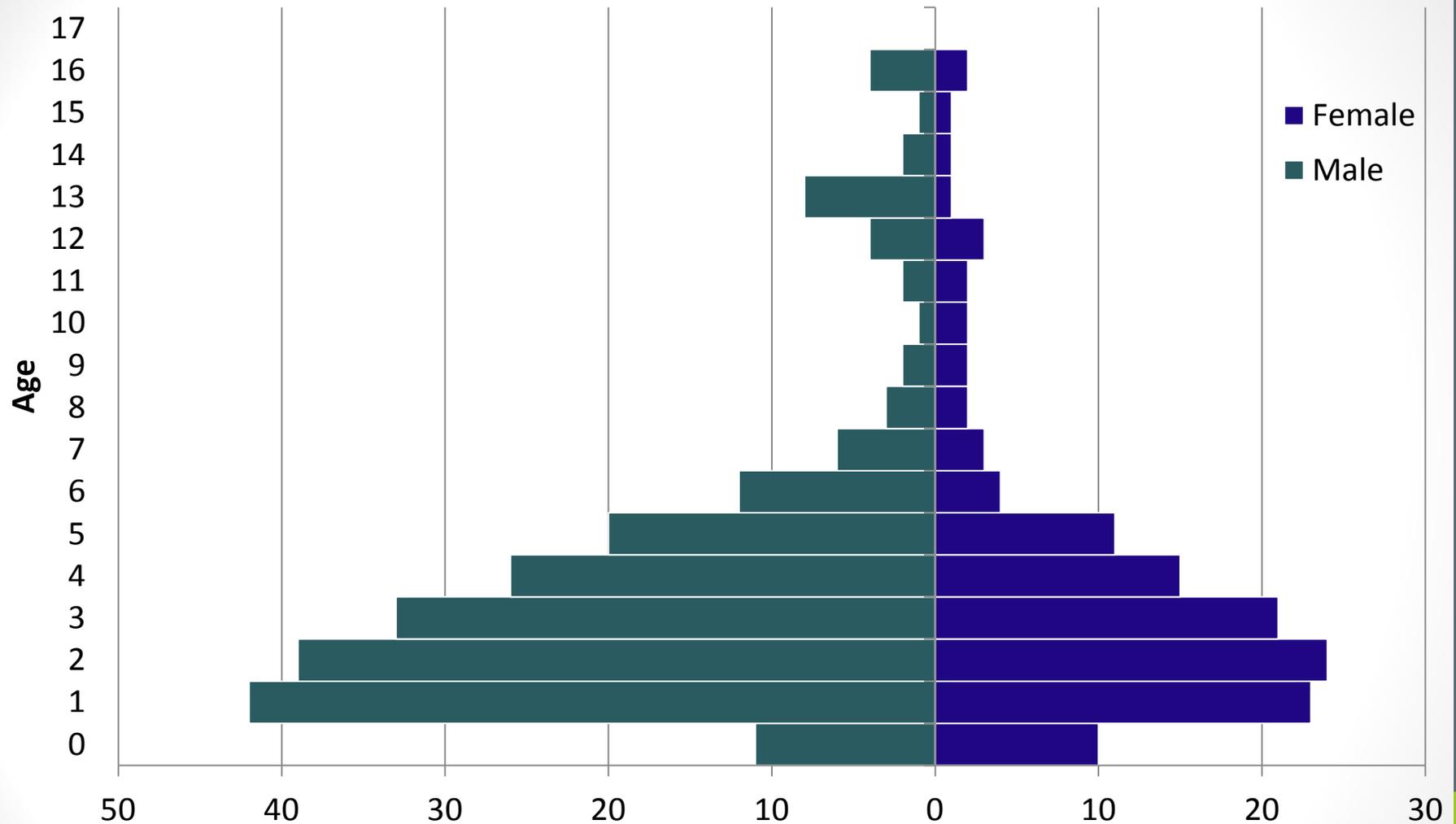
37 Unknown
(31%)

Pediatric Drownings by Age and Outcome, Texas 2013 (n=345)



There were 56 drownings in 2013 with an unknown outcome. These are included in the total count.

Pediatric Drownings by Age and Sex, Texas 2013

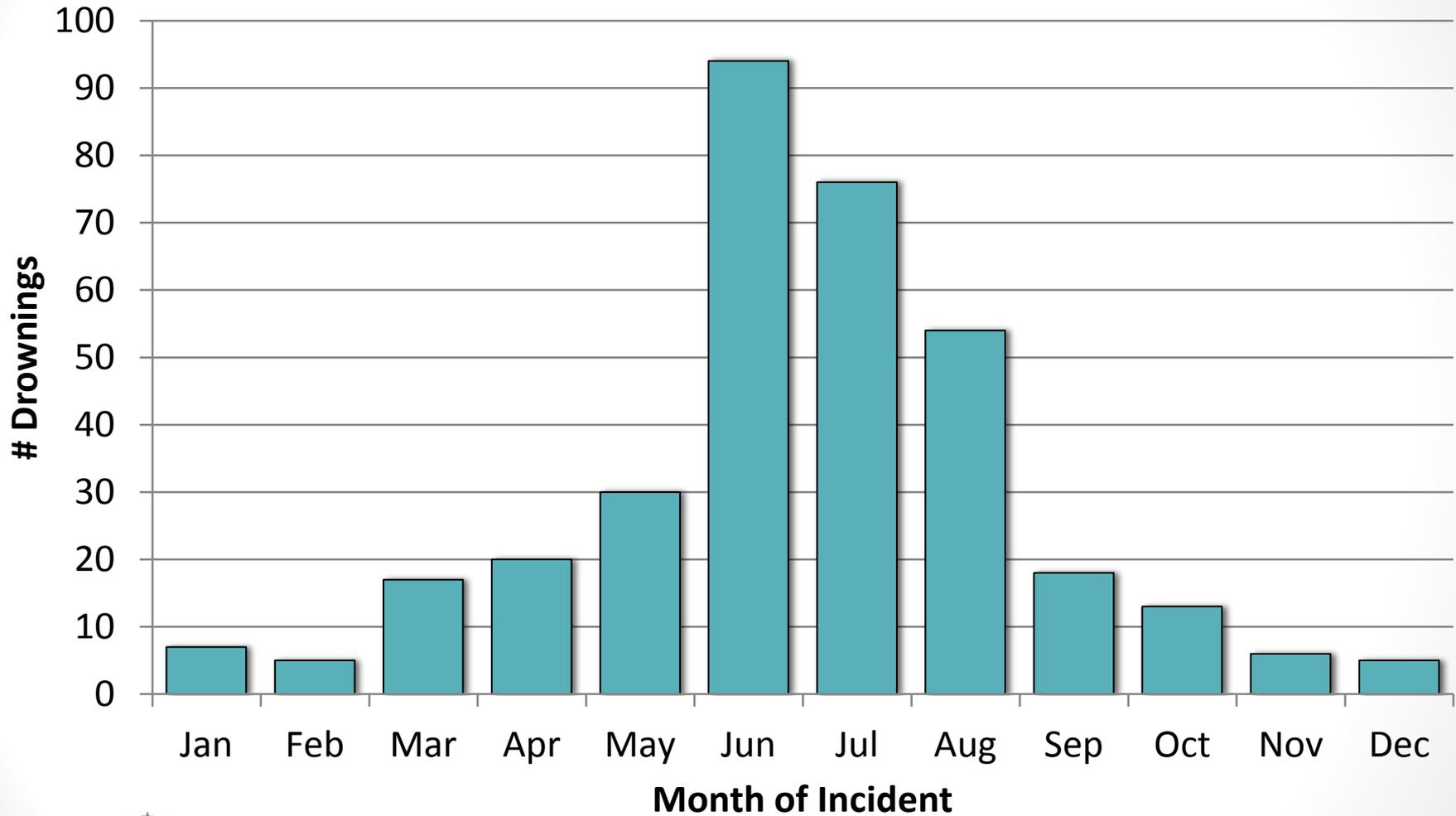


Number of Drowning Incidents
(n=343)

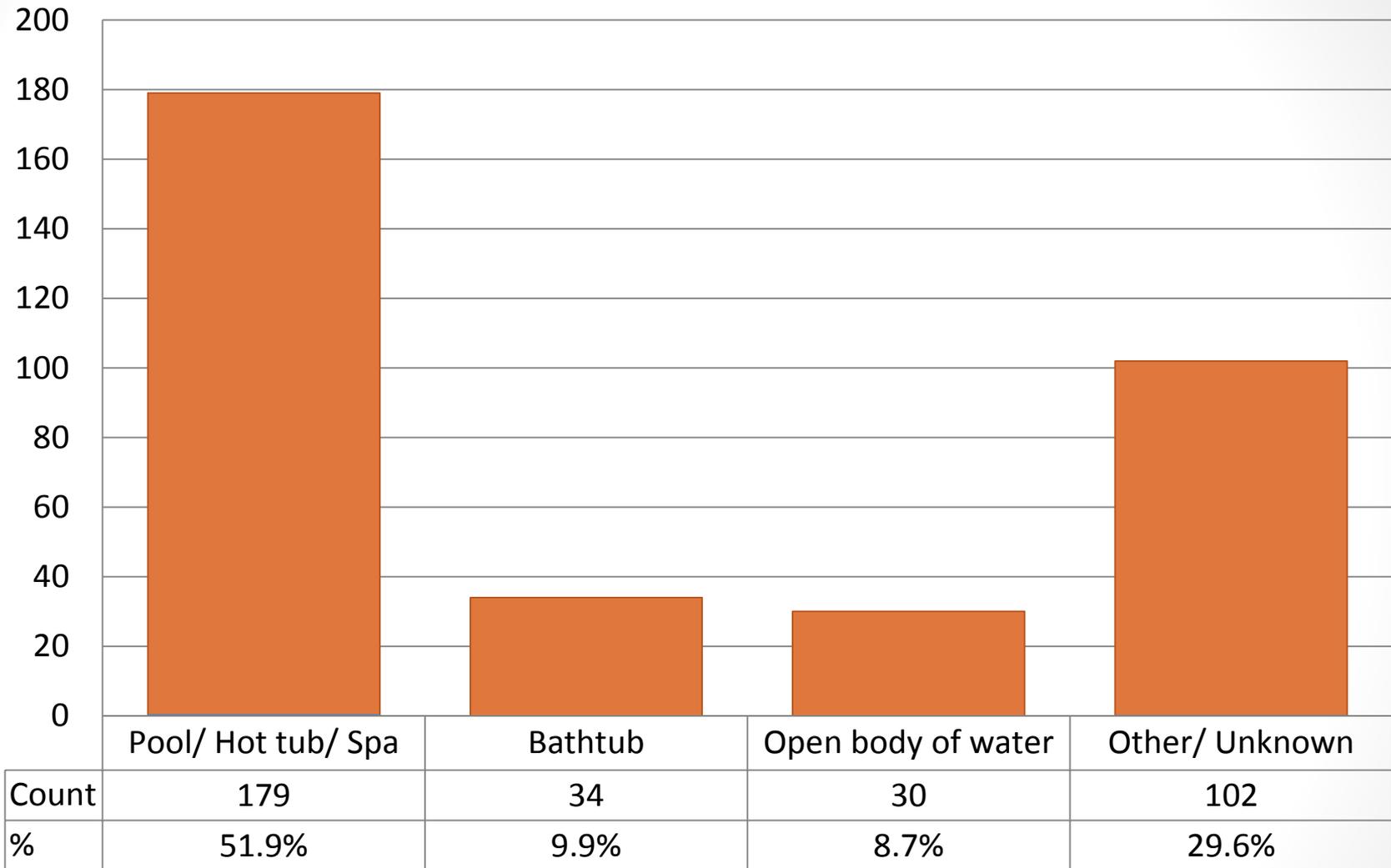
- 62.6% in males
- 80.3% in children 5 and younger



Pediatric Drownings by Month of Incident, Texas 2013 (n=345)



Pediatric Drownings by Scene, Texas 2013 (n=345)

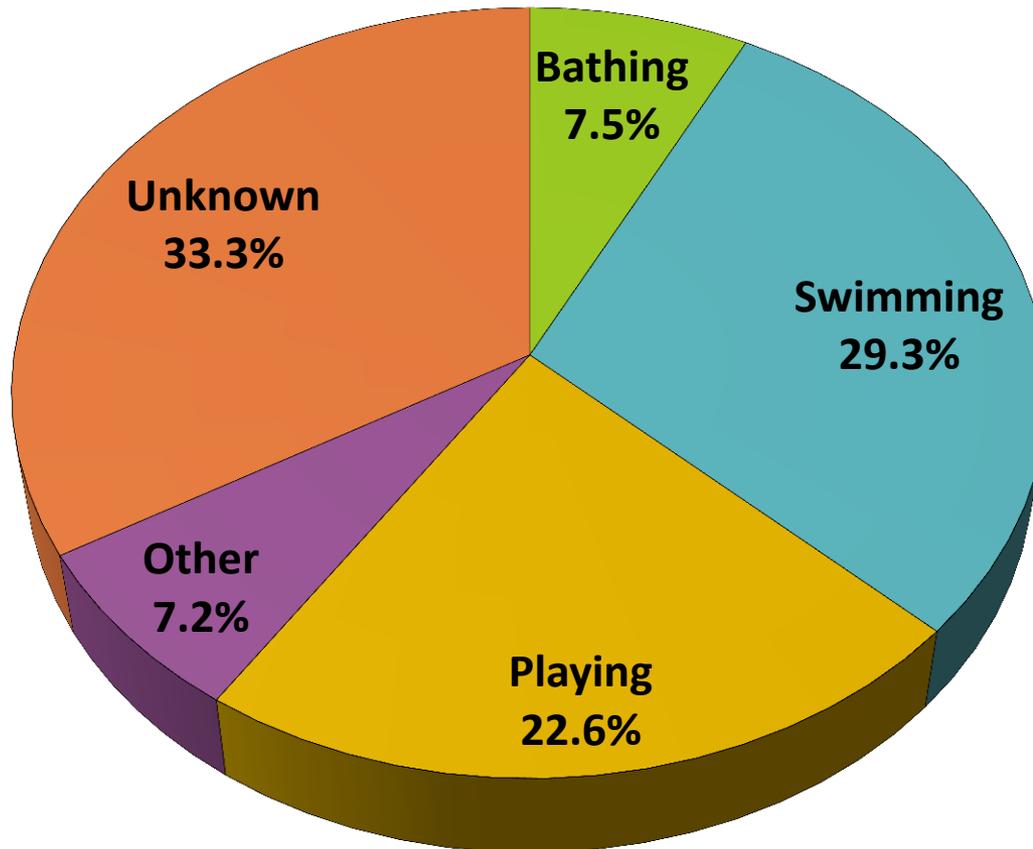


Supervision during the Drowning Incident

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

- Of the 337 children <15 years old, 73.9% (249) of the children were being supervised during the drowning incident
- Out of these:
 - 47.4% (118) of the supervisors were aware the child was involved in a water activity
 - 19.3% (48) witnessed the drowning event

Pediatric Drownings by Activity at Time of Incident, Texas 2013 (n=345)



Injury Epidemiology & Surveillance Branch

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