

# EMS & Trauma Registries 2013 Submersion Report

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## **Injury Epidemiology & Surveillance Branch**

Environmental & Injury Epidemiology & Toxicology Unit

Environmental Epidemiology and Disease Registries Section

Department of State Health Services

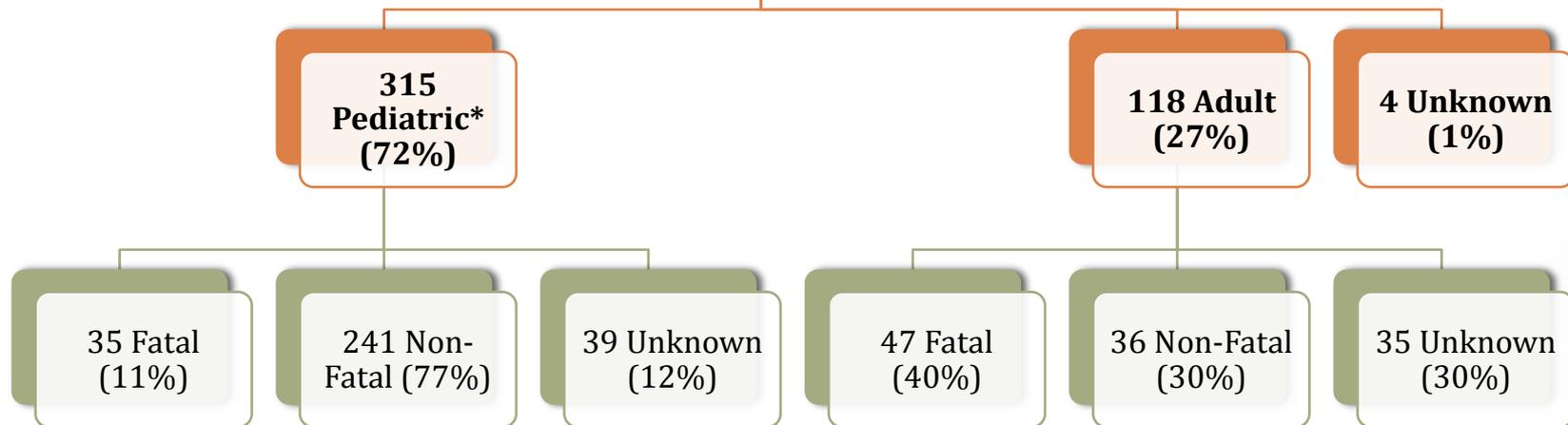


# Inclusion Criteria: Submersion Registry

- 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
- This summary report only includes data on records that were reported to the registry through a passive surveillance system

# Drowning in Texas, 2013

**437 Drownings Reported to the Registry**



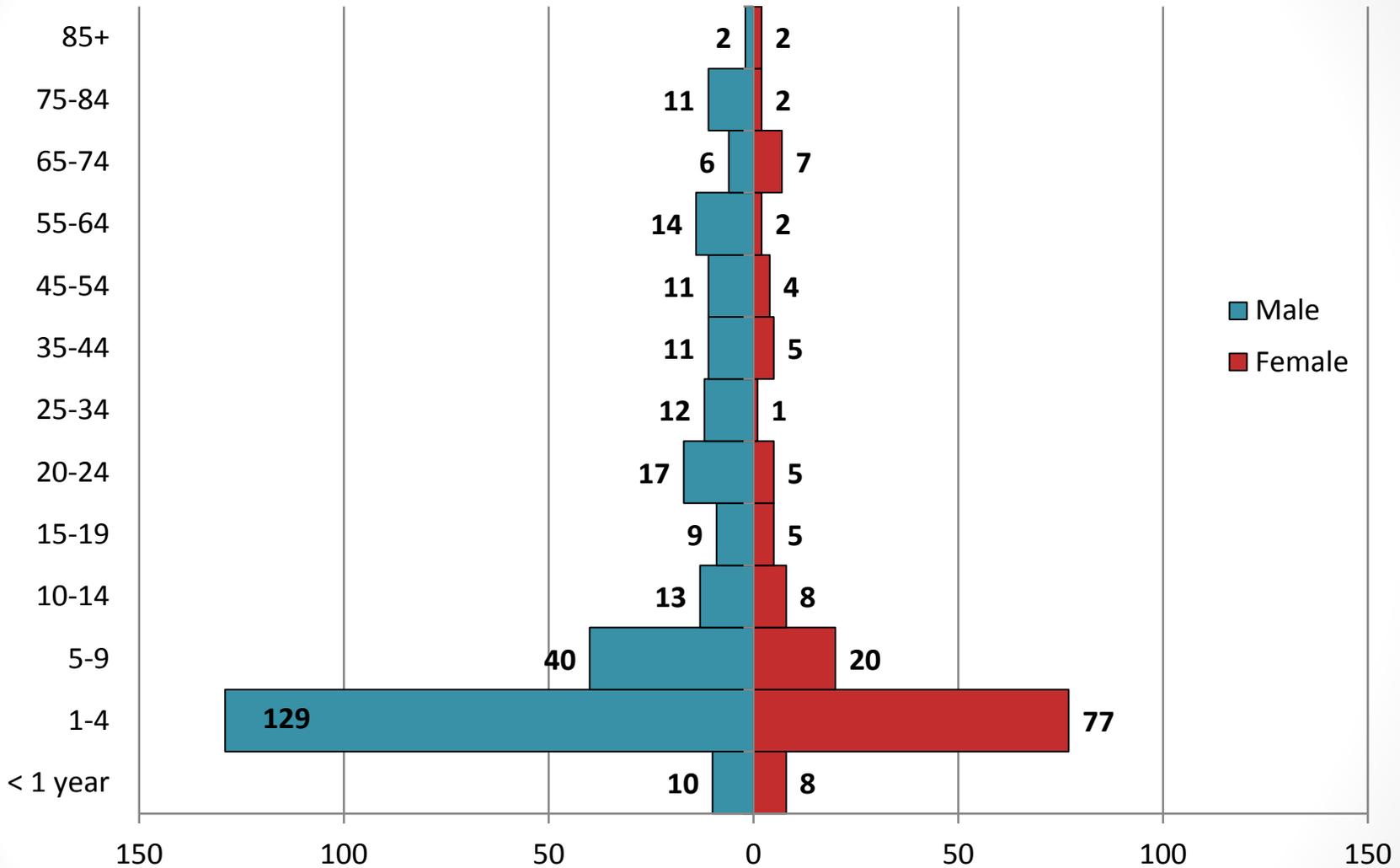
*\*In this report, pediatric is defined as less than 18 years old*

# Overview:



- 65.7% Male
- 57.7% White, 24.7% Hispanic
- 18.8% fatal
- 51.7% less than 5 years old
- 39.8% occurred in a pool, hot tub, or spa
- 45.3% in June and July

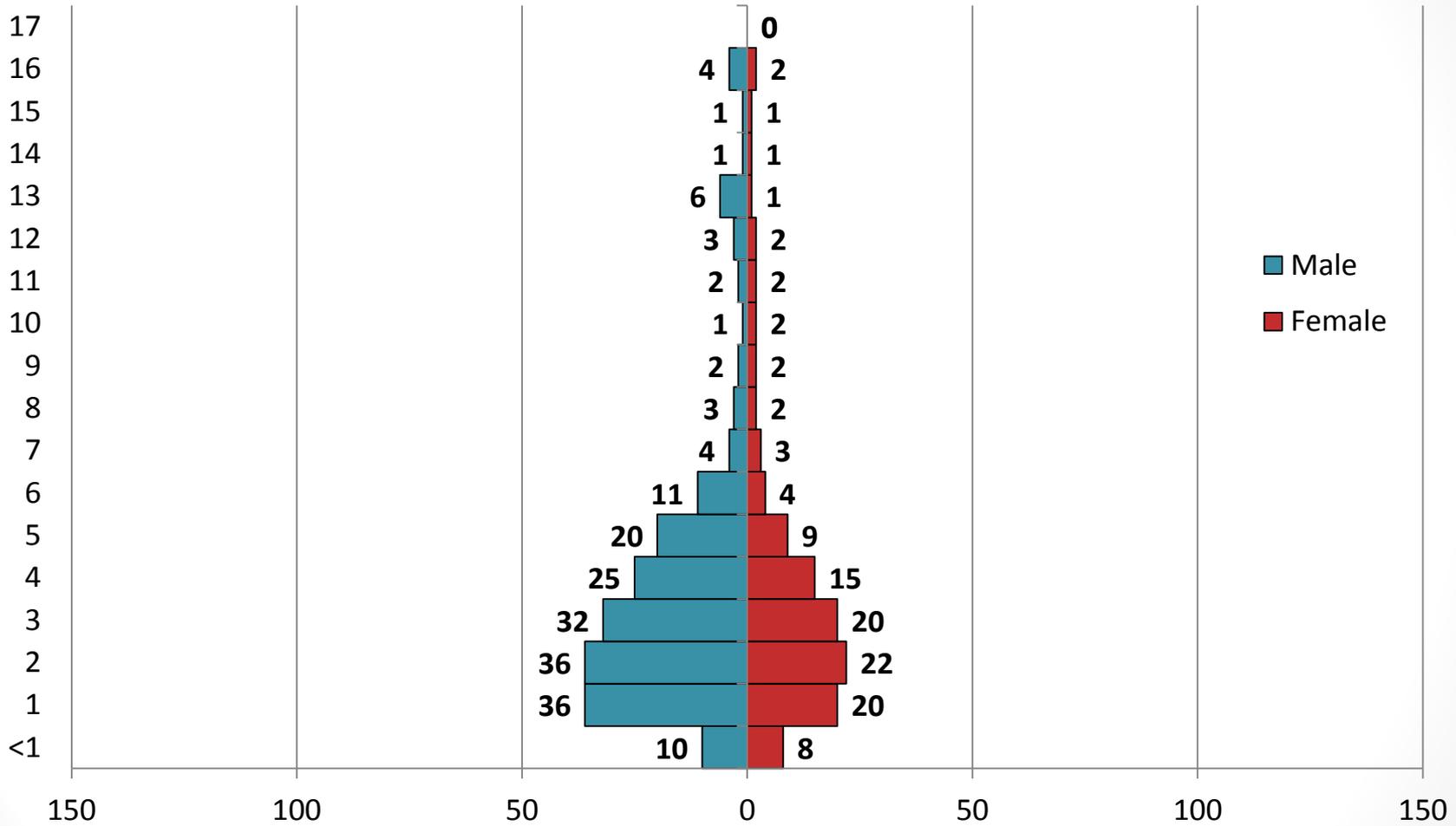
# Drownings by Age and Sex, Texas 2013 (n=434)



\*In 2013 there were 3 drowning patients with unknown age and sex



# Pediatric Drownings (<18 years old) by Age and Sex, Texas 2013 (n=313)



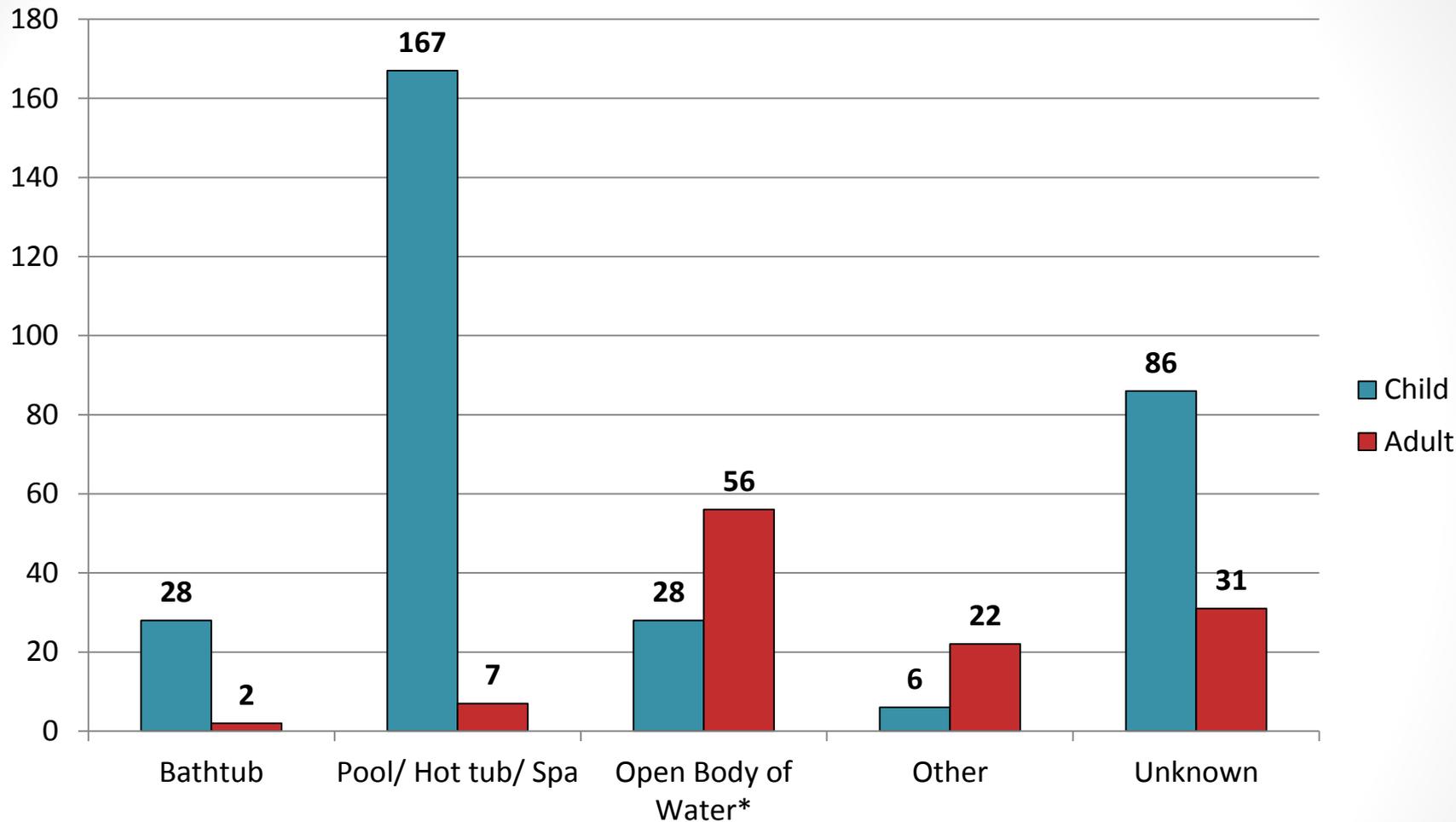
Out of these:

- 62.9% males
- 80.8% children 5 and younger

*\*In 2013 there were 2 pediatric drowning patients with unknown sex*



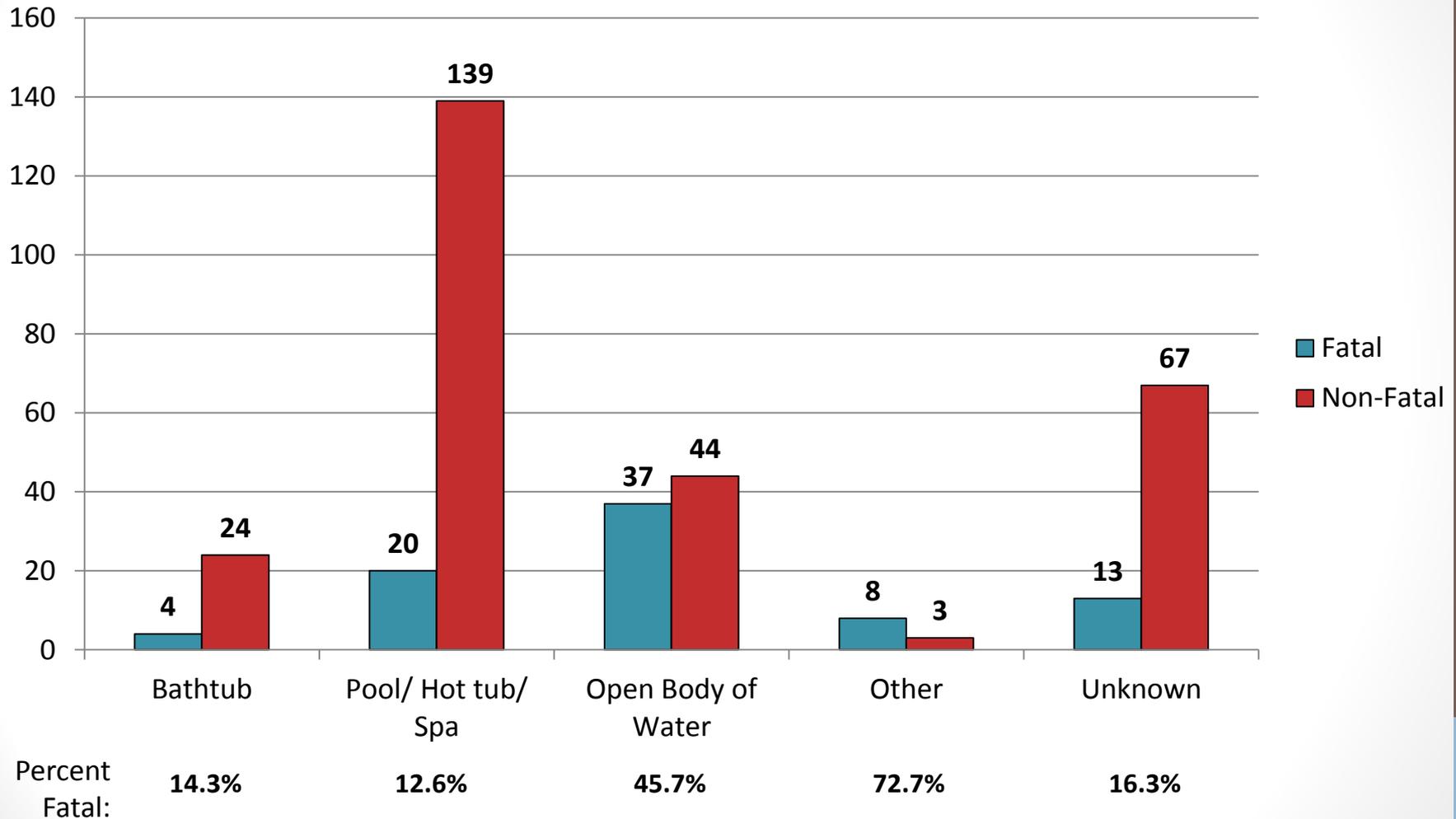
## Drownings by Scene and Age, Texas 2013 (n=433)



- 53.0% of pediatric drownings occurred in a pool, hot tub, or spa
- 47.5% of adult drownings occurred in an open body of water

\*Open bodies of water include: lakes, ponds, rivers, creeks, and the ocean

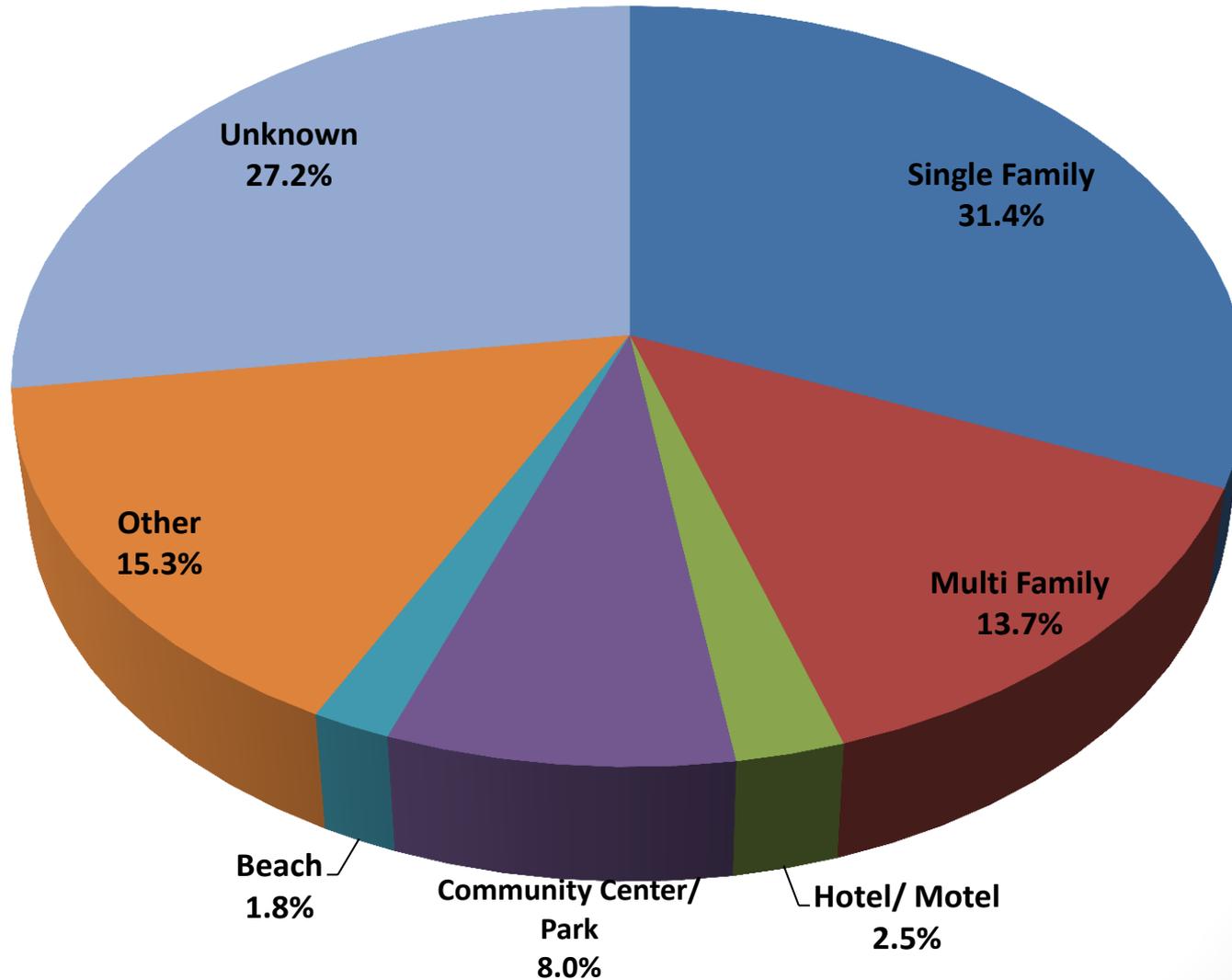
# Drownings with Known Outcome by Scene, Texas 2013 (n=359)



There were 78 drownings with an unknown outcome in 2013



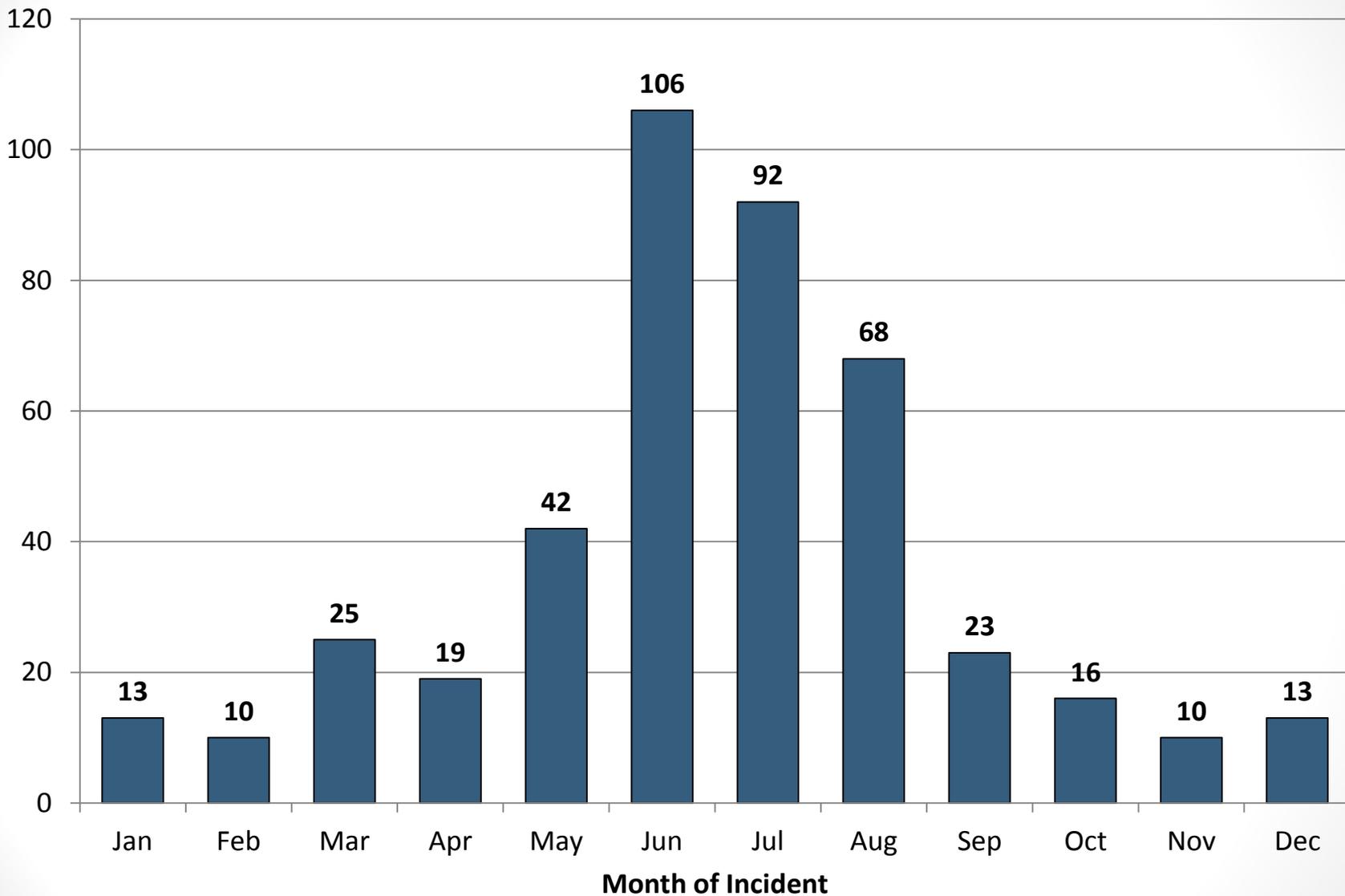
# Drownings by Location, Texas 2013 (n=437)



# Fatal Drownings

- Out of those with a known outcome:
  - 12.7% of pediatric drownings were fatal
  - 56.6% of adult drownings were fatal
- 45.1% of fatal drownings took place in an open body of water

# Drownings by Month of Incident, Texas 2013 (n=437)



# Supervision During Drowning Incidents

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

- Of the 307 children <15 years old, 77.9% (239) were being supervised during the drowning incident
- Out of these 239:
  - 48.1% (115) of the supervisors were aware the child was involved in a water activity
  - 19.7% (47) witnessed the drowning event

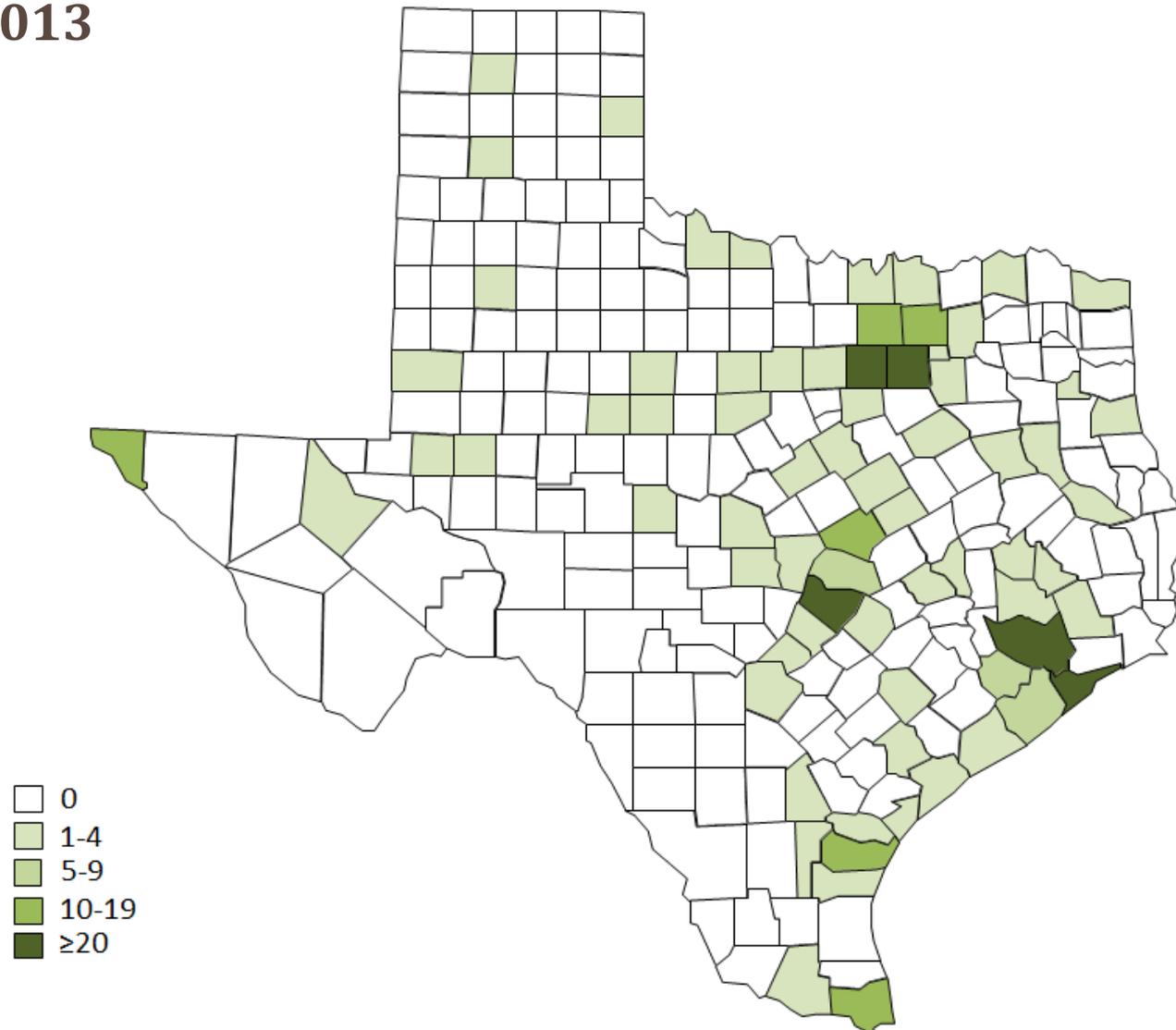
## Alcohol Use in Drowning Incidents Among Adults (18 and older), Texas 2013

	Count	%
No, Lab Confirmed	13	11.0%
No, Not Suspected	27	22.9%
Suspected	9	7.6%
Yes, Lab Confirmed	18	15.3%
Unknown	51	43.2%
<b>Total</b>	<b>118</b>	<b>100.0%</b>

## Reported Drownings by TSA of Incident, Texas 2013

TSA	Frequency	Percent
A	3	0.7%
B	3	0.7%
C	2	0.5%
D	8	1.8%
E	119	27.2%
F	2	0.5%
G	6	1.4%
H	2	0.5%
I	14	3.2%
J	4	0.9%
K	1	0.2%
L	14	3.2%
M	6	1.4%
N	4	0.9%
O	40	9.2%
P	2	0.5%
Q	44	10.1%
R	32	7.3%
S	7	1.6%
T	0	0%
U	26	5.9%
V	16	3.7%
Unknown/ Out of State	82	18.8%
<b>Total</b>	<b>437</b>	<b>100%</b>

# Number of Reported Drownings by County of Incidence, Texas 2013



NOTE: There were a total of 437 submersions reported to the registry in 2013. For 82 of these incidents, the county of occurrence is not known. These counts include both fatal and non-fatal drownings, as well as submersions in both enclosed bodies of water (pools, hot tubs, jacuzzis, spas, bathtubs, toilets, buckets, farm cattle tanks) and open bodies of water (lakes, ponds, rivers, creeks, beaches, bays, the ocean).

# Injury Epidemiology & Surveillance Branch

Department of State Health Services  
1100 West 49<sup>th</sup> St.  
Austin, Texas 78714

WEBSITE: [www.dshs.state.tx.us/injury/data](http://www.dshs.state.tx.us/injury/data)

EMAIL: [injury.web@dshs.state.tx.us](mailto:injury.web@dshs.state.tx.us)

DATA: [www.dshs.state.tx.us/injury/data/](http://www.dshs.state.tx.us/injury/data/)

