

Mechanism of Injury

2013 Final

Injury Epidemiology & Surveillance Branch

Environmental & Injury Epidemiology & Toxicology Unit

Environmental Epidemiology and Disease Registries Section

Department of State Health Services

Texas EMS & Trauma Registries

The following report was generated with hospital patient records submitted to the Texas EMS/Trauma Registry as of 12/22/2014. The hospital inclusion criteria are as follows per Texas Administrative Code, Title 25, Chapter 103:

1. Traumatic Brain Injuries

An acquired injury to the brain, including brain injuries caused by anoxia due to submersion incidents. The following International Classification of Diseases 9th Revision Clinical Modification (ICD-9-CM) diagnostic codes are to be used to identify cases of traumatic brain injury: 800.0-801.9, 803.0-804.9, and 850.0-854.1. The ICD-9-CM diagnostic code to be used to identify traumatic brain injury caused by anoxia due to submersion incidents is 348.1 or 994.1 (Rule § 103.2).

2. Spinal Cord Injuries

An acute, traumatic lesion of the neural elements in the spinal canal, resulting in any degree of sensory deficit, motor deficits, or bladder/bowel dysfunction. The ICD-9-CM diagnostic codes are to be used to identify cases of traumatic spinal cord injury: 806.0-806.9 and 952.0-952.9 (Rule § 103.2).

3. Other Traumatic Injuries

An injury listed in the ICD-9-CM diagnostic codes between 800.0 and 959.9, excluding 905-909, 910-924, and 930-939, and admitted to a hospital inpatient setting (for more than 48 hours), or died after receiving any evaluation or treatment or was dead on arrival, or transferred into or out of the hospital (Rule § 103.2).

Note: The ICD-9-CM codes used above are diagnosis codes, not E-codes.

Texas EMS & Trauma Registries

- This report only includes data on hospital records that were reported to the registry through a passive surveillance system. Additionally, these data are based on hospitalizations, not patients, such that if a patient was hospitalized more than once or transferred between facilities, both hospital records will be included.

Overview, Texas 2013

- In 2013, there were a total of **129,778** hospitalizations reported to the Texas EMS/Trauma Registry

Top 5 reported causes of injury in 2013

1.	Falls
2.	Motor Vehicle Traffic
3.	Struck by, against
4.	Cut/Pierce
5.	Other Transport

In the registry:

- 59% Male, 41% Female
- 58% White, 9% Black, and 31% Hispanic

Injury Intent

114,900 unintentional (89%)

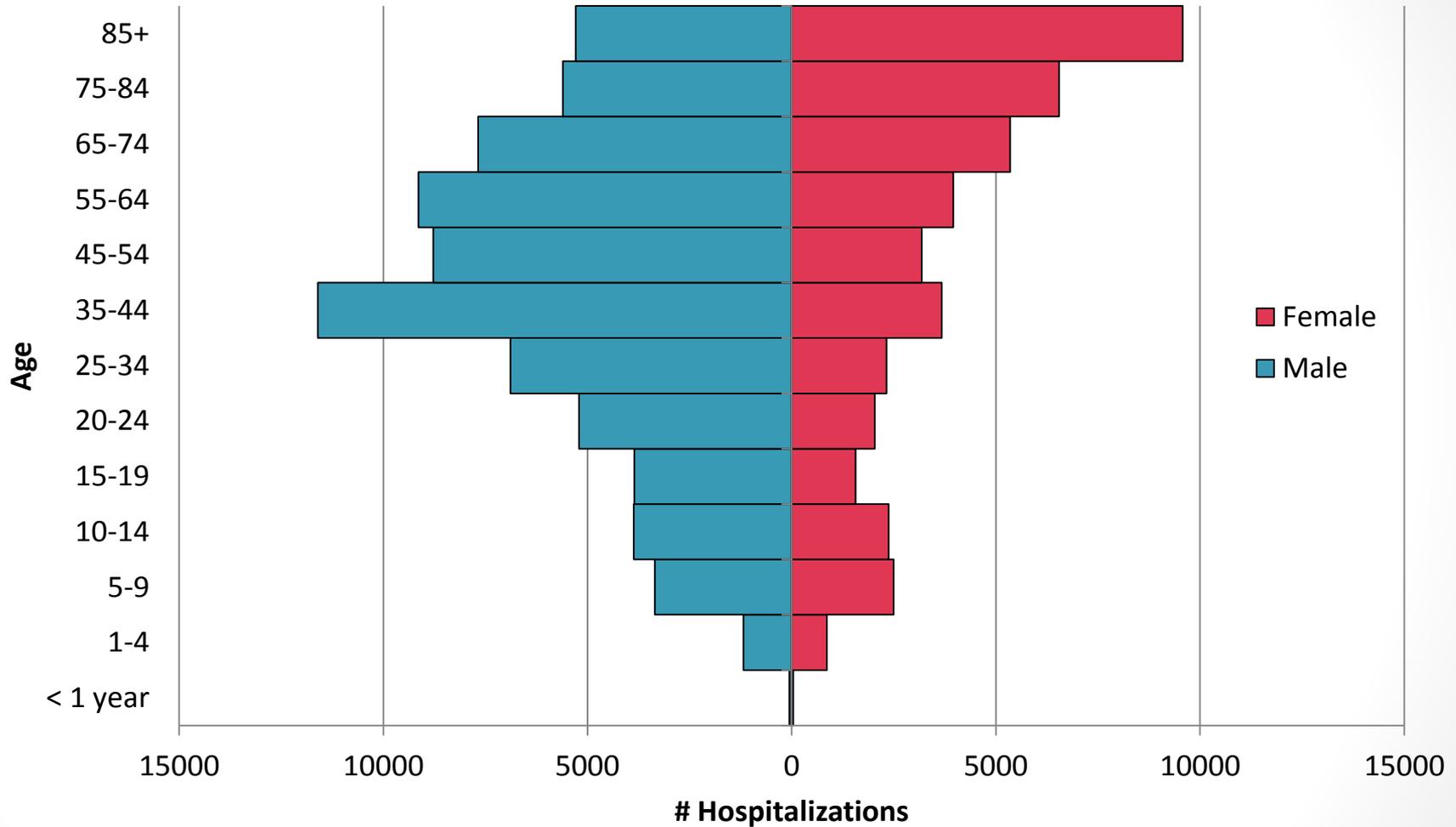
1,695 self-inflicted (1%)

9,945 assault (8%)

For all except firearm, unintentional injuries were most common: 58% of firearm injuries were assault

Total Hospitalizations by Age and Sex, Texas 2013

(n=116,503)



*Not included: 13,275 hospitalizations missing age or sex



Demographics of Leading Injury Mechanisms, Texas 2013

External Cause of Injury	Sex			Race						Ethnicity			Total
	Male	Female	Unknown	White	Black	Asian	Native American	Other	Unknown	Hispanic/Latino	Not Hispanic/Latino	Unknown	
Fall	27063	33589	40	40177	3655	608	66	1539	14647	15609	43460	1623	60692
Motor vehicle traffic	17238	9812	6	13688	3068	319	52	866	9063	9501	17094	461	27056
Struck by, against	8151	1844	3	4536	1464	89	9	323	3577	3808	6012	178	9998
Cut/pierce	4701	959	5	2320	931	43	11	213	2147	2271	3301	93	5665
Transport, other	3542	1626	4	3334	306	24	4	131	1373	1434	3640	98	5172
Other specified and classifiable	2750	851	3	1734	376	25	5	159	1305	1438	2086	80	3604
Firearm	3064	344	0	1213	1025	38	5	101	1026	1047	2326	35	3408
Fire/burn	2035	968	0	1371	336	42	1	118	1135	1188	1774	41	3003
Natural/environmental	1303	840	3	1435	113	15	4	51	528	556	1523	67	2146
Machinery	1359	91	2	746	89	12	1	64	540	601	828	23	1452

- A record can contain up to five ICD-9 e-codes
- Based on a framework detailed by the Centers for Disease Control and Prevention. For more details, visit http://www.cdc.gov/nchs/injury/injury_tools.htm

Leading Injury Mechanisms by Age, Texas 2013

External Cause of Injury	Age														Total
	<1 year	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown	
Fall	1120	2825	3217	1729	1069	1016	2264	2727	4307	6670	8677	12799	12220	52	60692
Motor vehicle traffic	174	656	866	889	2568	3561	5221	3582	3689	2894	1592	1000	351	13	27056
Struck by, against	76	512	531	954	1152	1128	1919	1325	1181	683	287	159	81	10	9998
Cut/pierce	17	107	132	123	416	870	1539	1018	740	432	179	69	18	5	5665
Transport, other	16	117	329	596	634	581	801	649	585	459	248	108	44	5	5172
Other specified and classifiable	257	334	203	207	207	315	627	492	450	287	132	63	25	5	3604
Firearm	6	11	32	74	384	663	1009	510	368	203	92	41	15	0	3408
Fire/burn	104	615	213	146	119	258	422	300	336	245	124	83	38	0	3003
Natural/environmental	24	256	251	177	118	105	205	259	282	247	136	60	24	2	2146
Machinery	2	10	10	10	59	136	304	269	286	188	130	42	6	0	1452

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Leading Injury Mechanisms by Intent, Texas 2013

External Cause of Injury	Intent					Total
	Unintentional	Self-Inflicted	Assault	Undetermined	Other	
Fall	60516	121	17	38	0	60692
Motor vehicle traffic	26974	25	49	8	0	27056
Struck by, against	5587	156	4169	18	68	9998
Cut/pierce	2812	636	2126	87	4	5665
Transport, other	5172	0	0	0	0	5172
Other specified and classifiable	2892	25	635	24	28	3604
Firearm	717	510	1966	126	89	3408
Fire/burn	2924	26	28	25	0	3003
Natural/environmental	2146	0	0	0	0	2146
Machinery	1452	0	0	0	0	1452

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Top 5 Injury Mechanisms by Age Group, Texas 2013

Age Group

	<1 year	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-85	85+
1	Fall	Fall	Fall	Fall	Motor vehicle traffic	Motor vehicle traffic	Motor vehicle traffic	Motor vehicle traffic	Fall	Fall	Fall	Fall	Fall
2	Other, Specified	Motor vehicle traffic	Motor vehicle traffic	Struck by, against	Struck by, against	Struck by, against	Fall	Fall	Motor vehicle traffic				
3	Motor vehicle traffic	Fire/ burn	Struck by, against	Motor vehicle traffic	Fall	Fall	Struck by, against						
4	Unspecified	Struck by, against	Transport, other	Transport, other	Transport, other	Cut/ pierce	Cut/ pierce	Cut/ pierce	Cut/ pierce	Transport, other	Transport, other	Transport, other	Unspecified
5	Fire/ burn	Other, Specified	Natural/ environment	Pedal cyclist, other	Cut/ pierce	Firearm	Firearm	Transport, other	Transport, other	Cut/ pierce	Cut/ pierce	Fire/ burn	Transport, other

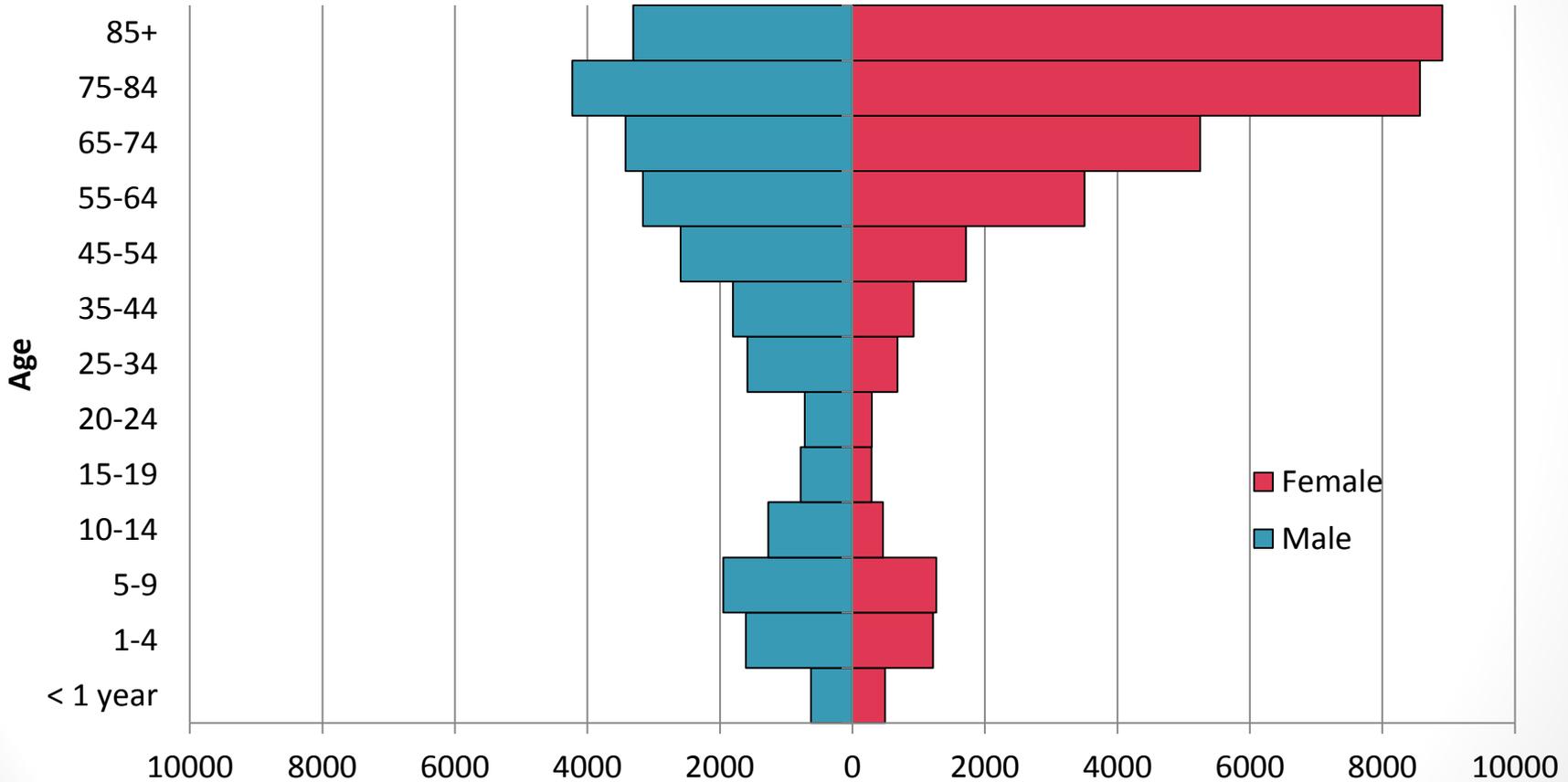
- This is based on the number of times each e-code was used, not the number of hospitalizations
- This includes all injuries in the registry, regardless of intent

Falls

- In 2013, there were 60,692 hospitalizations due to a fall
- Falls make up almost half of all injuries reported to the registry
- 45% were male, 55% were female
- Over half were 65 years old or older
- About 99.7% were unintentional

Falls

Number of Fall Hospitalizations by Age and Sex, 2013 (n=60,624)



*Not included: 68 fall hospitalizations missing age or sex

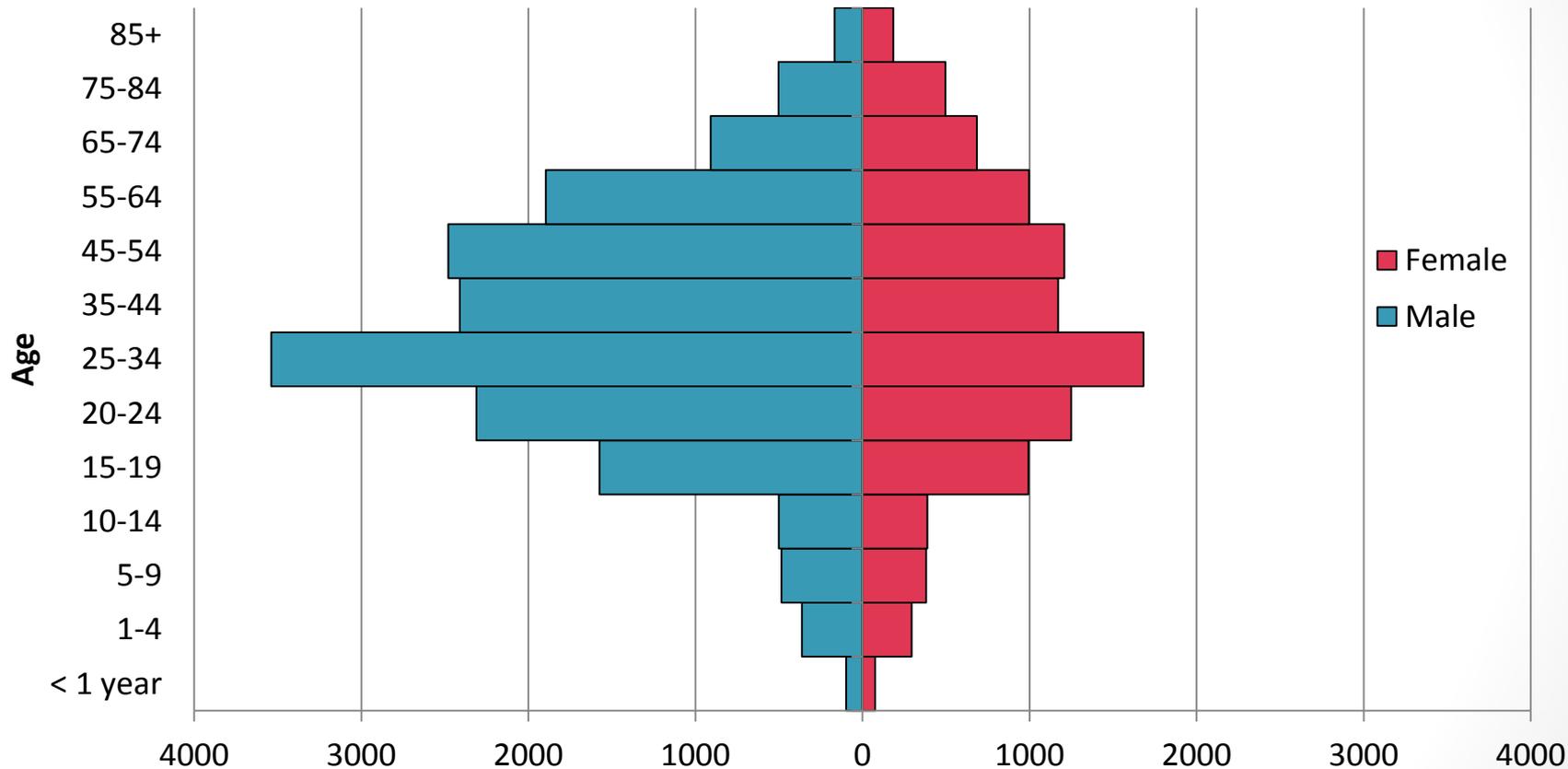


Motor Vehicle Traffic

- In 2013, there were 27,056 hospitalizations due to motor vehicle traffic related injuries
- These injuries make up about 20% of all injuries reported to the registry
- 64% were male and 36% were female
- About 70% were between 20-64 years old
- 99.7% were unintentional

Motor Vehicle Traffic

Number of Motor Vehicle Traffic Hospitalizations by Age and Sex, 2013 (n=27,041)



**Not included: 15 hospitalizations due to motor vehicle traffic missing age or sex*



Injury Epidemiology & Surveillance Branch

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