

FIRE FIGHTER ADVISORY COMMITTEE MEETING

June 20, 2024, 10:00 A.M.

4800 N. Lamar Boulevard, North Lamar Boulevard Bldg., Room 140, Austin, Texas

The meeting of the Fire Fighter Advisory Committee will be held in person at the physical location above.

- 1. Roll call and excuse of absences (if any) of committee members.**
- 2. Adoption of the September 21, 2023, Fire Fighter Advisory Committee meeting minutes.**
- 3. Election of committee officers.**
- 4. Discussion and possible action on the Injury Report.**
- 5. Discussion and possible action on 37 TAC, Chapter 469, Technical Rescue.**
- 6. Update on the Fire Fighter Advisory Committee vacancies and selection process.**
- 7. Subjects for future agenda items.**
- 8. Future meeting dates.**
- 9. Recognition of committee member Keith Schmidt for his service.**
- 10. Adjourn meeting.**

AGENDA ITEM NUMBER 1

1. Roll call and excuse of absences (if any) of committee members.

AGENDA ITEM NUMBER 2 WITH RELEVANT DOCUMENTS ATTACHED

2. Adoption of the September 21, 2023, Fire Fighter Advisory Committee meeting minutes **(please see attached)**.

TEXAS COMMISSION ON FIRE PROTECTION

Presiding Officer Daniel DeYear called the September 21, 2023, meeting of the Fire Fighter Advisory Committee to order at 10:09 a.m. at the William B. Travis Building, 1701 N. Congress Ave., Room 1-104, in Austin, Texas.

Member Attendance	Vince Abrigo Jason Collier	Daniel Anderson* Daniel DeYear	Keith Schmidt Daniel Buford	Antonio Ramos*	Jim Reidy
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*absent entire meeting

**absent part of meeting

Staff	Mike Wisko Rick Wallace	Sami Lepisto Candace Barnett	Cliff Grant Kenneth Barnett	Grace Wilson Robert Reese	Holden Wenger
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Attendees	Joe Don Warren Shonna Bellow	DJ Walker Gene Senter	Heath Lipke Alex Lopez	Patrick Pinder Robert Havens	Gustavo Ramirez
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|--|---|
| 1. Roll call | Secretary, Keith Schmidt called roll and a quorum was present. |
| 2. Adoption of Minutes | A motion was made by Jim Reidy and seconded by Daniel Buford to approve the minutes with changes from the March 30, 2023, Fire Fighter Advisory Committee. The motion carried. |
| 3. Chapter 495 Regulation of Nongovernmental Departments | A motion was made by Jim Reidy and seconded by Jason Collier to accept the review to 37 TAC, Chapter 495, Regulation of Nongovernmental Departments and to forward to the Commission without changes. The motion carried. |
| 4. Chapter 469 Technical Rescue | A motion was made by Jim Reidy and seconded by Daniel Buford to approve the amendments to 37 TAC, Chapter 469, Technical Rescue, and move to the Commission with changes to 469.1 (a) and 469.2 (a). The motion carried. |
| 5. Subjects for Future Agenda Items | Presentation from staff on 37 TAC, Chapter 469. Technical Rescue. |
| 6. Future Meeting | The committee confirmed a future meeting date of December 5, 2023, at 10:00 a.m. and set dates for future meetings on March 28, 2023, and June 20, 2023. |
| 10. Adjournment | A motion was made by Keith Schmidt and seconded by Jason Collier to adjourn. The motion carried. |

Daniel DeYear
Presiding Officer

AGENDA ITEM NUMBER 3

3. Election of committee officers.

AGENDA ITEM NUMBER 4 WITH RELEVANT DOCUMENTS ATTACHED

4. Discussion and possible action on the Injury Report **(please see attached)**.

2023 Injury Report

An Annual Summary of Fire Fighter Injuries, Exposures, and Cancer
Diagnoses Reported to the Texas Commission on Fire Protection in
Calendar Year 2023

By
Grace Wilson
of the
TEXAS COMMISSION ON FIRE PROTECTION



Texas Commission on Fire Protection
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*This publication can be downloaded free of charge on-line:
<https://www.tcfp.texas.gov/services/injury-reports>*

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Mission

The commission shall gather and evaluate data on fire protection personnel injuries and develop recommendations for reducing injuries.

Why we are collecting injury data

Under Texas Government Code §419.048, the Texas Legislature charged the commission with gathering and evaluating data on injuries. The rules requiring regulated entities to report injuries to the commission are in Texas Administrative Code §435.23. The commission encourages volunteer entities to report injuries so that it can gain as accurate a picture as possible concerning injury trends in the Texas fire service. The injury reporting program began in March 2010.

Information the commission collects

- Minor, serious, and fatal injuries,
- Exposures (toxic and pathogenic)
- Cancer diagnoses
- Activities where fire personnel are injured
- Types of injuries (burns, strain-sprains, wounds, etc.)
- Body parts being injured
- Tasks performed at the time of injury
- Missed time
- Work assignment after injury
- Malfunctions/failures of personal protective equipment (PPE), self-contained breathing apparatus (SCBA), personal alert safety systems (PASS devices) and standard operating procedures (SOPs)

How this will help the fire service

- Identify common injuries and exposures
- Identify trends in injuries and exposures
- Identify needed training
- Evaluate and find improvements in procedures

Executive Summary

The information in this report is collected by the Texas Commission on Fire Protection (TCFP) via an on-line injury reporting application. **At the time of this writing, the TCFP regulated 39,287 individuals and 808 entities.**

39,287 = The number of “associated” individuals in our database, meaning those who are currently employed by a regulated fire department.

808 = The number of departments in our database that are currently being regulated by the TCFP.

This report is a comprehensive analysis of injuries and exposures to Texas fire fighters. These injuries and exposures were reported to the TCFP in 2023 by fire departments throughout the state, and this report contains charts and graphs depicting the results of the information that was collected. The report also compares Texas fire fighter injury statistics with national statistics that were gathered by the National Fire Protection Association (NFPA) in 2022.

Under Texas Government Code §419.048, the Texas Commission on Fire Protection is charged with developing and establishing criteria to receive and analyze injury information pertaining to Texas fire fighters. The commission reviews this information to develop recommendations to help reduce injuries to fire protection personnel. The commission provides this information to the State Fire Marshal’s Office (SFMO) by September 1 of each year for inclusion in the SFMO’s annual Firefighter Fatality Investigations Report. The commission has enacted rules about reporting injuries in the Texas Administrative Code (TAC) Title 37, Chapter 435, and has established the criteria and policies for reporting and analyzing the information.

The commission originally built the data systems necessary to gather this information in 2010. In 2017 the data systems were migrated from a Microsoft Access database structure to a new system which was developed in-house and designed specifically to meet the information resource needs of the TCFP. The reporting process is accomplished online via TCFP’s FIDO system. Fire departments regulated by the commission have been notified of the requirement to report. Several volunteer departments, which are not regulated by the commission, are also participating voluntarily.

This report concludes with recommendations from the commission to help reduce the number of fire fighter injuries in Texas and to improve the injury reporting program.

Abstract

This report contains data submitted by regulated and non-regulated entities.

Grand Totals - 2023

Total number of incidents (injury reports) submitted: 4,613

Total number of individuals who sustained an injury or exposure: 4,502* (A)

Total number of injuries reported: 3,283 (B)

Total number of exposures reported: 1,378 (C)

**Note that an individual could have more than one injury or could have an injury and an exposure. This explains why the total number of individuals who sustained an injury is less than the total number of injuries + total number of exposures. ($A < B + C$)*

It's important to remember that one incident report can have multiple individuals involved, and each of those individuals can have one or more injuries. For example:

Joe and Bob were burned in a fire while on duty. This resulted in:

- One incident (one injury report), with
- Two individuals who...
- Sustained three injuries
 - Joe was burned on the hand and arm (two injuries)
 - Bob was burned on the leg (one injury)

The "Bird's Eye View"

Reporting Rate 75%. 610 of the 808 regulated departments used TCFP's injury reporting system in 2023.

Top 5 activities that resulted in injuries or exposures:

1. **EMS** = 1,138 injured individuals (25% of the total reported injuries/exposures)
2. **Station Duties** = 1,028 (23% of the total)
3. **Fire Suppression** = 850 (19% of the total)
4. **Skills Training** = 540 (12% of the total)
5. **Wellness/Fitness** = 509 (11% of the total)

State of Texas vs. NFPA

Comparison between the State of Texas (2022) and National Fire Protection Association (NFPA) U.S. Firefighter Injuries (2022)

For the purposes of comparison, the commission has mapped its categories to the NFPA categories as follows:

- “Fireground” includes the commission’s Fire Suppression and Rescue – Fire Related categories.
- “Non-Fire” includes Rescue Non-Fire, EMS and Hazmat.
- “Other On-Duty” includes Fire Prevention, Station Duties and Wellness/Fitness.

The NFPA’s “Responding and Returning” and “Training” categories appear to correspond closely to the commission’s categories. (The NFPA numbers include Texas statistics, although the reporting populations may not be the same.)

Please keep in mind that the comparisons between Texas and the NFPA are using numbers from 2022, and not 2023 data as in the remainder of this report. NFPA’s 2023 injury data will not be published and available until 2025.

Comparing Texas 2022 and NFPA 2022

Table 1: Comparison of Texas 2022 and NFPA 2022

Category	Texas 2022		NFPA 2022	
	Count	Percent	Count	Percent
Fireground	906	12%	21,325	32%
Non-Fire	2,696	37%	13,200	20%
Other On-Duty	2,971	41%	14,850	23%
Training	491	7%	9,050	14%
Responding and Returning	189	3%	7,225	11%
Total	7,253	100%	65,650	100%

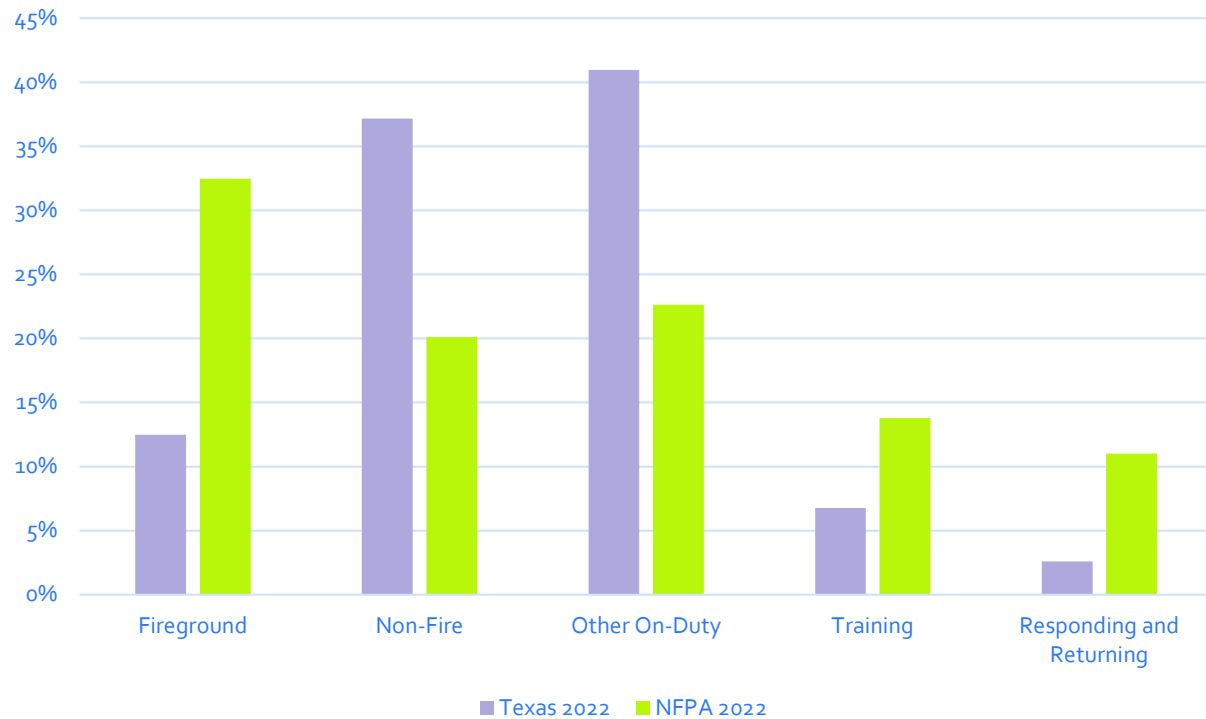
Fatalities in 2022

NFPA: 96 on-duty firefighter fatalities

Texas: 1 reported fatality (from a possible stroke)

All NFPA data in this report is from the [United States Firefighter Injuries](#) webpage, copyright 2023, National Fire Protection Association, Quincy, MA.

Figure 1: Injuries by Activity, percentages
(Comparing Texas 2022 and NFPA 2022)

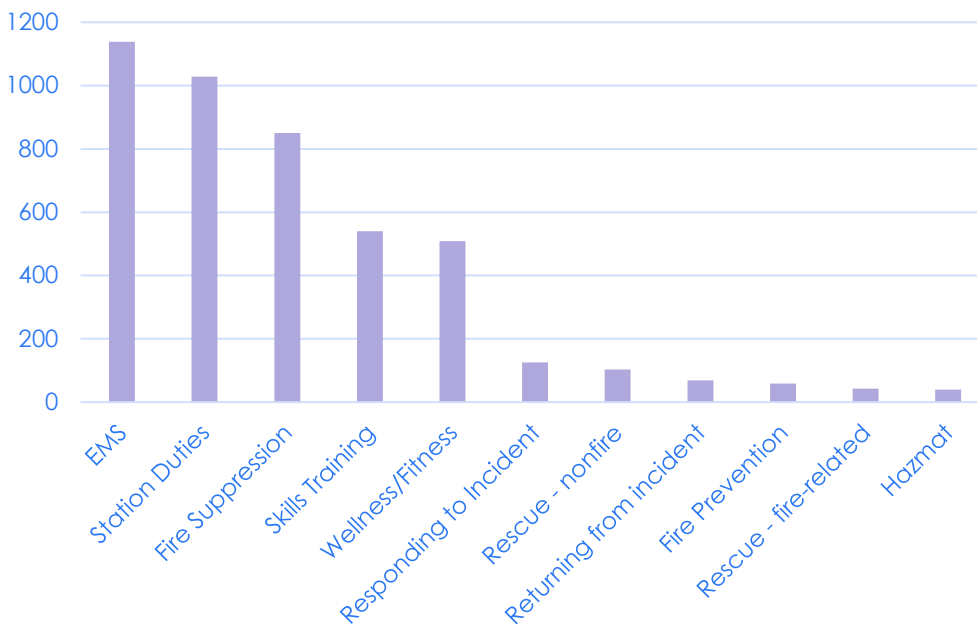


Fire Protection Personnel Injuries

Table 2: Total Injured or Exposed Individuals by Activity and Severity, 2023

Activity	Minor	Serious	Fatal	Total	2022	2021
EMS	899	239	0	1,138	2,528	2,852
Station Duties	598	429	1	1,028	2,449	1,594
Fire Suppression	667	183	0	850	846	691
Skills Training	391	149	0	540	491	423
Wellness/Fitness	367	142	0	509	422	450
Responding to incident	90	35	0	125	137	158
Rescue - nonfire	85	18	0	103	142	116
Returning from incident	58	11	0	69	52	158
Fire prevention	42	17	0	59	100	51
Rescue - fire-related	37	5	0	42	52	51
Hazmat	35	4	0	39	26	44
Total	3,269	1,232	1	4,502	7,245	6,588

Figure 2: Total Injured or Exposed Individuals by Activity, 2023



Injuries/Exposures by Activity

EMS activities resulted in the highest number of minor injuries in 2023 (see Table 3), which is consistent with the previous five years. The effects of the COVID-19 pandemic can be seen starting in 2020.

Definitions

Minor = An injury/exposure that does not result in the employee missing a full duty period.

Serious = An injury/exposure that results in the employee missing one or more full duty periods.

Fatal = The injured/exposed individual did not survive.

Table 3: Minor Injury/Exposure Activities, 2019 - 2023

Activity	2019		2020		2021		2022		2023	
	Count	%	Count	%	Count	%	Count	%	Count	%
EMS	776	26%	2,529	56%	2,095	48%	1,461	34%	899	27%
Fire Suppression	616	21%	397	9%	537	12%	653	15%	667	20%
Station Duties	591	20%	722	16%	828	19%	1,132	27%	598	18%
Skills Training	330	11%	304	7%	303	7%	362	9%	391	12%
Wellness/Fitness	290	10%	306	7%	311	7%	293	7%	367	11%
Responding to Incident	114	4%	68	2%	123	3%	97	2%	125	4%
Rescue - Non-Fire	140	5%	89	2%	94	2%	110	3%	85	3%
Returning from Incident	39	1%	28	1%	41	1%	31	1%	58	2%
Fire Prevention	46	2%	49	1%	40	1%	39	1%	42	1%
Rescue - Fire Related	37	1%	26	1%	41	1%	55	1%	37	1%
Hazmat	24	1%	22	0%	41	1%	22	1%	35	1%
Total	2,942	100%	4,492	100%	4,372	100%	4,255	100%	3,304	100%

(Numbers in red above = lowest number of injuries for the five-year period.)

Table 4: Serious Injury/Exposure Activities, 2019 - 2023

Activity	2019		2020		2021		2022		2023	
	Count	%	Count	%	Count	%	Count	%	Count	%
Station Duties	147	19%	731	39%	766	38%	1,316	44%	429	35%
EMS	146	19%	660	35%	755	37%	1,067	36%	239	19%
Fire Suppression	145	19%	127	7%	153	8%	192	6%	183	15%
Skills Training	139	18%	125	7%	120	6%	129	4%	149	12%
Wellness/Fitness	117	15%	116	6%	139	7%	129	4%	142	12%
Responding to Incident	28	4%	23	1%	35	2%	40	1%	35	3%
Rescue - Non-Fire	17	2%	29	2%	22	1%	32	1%	18	1%
Fire Prevention	14	2%	27	1%	11	1%	61	2%	17	1%
Returning from Incident	14	2%	13	1%	24	1%	21	1%	11	1%
Rescue - Fire Related	2	0%	3	0%	10	0%	5	0%	5	0%
Hazmat	4	1%	7	0%	3	0%	4	0%	4	0%
Total	773	100%	1,861	100%	2,038	100%	2,996	100%	1,232	100%

(Numbers in red above = lowest number of injuries for the five year period.)

Fatalities

Table 5: Number of Individuals Who Sustained Fatal Injuries/Exposures, 2023

Activity	Count	Percent
Station Duties	1	100%
Total	1	100%

The TCFP's "2023 Injury Report" includes one fatality from a possible stroke. Fatalities noted in this report include only those that were reported to the Texas Commission on Fire Protection (TCFP) by the entities it regulates.

According to the Texas State Fire Marshal's Office's "Firefighter Fatality Investigation Annual Report" dated October 2023, they conducted ten Texas fire fighter fatality incident investigations during their *fiscal* year 2023. Three of those ten deaths occurred in 2022, and of the remaining seven deaths, five were from volunteer departments which the TCFP does not regulate.

Comprehensive information about the fatality investigations may be found on the State Fire Marshal's Office's website at the following address:

<https://www.tdi.texas.gov/fire/fmloddannuals.html>

Emergency vs. Non-Emergency Injuries

Table 6: Number of Injured Individuals by Emergency Activity and Severity, 2023

Activity	Minor	Serious	Fatal	Total
EMS	899	239	0	1,138
Fire Suppression	667	183	0	850
Rescue - Non-fire related	85	18	0	103
Responding to Incident	90	35	0	125
Returning from Incident	58	11	0	69
Hazmat	35	4	0	39
Rescue - Fire related	37	5	0	42
Total	1,871	495	0	2,366

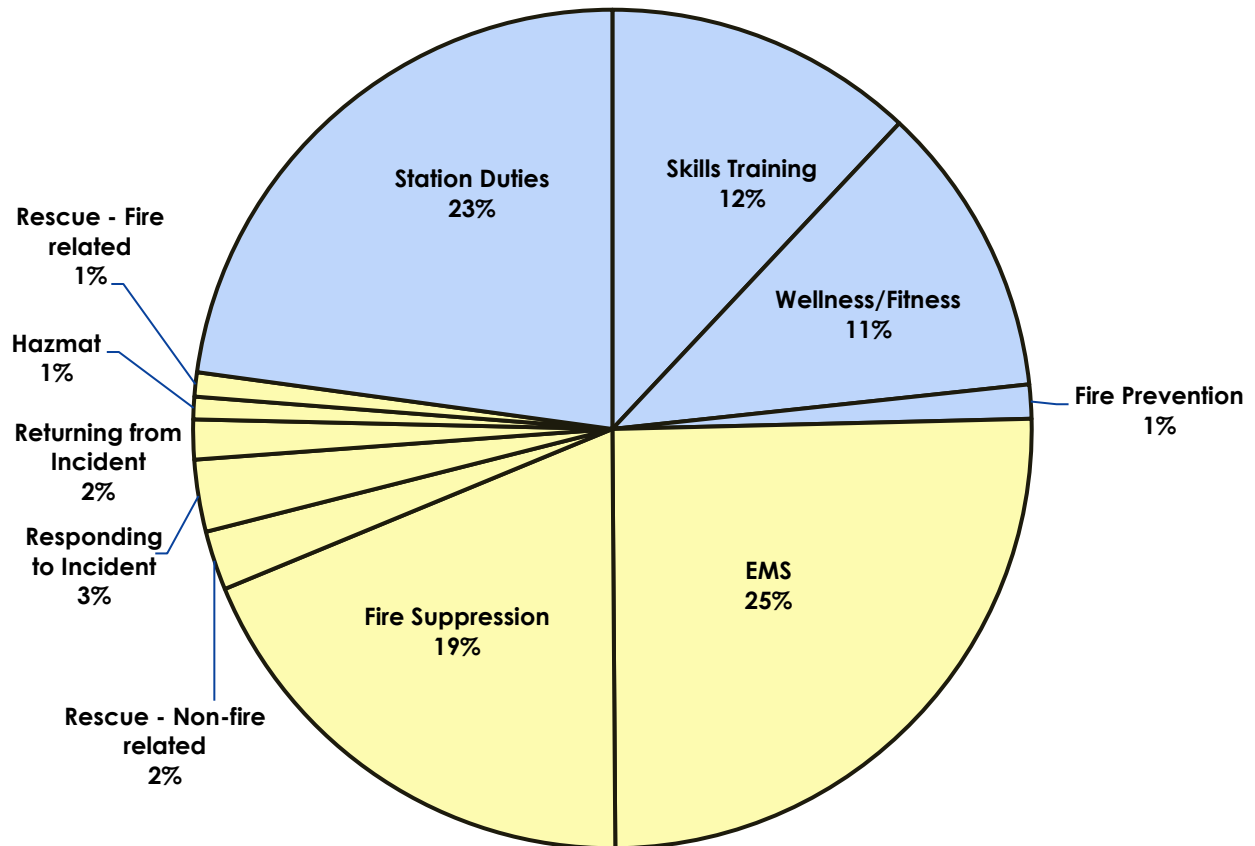
Table 7: Number of Injured Individuals by Non-Emergency Activity and Severity, 2023

Activity	Minor	Serious	Fatal	Total
Station Duties	598	429	1	1,028
Skills Training	391	149	0	540
Wellness/Fitness	367	142	0	509
Fire Prevention	42	17	0	59
Total	1,398	737	1	2,136

Figure 3: Percentages of Injured Individuals in Emergency and Non-Emergency Activities, 2023

Emergency Activities = 53%

Non-emergency Activities = 47%

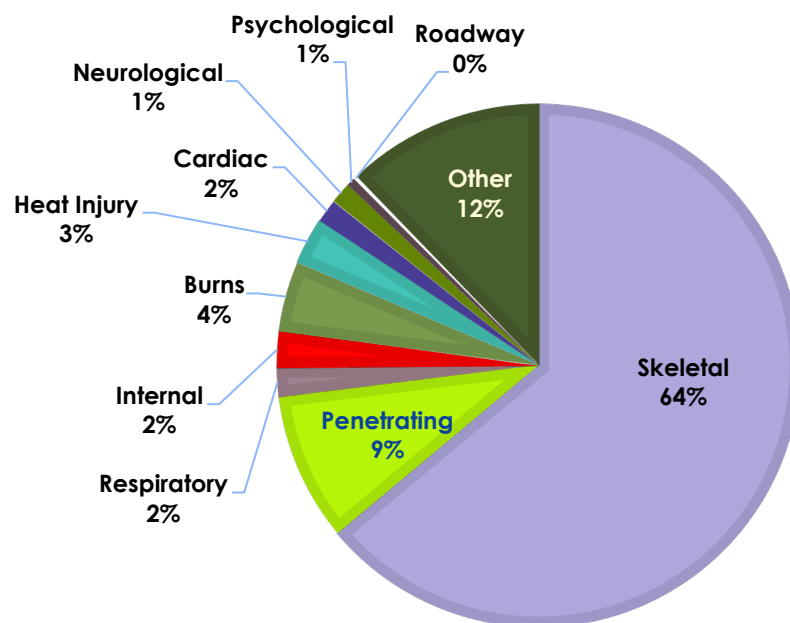


Types of Injuries

Table 8: Types of Injuries, 2023

Type of Injury	2023	
	Count	Percent
Skeletal	2,099	64%
Penetrating	300	9%
Respiratory	59	2%
Heat Injury	96	3%
Burns	142	4%
Internal	72	2%
Cardiac	47	1%
Neurological	43	1%
Psychological	17	1%
Roadway	9	0%
Other	399	12%
Total	3,283	100%

Figure 4: Types of Injuries, 2023

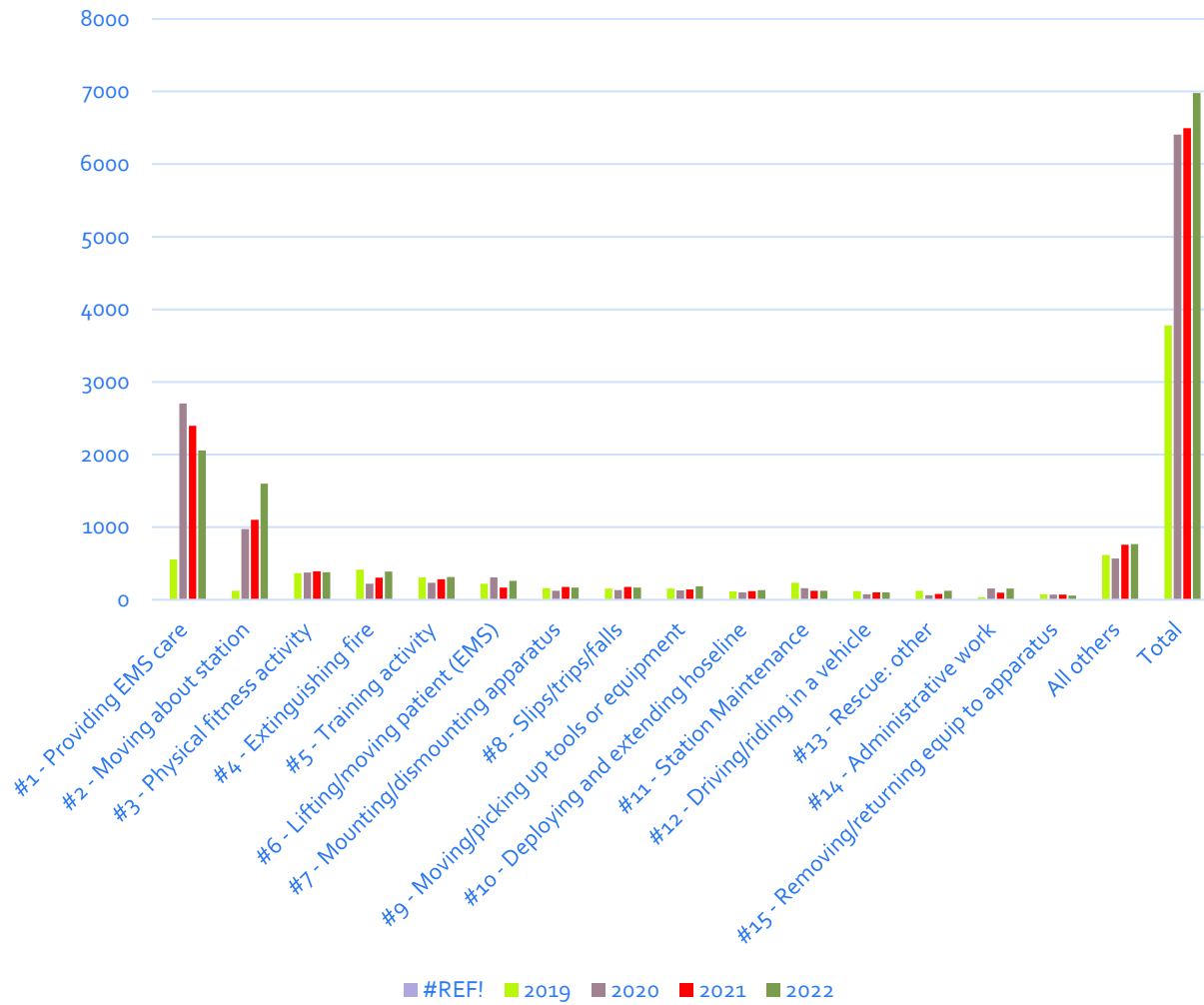


Task at Time of Injury

Table 9: Top 15 Tasks at Time of Injury, 2019 - 2023 (ordered by 2023, descending)

Task	2019	2020	2021	2022	2023
#1 - Providing EMS care	556	2,704	2,398	2,057	704
#2 - Moving about station	122	975	1,100	1,599	560
#3 - Physical fitness activity	364	376	394	378	454
#4 - Extinguishing fire	416	222	306	389	423
#5 - Training activity	309	236	284	312	340
#6 - Lifting/moving patient (EMS)	220	307	168	260	220
#7 - Mounting/dismounting apparatus	159	125	175	168	182
#8 - Slips/trips/falls	154	132	177	168	173
#9 - Moving/picking up tools or equipment	153	130	142	187	149
#10 - Deploying and extending hoseline	117	100	119	133	146
#11 - Station Maintenance	235	161	123	124	113
#12 - Driving/riding in a vehicle	119	77	100	101	105
#13 - Rescue: other	126	64	79	123	91
#14 - Administrative work	37	156	98	156	81
#15 - Removing/returning equip to apparatus	76	71	72	59	67
All others	617	570	760	766	694
Total	3,780	6,406	6,495	6,980	4,502

Figure 5: Top 15 Tasks at Time of Injury, 2019 - 2023



Injuries by Body Part

Table 10: Injuries by Body Part Type, 2019 - 2023

Injured Body Part	2019	2020	2021	2022	2023
Upper Extremities	795	700	812	859	939
Lower Extremities	684	616	724	787	847
Back	466	445	492	511	530
Head	327	197	248	323	306
Multiple Parts	255	281	284	389	300
Internal	125	144	402	337	151
Chest	108	107	124	146	105
Neck	56	33	38	50	74
Hip	33	29	35	24	31
Total	2,849	2,552	3,159	3,426	3,283

Table 11: Injuries by Body Part Sub-Type, 2019 - 2023

Body Part by Sub-Type	2019	2020	2021	2022	2023
Back: Back	194	191	191	214	274
Back: Buttocks	3	2	2	1	3
Back: Lower Back	258	248	287	284	239
Back: Neck	4	1	8	5	4
Back: Spine	7	3	4	7	10
Chest: Abdomen	4	2	3	3	1
Chest: Abdominal Area	4	9	5	9	5
Chest: Chest	100	96	116	134	99
Head: Brain	n/a	n/a	7	24	19
Head: Cheek	7	4	7	7	4
Head: Chin	1	4	2	3	5
Head: Ear	117	50	52	50	71
Head: Eye	60	44	50	58	45
Head: Face	112	78	57	32	33
Head: Forehead	n/a	n/a	3	31	40
Head: Jaw	6	2	2	0	0
Head: Mouth	16	10	8	7	14

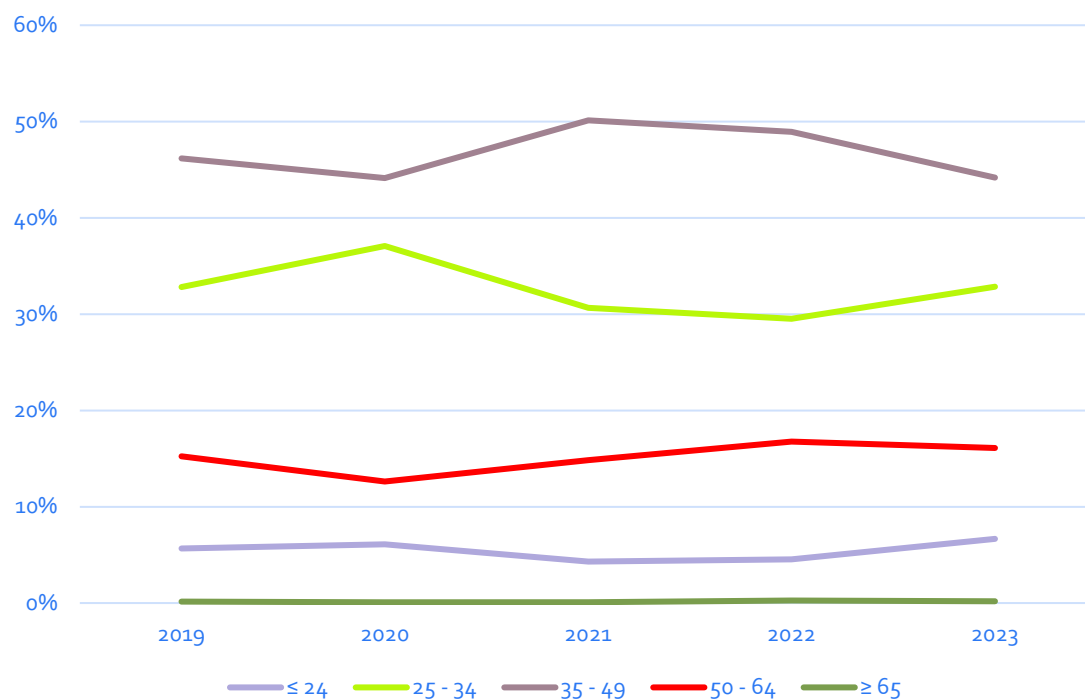
Head: Nose	8	3	9	60	45
Head: Skull	n/a	2	51	51	30
Hip: Groin	14	9	12	6	8
Hip: Hip	18	18	23	16	18
Hip: Pelvis	1	2	0	2	5
Internal: Genito-urinary	11	4	1	2	7
Internal: Heart	7	4	6	16	10
Internal: Internal	71	74	264	156	59
Internal: Intestinal tract	4	3	2	1	3
Internal: Lungs	11	51	114	150	47
Internal: Stomach	20	8	14	12	25
Internal: Trachea	1	0	1	0	0
Lower Extremities: Ankle	163	135	171	162	192
Lower Extremities: Foot	88	78	78	95	93
Lower Extremities: Knee	273	252	316	357	359
Lower Extremities: Lower leg	97	95	104	59	129
Lower Extremities: Toes	22	13	14	17	17
Lower Extremities: Upper Leg	41	43	41	67	57
Multiple Parts: Lower Body	19	20	15	16	33
Multiple Parts: Unknown	11	27	22	39	31
Multiple Parts: Upper Body	76	65	74	65	79
Multiple Parts: Whole Body	149	169	173	269	157
Neck: Neck	49	30	37	49	70
Neck: Throat	7	3	1	1	4
Upper Extremities: Elbow	44	34	44	63	67
Upper Extremities: Hands	326	319	315	356	344
Upper Extremities: Lower Arm	59	55	55	49	82
Upper Extremities: Shoulder	235	170	270	245	298
Upper Extremities: Upper Arm	72	45	68	94	86
Upper Extremities: Wrist	59	77	60	52	62
Total	2,849	2,552	3,159	3,396	3,283

Individuals by Age Group

Table 12: Individuals by Age Group, 2019 - 2023

Age Group	2019		2020		2021		2022		2023	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
≤ 24	210	5.65%	389	6.10%	279	4.31%	329	4.54%	300	6.66%
25 - 34	1,220	32.82%	2,365	37.07%	1,986	30.65%	2,141	29.52%	1,479	32.85%
35 - 49	1,716	46.17%	2,815	44.13%	3,248	50.12%	3,548	48.92%	1,989	44.18%
50 - 64	566	15.23%	805	12.62%	961	14.83%	1,216	16.77%	725	16.10%
≥ 65	5	0.13%	5	0.08%	6	0.09%	19	0.26%	9	0.20%
Totals	3,717	100.00%	6,379	100.00%	6,480	100.00%	7,253	100.00%	4,502	100.00%

Figure 6: Individuals by Age Group, percentages, 2019 - 2023



Activities Resulting in Lost Time

Table 13: Activities Individuals Were Doing that Resulted in Lost Time, 2023 Totals

Activity	Count	Days Missed	
		Average	Sum
EMS	194	19	3,703
Station Duties	264	13	3,624
Fire suppression	113	27	3,139
Wellness/fitness	78	36	2,849
Skills training	84	36	3,028
Fire prevention	15	17	261
Responding to incident	23	17	410
Rescue - nonfire-related	15	50	758
Returning from incident	5	18	91
Rescue - fire-related	4	53	214
Hazmat	2	23	46
Total	797	28	18,123

Table 14: Activities Individuals Were Doing that Resulted in Lost Time, 2023 Between 1 and 30 Days

Activity	Count	Days Missed	
		Average	Sum
EMS	172	9	1,636
Station Duties	252	10	2,564
Fire suppression	87	8	774
Skills training	64	9	613
Wellness/fitness	47	12	601
Fire prevention	12	9	117
Responding to incident	20	11	234
Rescue - nonfire-related	9	8	75
Returning from incident	5	18	91
Rescue - fire-related	2	6	13
Hazmat	1	12	12
Total	671	10	6,730

**Table 15: Activities Individuals Were Doing that Resulted in Lost Time, 2023
Between 31 and 90 Days**

Activity	Count	Days Missed	
		Average	Sum
EMS	15	48	727
Wellness/Fitness	24	48	1,155
Station Duties	9	53	479
Fire Suppression	15	58	872
Skills Training	8	62	500
Responding to incident	2	36	73
Fire Prevention	3	48	144
Rescue - nonfire-related	3	69	207
Total	79	53	4,157

**Table 16: Activities Individuals Were Doing that Resulted in Lost Time, 2023
91+ Days**

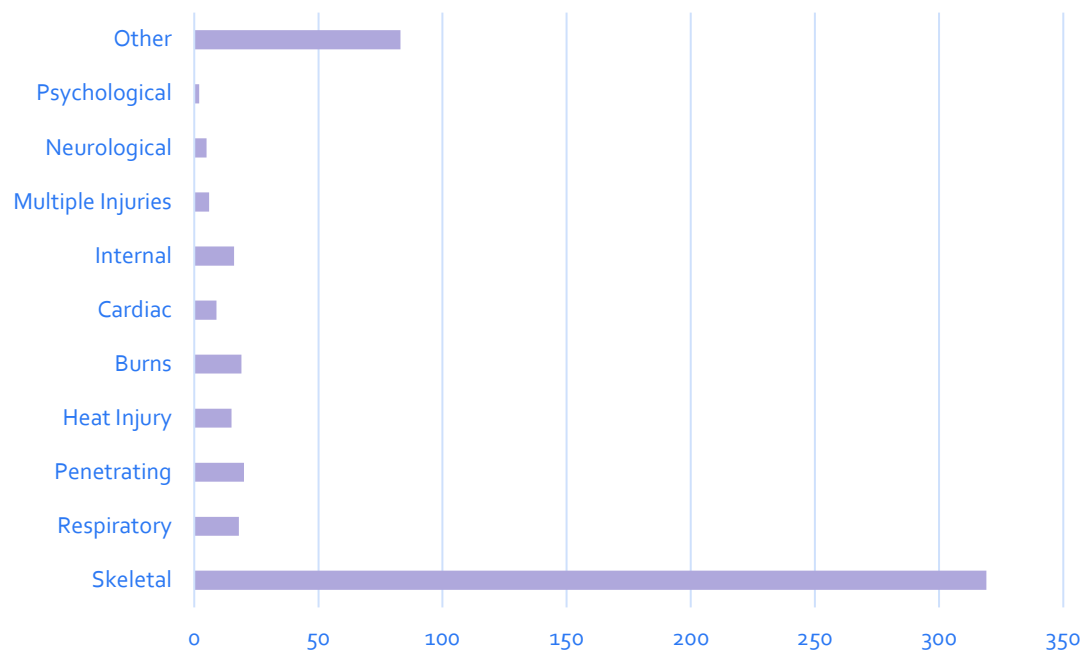
Activity	Count	Days Missed	
		Average	Sum
Fire Suppression	11	135	1,493
Skills Training	12	159	1,915
Station Duties	3	193	581
Wellness/Fitness	7	156	1,093
EMS	7	191	1,340
Responding to incident	1	103	103
Rescue - nonfire-related	3	158	476
Rescue - fire-related	1	129	129
Total	45	153	7,130

Types of Injuries with Lost Time

Table 17: Types of Injuries Resulting in Lost Time, 2023

Type of Injury	Count
Skeletal	319
Respiratory	18
Penetrating	20
Heat Injury	15
Burns	19
Cardiac	9
Internal	16
Multiple Injuries	6
Neurological	5
Psychological	2
Other	83
Total	512

Figure 7: Types of Injuries Resulting in Lost Time, 2023



Burn Injuries

Table 18: All Burns, 2019 - 2023

All Burns - Types	2019	2020	2021	2022	2023
Heat/Fire (thermal)	72	80	66	83	118
Scald or Steam	10	11	12	19	18
Chemical	6	2	3	6	6
Electrical	2	3	4	4	0
Totals	90	96	85	112	142

Table 19: Burns by Body Part Sub-Type, 2019 - 2023

Body Part Sub-Type	2019	2020	2021	2022	2023
Back: Back	0	0	2	2	2
Back: Buttocks	0	0	0	n/a	1
Back: Lower Back	0	0	0	0	0
Back: Neck	0	0	0	0	0
Back: Spine	0	0	0	0	0
Chest: Abdomen	2	0	0	0	0
Chest: Abdominal Area	0	0	0	0	0
Chest: Chest	0	0	0	3	0
Head: Brain	n/a	n/a	0	0	0
Head: Cheek	1	1	1	4	2
Head: Chin	1	3	0	1	2
Head: Ear	17	12	13	9	23
Head: Eye	5	3	2	0	2
Head: Face	7	8	2	6	4
Head: Forehead	n/a	n/a	1	2	2
Head: Jaw	0	0	0	n/a	n/a
Head: Mouth	1	0	0	0	1
Head: Nose	0	0	1	0	1
Head: Skull	n/a	0	0	1	1
Hip: Groin	0	0	0	0	0
Hip: Hip	0	0	1	0	0

Hip: Pelvis	0	0	n/a	0	0
Internal: Genito-urinary	0	0	0	0	0
Internal: Heart	0	0	0	0	0
Internal: Internal	0	0	0	0	0
Internal: Intestinal tract	0	0	0	0	0
Internal: Lungs	0	0	0	0	1
Internal: Stomach	0	0	0	0	0
Internal: Trachea	0	n/a	0	n/a	n/a
Lower Extremities: Ankle	0	1	1	1	0
Lower Extremities: Foot	3	4	3	4	2
Lower Extremities: Knee	1	1	0	0	2
Lower Extremities: Lower Leg	3	1	3	5	4
Lower Extremities: Toes	1	0	0	0	0
Lower Extremities: Upper Leg	0	1	0	1	3
Multiple Parts: Lower Body	0	0	0	1	2
Multiple Parts: Unknown	0	0	0	1	1
Multiple Parts: Upper Body	6	11	7	7	10
Multiple Parts: Whole Body	4	0	3	4	4
Neck: Neck	2	2	2	5	6
Neck: Throat	0	0	0	0	0
Upper Extremities: Elbow	0	1	2	2	1
Upper Extremities: Hands	16	20	24	21	21
Upper Extremities: Lower Arm	5	14	8	10	22
Upper Extremities: Shoulder	1	4	3	12	7
Upper Extremities: Upper Arm	3	0	3	8	8
Upper Extremities: Wrist	11	9	3	2	7
Totals	90	96	85	112	142

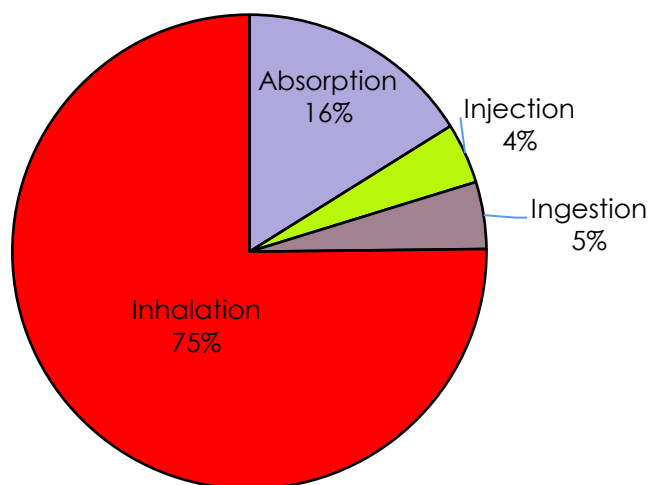
Exposures

Table 20: Exposures by Sub-type, 2019 - 2023

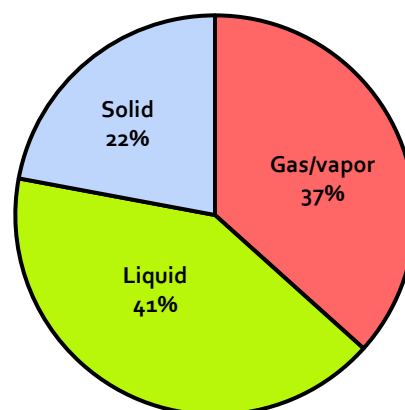
Exposure + Sub-Type	2019	2020	2021	2022	2023
Chemical: Ammonia	3	0	6	0	1
Chemical: Battery Acid	4	0	2	1	0
Chemical: Benzene	15	1	1	0	1
Chemical: Bleach	11	0	2	0	0
Chemical: Not listed	160	70	40	25	72
Chemical: Unidentified	55	27	34	42	38
Physical: Animal venom	17	5	7	3	8
Physical: Meningitis	40	33	3	3	41
Physical: Not listed	201	42	27	35	27
Physical: Plant toxin	14	12	24	22	17
Physical: Radiation	4	1	0	0	4
Physical: Unidentified	66	13	17	24	27
Physical: UV Light	2	1	0	1	0
Respiratory: Blood	73	78	54	48	90
Respiratory: COVID 19	1	1,715	2,878	3,466	621
Respiratory: Influenza	19	7	2	2	1
Respiratory: Not listed	118	56	8	9	7
Respiratory: Saliva	22	28	15	23	22
Respiratory: Tuberculosis	76	31	16	29	54
Respiratory: Unidentified	37	6	19	13	62
Respiratory: Vomit	8	13	4	4	9
Other: Asbestos	3	1	109	30	30
Other: Carbon Monoxide	1	6	2	11	15
Other: Carcinogenic Substances	1	13	15	21	75
Other: Contaminated Water/Sewage	4	11	8	21	4
Other: Chlorine	n/a	n/a	6	3	1
Other: Heavy Metals	0	1	0	1	3
Other: Mold	0	9	4	29	42
Other: Smoke/Products of Combustion	5	19	37	81	45
Other: Virus	3	1,878	266	203	61
Total	963	4,077	3,606	4,150	1,378

Table 21: Exposure by Route, 2023

Route	Count
Inhalation	1,036
Absorption	222
Injection/Puncture	57
Ingestion	63
Total	1,378

Figure 8: Exposure by Route, 2023, percentages**Table 22: Exposure by Substance, 2023**

Substance	Count
Liquid	569
Gas/vapor	505
Solid	304
Total	1,378

Figure 9: Exposure by Substance, 2023, percentages

Cancer

In June of 2019, the Governor of Texas signed Senate Bill 2551 (SB 2551) which expanded the scope of the law in which firefighters and EMTs who suffer from cancer are presumed to have developed the condition during the course and scope of their employment. The types of cancer this law addresses include:

- cancers that originate at the stomach, colon, rectum, skin, prostate, testis or brain
- non-Hodgkin's lymphoma
- multiple myeloma
- malignant melanoma
- renal cell carcinoma

The TCFP received **81** reports of cancer diagnoses from fire departments in 2023:

Skin - 34

(Males - 31, 32, 38, 41, 41, 41, 41, 41, 42, 42, 43, 43, 44, 44, 44, 45, 46, 47, 47, 47, 49, 50, 51, 52, 53, 54, 54, 54, 55, 55, 55, 55, 57, 59)

Prostate - 9

(Males - 50, 51, 53, 54, 55, 55, 60, 61, 62)

Lymphatic - 7

(Males - 18, 37, 49, 51, 55, 55, 62)

Colon/rectum - 6

(Males - 41, 55, 56, 57, 57, 61)

Testicular - 6

(Males - 28, 32, 35, 41, 44, 44)

Blood - 3

(Males - 47, 56, 60)

Thyroid - 3

(Males - 41, 44, 45)

Brain - 2

(Male - 24, 55)

Appendix - 1
(Male - 43)

Kidney - 1
(Male - 51)

Lung - 1
(Male - 49)

Neuroendocrine - 1
(Male - 47)

Stomach - 1
(Male - 43)

Throat - 1
(Male - 56)

Unidentified - 5
(Males - 51, 52, 52, 67)
(Female - 54)

A Reminder for Fire Departments

Any injuries to fire protection personnel that are reported to the Texas Worker's Compensation Commission must be reported to the Texas Commission on Fire Protection. This includes cancer diagnoses.

The commission strongly encourages fire departments to report cancer diagnoses; the commission recognizes that the number of job-related cancers reported during this time-period represents only a fraction of the cases that Texas fire departments are currently managing. There is a growing awareness of the impact that cancer is having on fire protection personnel nationwide, and the commission urges departments to use this reporting tool to help contribute to the education and awareness of the issue in Texas.

SOP Issues; PPE and PASS Failures

In 2023 there were five injuries attributed to failures of fire protection personnel to follow their departments' standard operating procedures (SOPs). All but a few were instances where the individuals were not wearing their provided PPE/SCBA gear in an environment or situation in which they should have been wearing it.

In its compliance inspections, the Texas Commission on Fire Protection verifies that fire departments have written SOPs that cover the appropriate subject matter.

Table 23: Injuries Attributed to SOP Issues, 2023

Activity	Minor	Serious	Total	Previous years' totals			
				2022	2021	2020	2019
EMS	0	0	0	1	1	18	11
Fire Suppression	2	0	2	7	8	10	10
Skills Training	1	1	2	3	2	5	1
Fire related rescue	1	0	1	1	0	0	2
Station Duties	0	0	0	4	1	2	6
Nonfire related rescue	0	0	0	1	0	0	4
Totals	4	1	5	17	12	35	34

Table 24: Injuries Attributed to PPE and PASS Failures, 2023

Activity	Minor	Serious	Total	Previous years' totals			
				2022	2021	2020	2019
Fire Suppression	15	3	18	7	4	7	2
EMS	1	0	1	0	1	4	0
Skills Training	1	2	3	1	1	1	2
Nonfire related rescue	2	0	2	0	0	0	0
Station Duties	1	0	1	0	1	0	1
Totals	20	5	25	8	7	12	5

Recommendations

The commission would like to thank Texas fire departments for their ongoing participation in reporting fire protection personnel injuries. This report would not be possible without their efforts.

Based on their review of the data contained within this report, the commission offers the following recommendations and reminders for the Texas Fire Service:

[The following list is from the 2022 Injury Report. New recommendations are needed for this report.]

1. *NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* is required by state law.
2. Ensure all appropriate PPE is properly worn on all emergency response incidents.
3. The commission strongly encourages the use of PPE during routine station duties and in training scenarios.
4. Inspect your PPE regularly and replace/repair damaged or worn items.
5. Continue to review and practice roadway safety and traffic incident management practices.
6. Review all of your department's SOPs with a focus on injury prevention, especially with regard to skeletal injuries that result from lifting and moving objects/patients.
7. Review decontamination procedures for medical calls and structure fires.
8. Review injury trends within your individual department.

Commission-Adopted Standards

The commission has adopted several NFPA and other nationally recognized standards to help keep Texas fire protection personnel safe. This list summarizes the relationships between some of the Texas laws and national standards and is not intended to be all-inclusive:

Texas Government Code

[§419.040, Protective Clothing](#)

[§419.041, Self-Contained Breathing Apparatus](#)

[§419.042, Personal Alert Safety Systems](#)

[§419.043, Applicable National Fire Protection Association Standard](#)

[§419.044, Incident Management System](#)

[§419.045, Personnel Accountability System](#)

[§419.046, Fire Protection Personnel Operating at Emergency Incidents](#)

[§419.047, Commission Enforcement](#)

Texas Administrative Code

[CHAPTER 425 FIRE SERVICE INSTRUCTORS](#)

[§443.9 National Fire Protection Association Standard](#)

[CHAPTER 435 FIRE FIGHTER SAFETY](#)

[§435.21 Fire Service Joint Labor Management Wellness-Fitness Initiative](#)

[§435.23 Fire Fighter Injuries](#)

[§435.25 Courage to be Safe So Everyone Goes Home Program](#)

[§435.27 Live Fire Training Structure Evolutions](#)

[CHAPTER 451 FIRE OFFICER](#)

[CHAPTER 457 INCIDENT SAFETY OFFICER CERTIFICATION](#)

Commission's web page

[NFPA Standards adopted by the commission](#)

§469.5. Examination Requirement.

Examination requirements in Chapter 439 of this title (relating to Examinations for Certification) must be met to receive Rope Rescue Awareness Level/Operations Level certification.

§469.7. Reserved. (IFSAC)

CHAPTER 469

TECHNICAL RESCUE

SUBCHAPTER A

MINIMUM STANDARDS FOR ROPE RESCUE AWARENESS AND OPERATIONS

§469.1. Rope Rescue Awareness Level/Operations Level Certification.

- (a) A Rope Rescue Awareness Level/Operations Level Rescuer is an individual who has met the requirements of Chapters 5.1 and 5.2 of NFPA 1006, Standard for Technical Rescue Personnel Professional Qualifications and has the knowledge, skills, and ability to perform Rope Rescue at the Awareness Level/Operations Level.
- (b) All individuals holding a Rope Rescue Awareness Level/Operations Level certification shall be required to comply with the continuing education requirements in Chapter 441 of this title (relating to Continuing Education).
- (c) Special temporary provision. Individuals are eligible to take the commission examination for Rope Rescue Awareness Level/Operations Level by:
 - (1) holding as a minimum, Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel through the commission; and
 - (2) providing documentation acceptable to the commission, in the form of an affidavit from the individual's Head of Department or Chief Training Officer, that the individual has met the department's requirements to perform as a Rope Rescuer and has demonstrated proficiency as a Rope Rescuer at the Rope Rescue Awareness Level/Operations Level.
- (d) All applications for testing during the special temporary provision period must be received no earlier than October 1, 2024, and no later than October 1, 2025.
- (e) This special temporary provision will expire on November 1, 2025.

§469.3. Minimum Standards for Rope Rescue Awareness Level/Operations Level Certification.

In order to be certified to the Rope Rescue Awareness Level/Operations Level, an individual must:

- (1) hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
- (2) complete a commission-approved Rope Rescue Awareness Level/Operations Level program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Rope Rescue Awareness Level/Operations Level program must consist of one of the following:
 - (A) completion of an in-state Rope Rescue Awareness Level/Operations Level program meeting the requirements of the applicable NFPA standard and conducted by a commission-certified training provider that was submitted and approved through the commission's training prior approval system; or
 - (B) completion of an out-of-state educational institution of higher education, and/or military training program that has been submitted to the commission for evaluation and found to meet the requirements of the applicable NFPA standard.

§469.5. Examination Requirement.

Examination requirements in Chapter 439 of this title (relating to Examinations for Certification) must be met to receive Rope Rescue Awareness Level/Operations Level certification.

§469.7. Reserved. (IFSAC)

CHAPTER 469

TECHNICAL RESCUE

SUBCHAPTER B

MINIMUM STANDARDS FOR ROPE RESCUE TECHNICIAN

§469.201. Rope Rescue Technician Level

- (a) A Rope Rescue Technician Level Rescuer is an individual who has met the requirements of chapter 5.3 of NFPA 1006, Standard for Technical Rescue Personnel Professional Qualifications, and has the knowledge, skills, and ability to perform Rope Rescue at the Technician Level.
- (b) All individuals holding a Rope Rescue Technician Level certification shall be required to comply with the continuing education requirements in Chapter 441 of this title (relating to Continuing Education).
- (c) Special temporary provision. Individuals are eligible to take the commission examinations for the Rope Rescue Technician Level by:
 - (1) holding as a minimum, Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel through the commission; and
 - (2) providing documentation acceptable to the commission, in the form of an affidavit from the individual's Head of Department or Chief Training Officer, that the individual has met the department's requirements to perform as a Rope Rescuer and has demonstrated proficiency as a Rope Rescuer at the Rope Rescue Technician Level.
- (d) All applications for testing during the special temporary provision period must be received no earlier than October 1, 2024, and no later than October 1, 2025.
- (e) This special temporary provision will expire on November 1, 2025.

§469.203. Minimum Standards for Rope Rescue Technician Level Certification

In order to be certified at the Rope Rescue Technician Level, an individual must:

- (1) Option 1-- hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and
 - (A) hold a Rope Rescue Awareness Level/Operations Level certification through the commission; and
 - (B) complete a commission-approved Rope Rescue Technician Level program and successfully pass the commission examination for Rope Rescue Technician as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Rope Rescue Technician Level program must consist of one of the following:
 - (ii) completion of an in-state Rope Rescue Technician Level program meeting the requirements of the applicable NFPA standard and conducted by a commission-certified training provider that was submitted and approved through the

commission's training prior approval system; or
(ii) successful completion of an out-of-state educational institution of higher education, and/or military training program that has been submitted to the commission for evaluation and found to meet the requirements of the applicable NFPA standard.

(2) Option 2-- hold certification as Structural Fire Protection Personnel, Aircraft Rescue Fire Fighting Personnel, or Marine Fire Protection Personnel; and

(A) complete a commission-approved Rope Rescue Awareness Level/Operations Level program. An approved Rope Rescue Awareness Level/Operations Level program must consist of one of the following:

(i) completion of an in-state Rope Rescue Awareness Level/Operations Level program meeting the requirements of the applicable NFPA standard and conducted by a commission-certified training provider that was submitted and approved through the commission's training prior approval system; or

(ii) successful completion of an out-of-state educational institution of higher education, and/or military training program that has been submitted to the commission for evaluation and found to meet the requirements of the applicable NFPA standard; and

(B) complete a commission-approved Rope Rescue Technician Level program. An approved Rope Rescue Technician Level program must consist of one of the following:

(i) completion of an in-state Rope Rescue Technician Level program meeting the requirements of the applicable NFPA standard and conducted by a commission-certified training provider that was submitted and approved through the commission's training prior approval system; or

(ii) completion of an out-of-state educational institution of higher education, and/or military training program that has been submitted to the commission for evaluation and found to meet the requirements of the applicable NFPA standard; and

(C) successfully pass the commission examinations for the Rope Rescue Technician Level as specified in Chapter 439 of this title (relating to Examinations for Certification).

§469.205. Examination Requirement.

Examination requirements in Chapter 439 of this title (relating to Examinations for Certification) must be met to receive Rope Rescue Technician Level certification.

§469.207. Reserved. (IFSAC)

AGENDA ITEM NUMBER 5 WITH RELEVANT DOCUMENTS ATTACHED

5. Discussion and possible action on 37 TAC, Chapter 469, Technical Rescue **(please see attached)**.

AGENDA ITEM NUMBER 6

6. Update on the Fire Fighter Advisory Committee vacancies and selection process.

AGENDA ITEM NUMBER 7

7. Subjects for future agenda items.

AGENDA ITEM NUMBER 8

8. Future meeting dates.

AGENDA ITEM NUMBER 9 WITH RELEVANT DOCUMENTS ATTACHED

9. Recognition of committee member Keith Schmidt for his service **(please see attached)**.

Keith A. Schmidt
14 Park Place Dr.
Gonzales, Texas 78629

May 30th, 2024

Chief Mike Wisko
Texas Commission on Fire Protection
P.O. Box 2286
Austin, Texas 78768

Chief Wisko,

I have not been able to dedicate the time required to continue as a volunteer for the Gonzales Fire Department. Therefore, effective at the close of business, at the June 21st advisory board meeting, I am tendering my resignation from the Fire Fighter Advisory Committee. I cannot express how much I have enjoyed working you and everyone on the Fire Fighter Advisory Committee. The friendships and brotherhood with all of the men and women in the fire service mean the world to me and I look forward to continuing these relationships.

If ever I can be of assistance please let me know.

Sincerely,


Keith A. Schmidt

AGENDA ITEM NUMBER 10

10. Adjourn meeting.