



City of Merced Fire Department

Casey Wilson, Fire Chief

First Responder Advanced Life Support Update

What is First Responder Advanced Life Support (FRALS)?



- Paramedics on Fire Engines, Squads and Ladder Trucks
- Generally, do not transport
- Historically MFD was trained to the Basic Life Support (BLS) level



EMT vs. Paramedic – What is the difference?

EMT

- Basic Life Support
- 170 hours of training
- Min. training for MFD firefighters
- Basic airway management
- Basic patient stabilization

Paramedic

- Advanced Life Support
- 1200 - 1800 hours of training. (Approx. 2-year process)
- Advanced Airway Management
- Cardiac monitoring
- Medication administration
- Pain management



Previous Council Action – Nov. 2024

- First Responder Advanced Life Support Agreement with Merced County EMS
- Additional equipment to support ALS
 - Engine 53 became ALS effective Jan. 2025
 - Squad 53 implemented Mar. 2025
- Approved Battalion Chief position for ALS program management



MFD Firefighter Paramedic Status

- Licensed Firefighter Paramedics – 11
- Paramedics in Training – 7
 - Didactic – 6 Firefighters
 - Internship – 1 Firefighter
- Beginning Training January – 5
 - 5 additional Firefighters completed their entrance exam



Incident Data

- Jan 1 - Aug 31, 2025

- E53 Total EMS Responses:
 - E53 - 992
- ALS Responses:
 - E53 - 261



- Mar 3 - Aug 31, 2025

- S53 Total EMS Responses:
 - S53 - 735
- ALS Responses:
 - S53 - 205

*ALS When Available Status



ALS Care Provided



ALS Interventions

Procedure	Count
EKG 3/4-Lead	376
EKG 12/15-Lead	206
IV Access	167
Contact Medical Control	29
End-Tidal CO2 Monitoring	29
Defibrillation (Manual)	23
Intubation (Oral w/ Bougie)	6
IO Access	7
Chest Decompression	2
External Pacing	1

Medication Administrations

Medication	Route	Count
Epinephrine (1:10,000)	IO + IV	84
Nitroglycerin (Tab + Paste)	Sublingual + Topical	62
Albuterol	Nebulizer	29
Dextrose (10% + 50%)	IV	12
Ondansetron (Zofran)	Oral + IV	33
Fentanyl	IM + IV	10
Naloxone (Narcan)	IO + IV	8
Calcium Chloride	IO + IV	5
Morphine Sulfate	IV	5
Glucagon	IM	9

(27 Total including BLS)



Progressing ALS

- E51 Upgraded to "ALS when Available" effective Sep. 17th, 2025
 - Will become full-time ALS November 2025
- Capacity to add 4th ALS unit expected Q1 2026
 - Data supports need on Engine 55
- MFD will be providing ALS service to and estimated 73% of EMS calls city wide



Progressing ALS

- MFD is looking to deploy Paramedics to the community with more efficiency.
- Analysis indicates that implementing the Squad deployment strategy at Stations 51 and 53 will result in coverage for 59% of total EMS call volume across the city.
- MFD is in discussion with the new Merced County exclusive ambulance provider to integrate our paramedics into the EMS system, enhancing service delivery with the possibility of recovering costs.



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Questions?