

# Prehospital Care in Roseville

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# EMT and Paramedic, what's the difference?

- Both are licensed prehospital care providers in CA
- Both are integral members of the prehospital care
- Different levels of education
- Different levels of Scope and Practice
  - What medications and routes of administration can be given
  - What procedures can be performed



# **Emergency Medical Technician (EMT)**

### • Education:

- 146 hrs. of didactic instruction and skill laboratory (Standardized)
- 24 hrs. supervised clinical experience
- CPR certified
- Successfully pass National Registry Examination for EMT level





### **EMT Scope and Practice (what can an EMT do)**

- Basic lifesaving interventions: CPR, AED, vital signs, SMR/immobilization, tourniquet, airway management and ventilation.
- Medications:
  - Administer Narcan through the nose and in the muscles
  - Epinephrine via "auto injector"
  - Aspirin
  - Assist patient with physician prescribed Nitroglycerin
  - Utilize glucometer and administer oral glucose



### **Paramedic**

### • Education:

- 450 hrs. didactic instruction and skills laboratory (Standardized)
- 160 hrs. hospital clinical training
- 480 hrs. field internship (Direct one on one training by a qualified Paramedic Preceptor)
- CPR certified
- American Heart Association Pediatric Advanced Life Support certified
- Successfully pass National Registry Examination for Paramedic





# Paramedic Scope and Practice

- Everything an EMT can do plus Advanced Life Support (ALS):
  - Utilize EKG, including 12 lead and interpretation
  - Defibrillation, cardioversion, cardiac pacing
  - Visualization of airway via laryngoscope
  - Intubation
  - CPAP and PEEP
  - Start, maintain and administer medication through IV's
  - Start, maintain and administer medications through IO
  - Utilize laboratory devices prehospital (capnography, CO, glucose)



# Scope and practice continued

- Needle Cricothyroidotomy
- Needle Thoracostomy
- Monitor and adjust IV solutions
- Administer medications via IV, IO, IN, IM, SQ, INH, TC, SL, oral or topical
- Administer 25 life saving medications including pain management therapies
- Advanced assessment abilities

#### \*\*\*\*Disclaimer\*\*\*\*

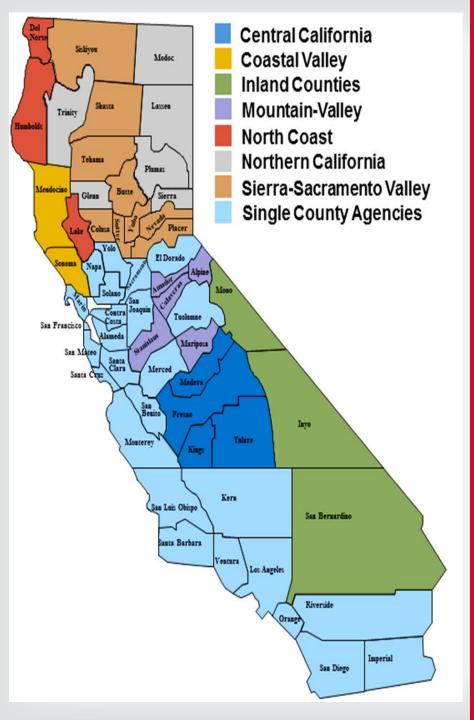
This is not a comprehensive presentation of Title 22



### What and who defines Scope and Practice

- California Emergency Medical Service Authority
- Established by Title 22, Division 2.5 of the Health and Safety Code
- 1980 Emergency Medical Services System and Prehospital Emergency Care Personnel Act (SB 125)
- CAEMSA is responsible for:
  - EMS Systems Planning and Development
  - Trauma Care System Planning and Development
  - Emergency Medical Services For Children
  - Poison Control System
  - Prehospital Emergency Medical Care Personnel Standards
  - Paramedic Licensure and Enforcement
  - Disaster Medical Services Preparedness and Response





# That's great at a State level but what about here?

- Local Emergency Medical Authority established through Title 22
- Sierra Sacramento Valley EMSA (S-SV)
- Dr. Troy Falck, Medical Director for S-SV accredited Paramedics
- Applicable Protocols and Policies for the local service area
- Municipalities do not control prehospital systems
- S-SV authorizes and oversees all providers
  - Public
  - Private
  - This includes transportation, fees and contracts

### Who does what, when I dial 9-1-1 in Roseville?

- Roseville Fire Department (RFD) is the "First Responder"
  - Early and timely interventions
- American Medical Response (AMR)
  - Transport provider
  - Staffed with an EMT and a Paramedic

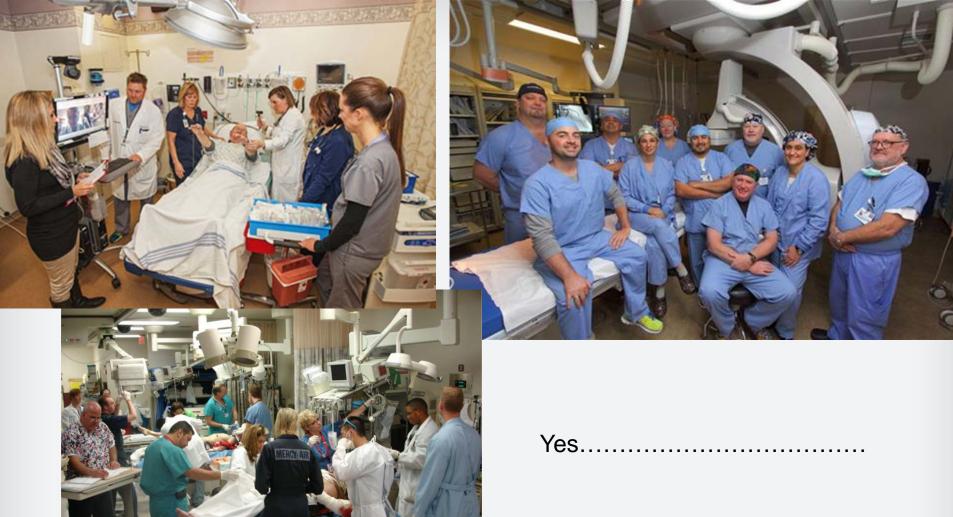




### Does high quality prehospital care "really matter"?

- Accepted by all medical authorities (AHA, ACS, etc.) as a necessary and required part of the continuum of care
- Time is tissue
  - In the field treatments that are researched and evidence based
- Timely packaging and effective communication to definitive treatment centers
- Early notification and transmission of definitive evaluative tools to treatment centers
- Decreased morbidity and mortality
- It is part of the health care system





# Do we really need all these Paramedics?







# Statistical odds of "something" happening

- Heart Attack\*\*
  - 790,000 in the US, one every 40 seconds
  - 114,000 will die
  - Remains #1 cause of death
- Stroke\*\*
  - 795,000 in the US, one every 40 seconds
  - Accounts for 1 of every 20 deaths
  - Leading cause of serious long term disability in the US

\*\* AHA Heart Disease and Stroke Statistics 2017



### **Continued:**

- Trauma\*\*
  - Leading cause of death up to age 45
  - 4<sup>th</sup> leading cause of death in all ages
  - 1 million per year with traumatic brain injury
  - Accounts for 150,000 deaths
  - 3 million non-fatal injuries annually
  - 2.7 million injuries from MVC in the US in 2005

\*\* The American Association for the Surgery of Trauma and NHTSA





## RFD is proud to be 100% ALS (Paramedics)

- ALS doesn't diminish the importance of EMT (integral members of the health care team)
- ALS does bring the most life saving measures to the field for timely intervention
- Interoperability of providers
- Increased "Hands on deck" for complex involved calls.
- Ability to effectively and efficiently move patients in difficult scenes (entrapment, up stairs, etc.)
  - Without adding additional injury or exacerbating it



### RFD proudly served its community in 2017 by answering:

- 689 calls for Trauma
- 125 calls for Stroke
- 355 calls for Chest Pain
- 200 calls for Respiratory Distress
- 74 calls for Cardiac arrest
- 96 calls for Cardiac arrhythmia
- 22 calls for Hemorrhage





### **Quality when it matters:**

- 33% return of spontaneous circulation
  - 3 times National average
- 2016 and 2017 American Heart Association Mission Lifeline
  - Roseville Fire Department has received recognition for excellence in STEMI care





# Thank You for your time

• Questions?????





