



**AMBULANCE RULES AND REGULATIONS  
GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

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I. AUTHORITY:

*California Code of Regulations, Title 22, Division 9, Chapter 12. California Code of Regulations, Title 13, Division 2, Chapter 5. California Health and Safety Code, Division 2.5, Sections 1797.84, 1797.180, 1797.200, 1797.204, & 1798 Code of Federal Regulations 634. County of Orange Ambulance Ordinance. Policy sets minimum acceptable standards, any exemptions for public providers allowed by law.*

II. APPLICATION:

To provide minimum ambulance design, documentation, and equipment standards for ambulance transportation providers and to ensure a system-wide standardized inventory to promote safety, readiness, and the ability to meet the requirements of a disaster response in the event of a declared emergency.

III. AMBULANCE DESIGN/REQUIREMENTS:

- A. Each ambulance shall be classified in accordance with the National Incident Management System.
- B. No OCEMS ambulance permit shall be issued or renewed for any ambulance that is older than ten (10) years. Year 1<sup>st</sup> sold, as noted on CA DMV documentation, shall be the determining qualification. (e.g., an OCEMS permitted ambulance initially sold in 2010 would need to be taken out of service no later than December 31<sup>st</sup>, 2020).
  - 1. If Year 1<sup>st</sup> sold is not noted, or noted as "0000" on DMV documentation, then the vehicles year shall be the vehicles model year.
  - 2. No salvage titles will be authorized.
  - 3. Providers will be allowed to request a 1-year extension past the 10-year allowed service time limit if there are:
    - a. Supply chain issues that cause delays in ambulance manufacturing (proof of purchase must be submitted), or
    - b. Cataclysmic events
- C. No ambulances shall be operated if staffed at less than the level of care marked on the unit, (e.g., "ALS", "Mobile Intensive Care Unit", or "MICU" – must be staffed by paramedics or registered nurses).
- D. Each ambulance shall have:
  - 1. Patient compartment door latches operable from inside and outside the vehicle.
  - 2. Operational heating and air conditioning systems in the patient and driver compartments.
  - 3. Seat belts for all passengers in the driver's and patient compartment shall be fully functional.
  - 4. All door and window gaskets shall be undamaged with their integrity intact and form the appropriate seal.



## **AMBULANCE RULES AND REGULATIONS GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

---

5. All surfaces in the patient compartment (seats, ambulance cot/gurney mattress, etc.) shall be intact, impervious to fluid and able to be disinfected in case of contamination.
6. The name of the public entity that operates an ambulance service or the name under which the ambulance licensee is doing business or providing service shall be displayed on both sides and the rear of each emergency ambulance. The display of the name shall be in letters in sharp contrast to the background and shall be of such size, shape, and color as to be readily legible during daylight hours from a distance of 50 feet.
  - a. All ambulances operated under a single license shall display the same company identification and exterior paint/wrap design, and will be assessed at the discretion of Orange County EMS, with the following exemptions:
    - (1) Ambulance providers contracted by an Orange County city for 911 services if the city requires an alternate ambulance exterior paint/wrap design.
    - (2) Ambulance providers displaying public service announcements (e.g., Drowning prevention, Bicycle helmet safety, Leaving children in vehicles).
    - (3) Ambulances providing specialty care services for a hospital (e.g., Neonatal transports, Pediatric transports).
7. A unit number or identifier, of at least two characters minimum, 3 to 4 inches in height and of a contrasting color from the background, shall be affixed to the right rear and both sides of the front of the vehicle, at a minimum.
8. Medical supplies, solutions, and medications shall be acceptable for medical use and replaced prior to the expiration date.
9. Medical equipment and supplies used to treat a patient shall be acceptable for medical use and shall be securely stored to prevent loose flying objects in the case of an ambulance collision. Each ambulance shall be designed and have equipment to secure ambulance cots, gurneys, oxygen tanks, sharps containers, and any other equipment that might be used on a patient.
  - a. Ambulance Design shall allow for medical equipment and supplies to be readily accessible for immediate use in securable cabinets.
  - b. Any aftermarket products installed on or in an ambulance must be professionally installed and will be subject to authorization by OCEMS.

### **IV. REQUIRED DOCUMENTATION AND PUBLICATIONS FOR EACH AMBULANCE:**

The following documentation and publications are required in all permitted ambulances to operate in Orange County and shall be kept current and be made available upon request:

- A. For currently permitted vehicles, a valid County of Orange ambulance permit (or facsimile) in the driver compartment.
  - B. For currently permitted vehicles, a valid County of Orange ambulance permit decal affixed to the lower portion of the right rear window of the ambulance.
  - C. Ambulance cleaning checklist, completed at the start of the shift, that adheres to cleaning standards as identified in OCEMS policy 720.50 Section VIII. Cleaning Standards for Ambulances and Ambulance Equipment.
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**AMBULANCE RULES AND REGULATIONS  
GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

---

- D. Evidence of successful completion of an annual vehicle inspection performed by the California Highway Patrol within the preceding twelve (12) months. Ambulances in possession of a valid and current California Highway Patrol ambulance inspection report shall be deemed in compliance with Vehicle Code and regulations adopted by the California Highway Patrol Commissioner.
- E. Evidence of successful completion of current odometer inspection(s) performed by the Division of Weights and Measures of the Agriculture Department of the County of Orange or other California county within the preceding twelve (12) months.
- F. Evidence of completion of an initial, and upon request, MED-9 radio inspection(s) performed by the County of Orange Sheriff Department of Communications.
- G. Current map book, or an updated electronic mapping device with orange county maps.
- H. 2024 or more recent DOT Emergency Response Guidebook
- I. Proof of insurance
- J. Evidence of current CA DMV registration.
- K. Every ambulance service provider shall maintain a file (electronic or paper) with the following documentation at their main office for each ambulance:
  - 1. Shift inspection sheet and ambulance cleaning checklist. Shift inspection sheets and ambulance cleaning checklist shall be maintained in ambulance files for the current permitting year for each ambulance.
  - 2. Proof of insurance.
  - 3. Maintenance records.
  - 4. Evidence of CA DMV registration.
  - 5. Records of initial MED-9 radio testing by Orange County Sheriff's Department or approved equivalent.

**V. AMBULANCE MEDICAL EQUIPMENT:**

OCEMS requires each ambulance provider to provide the following required medical equipment and supplies:

- A. Airway and Ventilation Equipment
  - 1. Vehicle (house) "H", "M", or equivalent oxygen cylinders (not less than 500 psi) for operation with a wall mount oxygen outlet and variable flow regulator: one (1)
  - 2. Portable "E" oxygen cylinders: one (1) at full pressure at all times and one (1) at not less than 1000 psi with variable flow regulator: two (2) in total **or**  
  
Portable "D" oxygen cylinders: one (1) at full pressure (not less than 2000 PSI) at all times and two (2) at not less than 500 PSI with variable flow regulator: three (3) in total
  - 3. Oxygen tank wrench or key device: one (1)



**AMBULANCE RULES AND REGULATIONS  
GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

---

4. Hand operated bag-valve devices with oxygen inlet and reservoir/accumulator (manual resuscitators): one (1) Adult ( $\geq 1000$  ml) and one (1) child (450-750 ml)
  5. Bag-valve masks: one (1) of each size; Adult, Child, Infant, and Neonate
  6. Oropharyngeal airways: one (1) set of multiple standard sizes 0-5.
  7. Nasopharyngeal airways: one (1) set of multiple standard sizes, no less than four (4)
    - a. Lubrication jelly for NPAs, no less than four (4)
  8. Nasal Cannulas: two (2) adult size and two (2) child size
  9. Oxygen mask, transparent, non-rebreathing: two (2) adult and two (2) child. (Two (2) infant – **optional**)
  10. Vehicle installed suction equipment (house), capable of at least a negative pressure equivalent to 300mm Hg and 30 liter per minute air flow rate for 30 minutes of operation.
  11. **Portable suction equipment, with soft suction catheter adapter, or equivalent.**
  12. Wide bore suction tubing, non-collapsible, plastic, semi-rigid: two (2)
  13. Hard suction catheters: plastic, semi-rigid, whistle-tipped (finger controlled type is preferred): two (2)
  14. Soft suction catheters: #10 French with venturi valve; #14 French with venturi valve; #18 French with venturi valve: two (2) each size
- B. Bandaging and Immobilization Devices
1. Clean burn sheets: two (2)
  2. Individually wrapped sterile gauze pads 3 X 3 or larger: twenty five (25 or 1 box)
  3. Bandage scissors: one (1)
  4. Rolled gauze bandages: minimum six (6) total with three (3) of the six to be 3 inches in size.
  5. Petroleum treated gauze dressings (occlusive dressing), 3" X 3" or larger: two (2)
  6. Medical adhesive tape: minimum six (6) total with three (3) of the six to be 2 inches in size.
  7. Arterial tourniquet, OCEMS approved type: one (1) – **optional**
  8. Cervical collars, rigid type: one (1) large, one (1) medium, one (1) small, and one (1) pediatric size collar; **or** four (4) multi-size adjustable rigid cervical collars, with pediatric size
  9. Head immobilization devices, commercial device or firm padding: four (4)
  10. Half ring or similar lower extremity (femur) traction device; limb-supporting slings, padded ankle hitch, padded pelvic support, traction strap: one (1) each adult and child sizes.
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## AMBULANCE RULES AND REGULATIONS GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT

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11. Splints: medium and long for joint-above and joint-below fractures. Rigid-support constructed with appropriate material (cardboard, metal, pneumatic, vacuum, wood or plastic): for child and adult: two (2) per size.
12. Long (60" or larger) impervious backboard (radiolucent) with minimum of four straps for immobilization of suspected spinal or back injuries: one (1)
13. Short (30" or larger) backboard or equivalent (e.g., KED) for head-to-pelvis immobilization during seated patient extrication: one (1)
14. Pediatric immobilization device, designed specifically for patients 40 kg and smaller: one (1)  
examples: pediatric immobilization board, papoose board or other OCEMS approved devices.

### C. Medical and Miscellaneous Devices

1. Blood pressure manometer
2. Blood pressure cuffs: Adult, Thigh, and Child: one (1) each size
3. Pulse oximeter with adult and pediatric probes: one (1) – **optional**
4. FDA approved blood glucometer with lancets and test strips: one (1) – **optional**
5. **FDA approved automatic external defibrillator (AED) with adult and child defibrillation pads or pediatric key – optional.**
6. Sharps container (meets or exceeds OSHA standards): one (1)
7. Biological waste disposal bag (meets or exceeds EPA standards): one (1)
8. Stethoscope: one (1)
9. Bedpan: one (1)
10. Emesis basin: one (1)
11. Urinal: one (1)
12. Pen light or flashlight: one (1)
13. Tongue depressors, individually wrapped: six (6)
14. Cold packs: four (4)
15. Obstetrical supplies including at a minimum: gloves, two umbilical clamps, sterile dressings, sterile scissors (no scalpel), sterile towels, bulb syringe, and clean plastic bags: one (1) set.
16. Sterile saline isotonic solution or sterile water in secured, clearly labeled plastic containers: two (2) liters.
17. Straps to secure the patient to the stretcher or ambulance cot, and means of securing the stretcher or ambulance cot in the vehicle: two (2)



**AMBULANCE RULES AND REGULATIONS  
GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

---

18. Sheets, pillowcases, blankets and towels for each stretcher or ambulance cot, and two (2) pillows for each ambulance
  19. Hard or soft type ankle and wrist restraints designed for quick release; if soft ties are used, they should be at least 3" in width (before tying) and maintain at least 2" in width while in use: two (2) sets.
  20. FDA approved oral glucose preparation: two (2)
  21. Gloves: Nitrile or Latex with at least one box of small, medium, and large.
  22. Ambulance cot or gurney: one (1)
- D. All previously listed equipment shall be used only for its intended purpose.

**VI. AMBULANCE AND EQUIPMENT INSPECTION:**

Ambulance personnel shall conduct an inspection of the ambulance at the beginning of their shift.

- A. The assigned ambulance personnel shall at the beginning of each shift document, in writing, on a shift inspection sheet (electronic or paper):
  1. That ambulance is in proper working condition.
  2. The ambulance is supplied according to requirements in Section V. of this policy.
  3. All equipment is in proper working condition
  4. All required documentation is in ambulance according to requirements in Section IV. of this policy.
  5. The assigned driver shall report to the supervisory staff if:
    - a. The ambulance or equipment is not in proper working order, radio equipment is not functioning or missing, or if any of the required supplies or documents are missing.
- B. The assigned ambulance personnel at the beginning of each shift shall complete and document the ambulance vehicle cleaning according to the cleaning schedule as identified in OCEMS Policy 720.50 Section VIII. Cleaning Standards for Ambulances and Ambulance Equipment.
- C. The assigned ambulance personnel shall sign and date each shift inspection sheet and submit the shift inspection sheet to their immediate supervisor or as company policy dictates for follow through on deficiencies noted.
- D. Ambulance shift inspection sheets and ambulance vehicle cleaning checklists shall be retained for no less than one (1) year by the ambulance provider and be made available for OCEMS audit.
- E. The supervisor's name shall be noted on every completed shift inspection sheet.
- F. It is the responsibility of the supervisory staff to ensure that all equipment and/or ambulance is in proper working order prior to permitting its use.

**VII. REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE):**

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## AMBULANCE RULES AND REGULATIONS GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT

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In order for ambulance crews to be prepared for an all hazards response, the following shall apply:

- A. All personal protective equipment shall be maintained in a clean condition and in good working order at all times.
- B. Ambulance personnel shall not respond to an incident requiring PPE beyond their level of training.
- C. Required PPE shall be kept on each ambulance in an accessible location and in sufficient quantity for all staff assigned to the ambulance.
- D. PPE equipment for each permitted ambulance shall include but not be limited to:
  1. Alcohol-based hand cleansers and hand cleanser dispensers or towelettes for on-scene use.
  2. Eye protection (ANSI Z87.1-2003 Standards), glasses, face shield, work goggles or mask with side protection and splash resistance for infection control: two (2).
  3. **Nitrile or Latex Gloves, minimum 1 box of small, medium, and large.**
  4. Hearing protection, ear plugs or other: two (2) sets.
  5. High-visibility safety apparel that provides visibility during both daytime and nighttime usage and is defined to meet the performance class 2 or 3 requirements of ANSI/ISEA 107-2004: two (2) per vehicle.
  6. NIOSH approved (N95) or (N100 or P100) filter respirators: six (6) of each N95 or N100 or P100
  7. Gloves – Work gloves, multiple use physical protection, cut resistant, barrier protection: two (2) pairs – **optional; required for ambulance strike team participation.**
  8. Ballistic protective vest: two (2) total, (1) per crew member – **optional, risk dependent**
  9. Hard Hat – Work Helmet – Blue, (ANSI Z89.1-1986 Class B; 29 CFR 1910.135 & 29 CFR 1926.100(b); CSA Z94.1-M1992 (Class G), or equivalent: one (1) per crew member – **optional; required for ambulance strike team participation.**
  10. Mark I Auto-Injector Kit or Duo Dote: six (6) – **optional.**

### VIII. REQUIRED PPE TRAINING:

Prior to use, all personnel who may be required to utilize any of the equipment required in this policy shall receive training in accordance with OSHA requirements (Ref. 26 CFR 1910.132[f]). At minimum, training shall consist of:

- A. Identification of when and what type of PPE is necessary; how to properly don, remove, adjust and wear PPE; the limitations of PPE; and the proper care, maintenance, useful life and disposal of the PPE (Ref. 29 CFR 1910.132[f][1][5]).
- B. Training in the use N95s, N100s, and P100s must cover fitting, fit-testing and proficient use in accordance with OSHA requirements (Ref 29 CFR 1910.134).
- C. Demonstration of the ability to use PPE properly before being allowed to perform work requiring the use of PPE (Ref 29 CFR 1910.132 [f] [2]).



**AMBULANCE RULES AND REGULATIONS  
GROUND AMBULANCE DESIGN / DOCUMENTATION / EQUIPMENT**

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- D. Verification that each employee has received and understands the required training through a written certification that contains the course title and date of the training and shall be recorded and maintained in each employee's file.

**Approved:**

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Carl H. Schultz, MD  
OCEMS Medical Director

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Tammi McConnell, MSN, RN  
OCEMS Administrator

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