# GENERAL ADVANCED LIFE SUPPORT STANDING ORDERS

The following General Advanced Life Support (ALS) Standing Orders authorize Orange County EMS (OCEMS) Accredited Paramedics to provide assessment, treatment, monitoring, and transport of patients within their approved scope of practice.

In addition to all interventions listed within the General Basic Life Support (BLS) Standing Orders, OCEMS-Accredited Paramedics are authorized to do the following ALS interventions.

Additional patient condition-specific Standing Orders, Procedures, Treatment Guidelines, and Policies shall be followed when applicable.

## ADVANCED ASSESSMENT

- Perform advanced patient assessment and ongoing reassessment
- Assess Pediatric Assessment Triangle (PAT) for patient ages < 15 years of age:
    - General appearance: tone, interactiveness, consolability, look / gaze, speech / cry
    - Work of breathing: retractions, nasal flaring, abnormal airway sounds, positioning
    - Circulation to skin: pallor, mottling, cyanosis
- Utilize paramedic clinical judgment in patient assessment, treatment, destination selection, and transport decisions
- Obtain, interpret, and monitor:
    - Cardiac monitoring
    - 12-lead electrocardiograms (ECG)
    - Pulse oximetry (SpO2)
    - Waveform capnography (EtCO2)
    - Blood glucose analysis
- Perform focused assessments and approved clinical screening tools as indicated, including but not limited to:
    - Stroke assessment
    - Trauma assessment and triage
    - Cardiac assessment
    - Behavioral emergency assessment
    - Specialty center destination determination
- Reassess patient response to treatment and modify care as clinically indicated
- Obtain the pediatric patient's estimated weight utilizing an appropriate length-based resuscitation tape or age-based system.

## AIRWAY MANAGEMENT

- Ensure a patent airway and provide advanced airway management as indicated
- Utilize advanced airway adjuncts and procedures, including:
    - Supraglottic airway devices (patient weight ≥ 50 kg)
    - Endotracheal intubation (patient weight > 36 kg)
    - Stomal intubation
    - Airway visualization utilizing laryngoscopy
    - Removal of airway foreign bodies utilizing Magill forceps

- Confirm and continuously monitor advanced airway placement utilizing waveform capnography
- Utilize approved non-invasive and invasive ventilatory support techniques

## CIRCULATION AND CARDIAC CARE

- Establish and interpret continuous cardiac monitoring
- Perform manual cardiac rhythm interpretation
- Perform:
    - Defibrillation
    - Synchronized cardioversion
    - Transcutaneous pacing
- Initiate Advanced Cardiac Life Support (ACLS) or Pediatric Cardiac Life Support (PALS) interventions as indicated

## VASCULAR ACCESS

- Establish peripheral intravenous (IV) access
- Establish intraosseous (IO) access
- Establish saline lock vascular access
- Access, monitor, and maintain approved pre-existing vascular access devices in accordance with OCEMS policy
- Administer medications, fluids, and approved infusion therapies via authorized routes in accordance with applicable Standing Orders, Procedures, Treatment Guidelines, and Policies

## MEDICATION ADMINISTRATION

- Administer medications approved by the OCEMS Medical Director and identified within the OCEMS-approved Standing Orders, Procedures, Treatment Guidelines, and Policies
- Administer medications via approved routes in accordance with applicable Standing Orders, Procedures, Treatment Guidelines, and Policies
- Monitor patients for medication effectiveness, adverse reactions, and complications

## SPECIAL PROCEDURES

- Perform procedures approved by the OCEMS Medical Director and identified within applicable Standing Orders, Procedures, Treatment Guidelines, and Policies
- Utilize special equipment, technologies, and procedures approved by OCEMS
- Perform invasive procedures authorized within OCEMS Standing Orders, Procedures, and Treatment Guidelines

## ALS SUPERVISION AND DELEGATION

- Direct and supervise OCEMS Accredited Emergency Medical Technician (EMT) personnel in the provision of patient care
- Delegate tasks within the OCEMS Accredited EMT Scope of Practice
- Assume responsibility for patient care when ALS assessment, monitoring, or interventions are required

## COMMUNICATIONS

- Contact the Base Hospital when required, clinically indicated, or based on paramedic judgement
- Initiate specialty center notifications and destination consultations as required by OCEMS Standing Orders, Procedures, Treatment Guidelines, or Policies
- Consult with receiving facilities, specialty centers, and Base Hospitals as appropriate

## PATIENT DISPOSITION

- Honor valid Do Not Resuscitate (DNR) requests and end-of-life documents in accordance with OCEMS Policy, including:
    - Physician Orders for Life-Sustaining Treatment (POLST)
    - Advance Healthcare Directive
    - Physician-signed DNR orders
    - Other legally recognized end-of-life documents
- Determine patient disposition, destination, and transport priority in accordance with OCEMS Standing Orders, Treatment Guidelines, and Policies

## TRANSPORT CONSIDERATIONS

- Transport patients requiring ALS assessment, monitoring, or treatment
- Monitor and maintain approved medications, vascular access devices, infusion therapies, and medical devices during transport in accordance with OCEMS Policy
- Provide ongoing reassessment, treatment, and documentation throughout transport

**ALS GENERAL STANDING ORDERS - OCEMS ACCREDITED PARAMEDIC**

Based on paramedic judgment, the following may be initiated at any time:

1. Base Hospital contact.
2. Use any BLS Standing Order.
3. Cardiac monitor and interpret rhythms and 12-lead ECGs.
4. Establish IV/IO or saline lock vascular access.
5. For patients with lungs clear to auscultation and suspected poor perfusion due to hemorrhage, nausea/vomiting/diarrhea, or dehydration:

   ► *Adult/Adolescent: Normal saline bolus 250 mL; repeat up to a total of one (1) liter to maintain perfusion.*
   ► *Pediatric: Infuse normal saline 20 mL/kg (maximum 250 mL) IV/IO bolus and make BH contact (CCERC preferred). May repeat twice for total of 3 boluses as a standing order.*

6. Intraosseous placement for cardiac/traumatic full arrest or unconscious patients in extremis for whom IV access cannot be established and immediate intravenous infusion therapy is required.
7. 12-lead electrocardiogram. For 911 field responses, transmit ECG that is positive for an acute MI to the cardiovascular receiving facility.
8. Oxygen by mask or nasal cannula.
9. BVM assisted ventilation.
10. Adult/Adolescent advanced airway with confirmation of proper placement and ventilation.
11. Pulse Oximetry [1]; if oxygen saturation less than 95% give:

    ► High-flow oxygen by mask or up to 6 L/min by nasal cannula as tolerated.

    [1]Administer oxygen by mask or nasal cannula for potentially hypoxic patients when pulse oximetry may be inaccurate (hypotension, hypovolemia, hypothermia, nail polish or artificial nails, nail disease, or suspected pulse oximetry malfunction).

    ► If patient already on home or portable oxygen, maintain flow rate and delivery (nasal cannula or mask) at the rate patient is already using.

12. Consider hypoglycemic with blood glucose analysis. In adults/adolescents, an exact cutoff value for hypoglycemia has not been established because age and health cause variation in the effects of lower blood glucose levels. A blood glucose of 60 or less should be treated; if hypoglycemia is suspected and blood glucose is in the range of 60 to 80, treatment based on field impression is appropriate.

    *Adult/Adolescent*:
    ► *Oral glucose preparation, if airway reflexes are intact and able to swallow.*
    ► *10% Dextrose 250 mL IV (titrated for effect to improve symptoms to maximum 250 mL).*
    ► *Glucagon I mg IM if unable to establish IV.*

    Note: IO access may be used for dextrose administration when patient is unconscious with blood glucose < 60, unable to establish IV, and there is no response to IM glucagon.

13. For suspected hypoglycemia in children, obtain blood glucose and if 60 or less, administer one of the following:

    *Pediatric:*
    - ► *Oral glucose preparation, if airway reflexes are intact and able to swallow.*
    - ► *10% Dextrose 5 mL/kg IV (titrated for effect to improve symptoms to maximum 250 mL)*
    - ► *Glucagon 0.5 mg IM if unable to establish IV.*

    Note: IO access may be used for dextrose administration when patient is unconscious with blood glucose < 60, unable to establish IV, and there is no response to IM glucagon.

14. For on-going seizure or recurrent seizure activity:

    - ► *Adult/Adolescent: Midazolam 10 mg IM one time (preferred route). Administer before starting IV/IO. If unable to deliver IM or IV/IO already present, give midazolam 5 mg IV/IN/IO. May repeat 5 mg IV/IN/IO once 3 minutes after initial dose for on-going or recurrent seizure activity.*
    - ► *Pediatric: Midazolam 0.2 mg/kg IM one time (preferred route). Maximum dose 10 mg. If unable to deliver IM or IV/IO already present, give 0.1 mg/kg IN/IV/IO. Maximum dose 5 mg. May repeat once 3 minutes after initial dose for on-going or recurrent seizure Activity. Make BH contact (CCERC preferred).*

15. For suspected narcotic overdose and respiratory depression or ALOC (respiratory rate approximately 12/minute or less), give:

    - ► *Adult/Adolescent:*
      - *Nalaxone 0.8, 1, or 2 mg IN or IM, every 3 minutes as needed; or*
      - *Nalaxone 0.4 to 1 mg IV, every 3 minutes as needed; or*
      - *Nalaxone 4 mg/0.1 ml preloaded nasal spray IN and repeat as needed.*

    - ► *Pediatric:*
      - *Nalaxone 0.1 mg/kg IN, IM, or IV; or*
      - *Nalaxone 4 mg/0.1 ml preloaded nasal spray IN.*
      - *Repeat IN, IM, or IV every 3 minutes as needed.*