

- a. Administer high-flow oxygen via NRB (non-rebreather) as a precaution against unanticipated deterioration
  - b. If patient unable to maintain airway, consider oral airway (nasal airway should not be used with significant facial injury or possible basilar skull fracture)
  - c. BVM (bag-valve-mask) ventilation if high flow oxygen (HFO)/non-rebreather (NRB) inadequate to maintain good airway and/or oxygenation
  - d. Place supraglottic airway or perform endotracheal intubation or if BVM ventilation ineffective in maintaining oxygenation or if airway is continually compromised.  
Endotracheal intubation (ETI)/supraglottic airway (SGA) should only be used in systems that have continuous EtCO<sub>2</sub> monitoring
2. Breathing:
    - a. For patients who cannot maintain adequate oxygenation with HFO/NRB, BVM ventilation (15 years old or older: 10 breaths per minute; 2–14 years old: 20 breaths per minute; less than 2 years old: 25 breaths per minute) with gentle manual bagging. Consider flow-controlled bags and ventilation rate timers to help prevent hyper-/overventilation
    - b. SGA placement or ETI should only be performed if BVM ventilation fails to maintain adequate oxygenation. With advanced airways, manage with a target EtCO<sub>2</sub> of 40 (normal range 35–45 mmHg)
    - c. Do not induce hypocapnia through hyper-/overventilation
  3. Circulation:
    - a. Wound care
      - i. Control bleeding with direct pressure if no suspected open skull injury
      - ii. Moist sterile dressing to any potential open skull wound
      - iii. Cover an injured eye with moist saline dressing and place cup over it
    - b. Moderate/severe closed head injury
      - i. Blood pressure: avoid hypotension
        1. **Adult** (age greater than 10 years): maintain SBP greater than or equal to 110 mmHg
        2. **Pediatric**: maintain SBP:
          - a. Age less than 1 month: greater than 60 mmHg
          - b. Age 1–12 months: greater than 70 mmHg
          - c. Age 1–10 years: greater than 70 + 2x age in years
      - c. Closed head injury
        - i. Administer normal saline (NS)/lactated Ringer's (LR) fluid boluses to maintain SBP above threshold. Do not wait until after the patient is already hypotensive—*prevent* hypotension
        - d. Do not delay transport to initiate IV access
    4. Disability:
      - a. Evaluate for other causes of altered mental status — check blood glucose during transport
      - b. Spinal assessment and management, per [Spinal Care Guideline](#)
      - c. Perform and trend neurologic status assessment (GCS or AVPU scale)
        - i. Early signs of deterioration:
          1. Confusion
          2. Agitation
          3. Drowsiness
          4. Vomiting
          5. Severe headache