3. **Pediatric Consideration:** for children, 1 breath every 3–5 seconds is recommended (12–20 breaths/minute)
4. **Pediatric Consideration:** deliver volume needed to achieve chest rise

7. Consider use of antiarrhythmic for recurrent VF/Pulseless VT
   a. The principal objective of antiarrhythmic drug therapy in shock-refractory VF and pulseless VT is to facilitate the restoration and maintenance of a spontaneous perfusing rhythm in concert with the shock termination of VF/VT; some antiarrhythmic drugs have been associated with increased rates of ROSC and hospital admission, but none have yet been proven to increase long-term survival or survival with good neurologic outcome
      i. Amiodarone (5 mg/kg IV, max of 300 mg) may be considered for VF/pulseless VT that is unresponsive to CPR, defibrillation, and a vasopressor therapy
      ii. Lidocaine (1 mg/kg IV) may be considered as an alternative to amiodarone for VF/pulseless VT that is unresponsive to CPR, defibrillation, and vasopressor therapy
      iii. The routine use of magnesium for VF/pulseless VT is not recommended in adult patients unless it is refractory, polymorphic VT, or Torsades de pointes.
   b. There is inadequate evidence to support the routine use of lidocaine and beta-blockers after cardiac arrest by EMS. There is insufficient evidence to recommend for or against the routine initiation or continuation of other antiarrhythmic medications after ROSC from cardiac arrest
   c. For torsades de pointes, give magnesium sulfate 2 g IV administered over 1–2 minutes (or 25–50 mg/kg for **pediatrics**). There is insufficient evidence to recommend for or against the routine administration during cardiac arrest
8. Consider reversible causes of cardiac arrest which include the following:
   a. Hypothermia – additions to care include attempts at active rewarming [See Hypothermia/Cold Exposure Guideline]
   b. The dialysis patient/known hyperkalemic patient – Additions to care include the following:
      i. Calcium gluconate 10% 1 g IV bolus over 2 minutes (for **pediatrics**, the dose is 100 mg/kg which is 1 mL/kg), can repeat the dose if no response
      OR
      ii. Calcium chloride 10% 1 g IV bolus over 2 minutes (for **pediatrics**, the dose is 20 mg/kg which is 0.2 mL/kg)
      iii. Sodium bicarbonate 1 mEq/kg IV
   c. Tricyclic antidepressant overdose. Additions to care include sodium bicarbonate 1 mEq/kg IV
   d. Hypovolemia. Additions to care include normal saline 2 L IV (or 20 mL/kg, repeated up to 3 times for **pediatrics**)
   e. If the patient is intubated at the time of arrest, assess for tension pneumothorax and misplaced ETT
   f. If tension pneumothorax suspected, perform needle decompression. Assess ETT, if misplaced, replace ETT
9. If at any time during this period of resuscitation the patient regains return of spontaneous circulation, treat per Adult Post-ROSC (Return of Spontaneous Circulation) Care Guideline
10. If resuscitation remains ineffective, consider termination of resuscitation [See Termination of Resuscitative Efforts Guideline]