

Supplemental Information

General Equipment

- Patient warming device (infant warmer)
- IV blood and/or fluid warmer
- Restraint device
- Weight scale, in kilograms only (no opportunity to weigh or report in pounds), for infants and children
- Standardized chart or tool used to estimate weight if resuscitation precludes the use of a weight scale (eg, length-based tape)
- Tool or chart that relies on weight (kilograms) used to assist physicians and nurses in determining equipment size and correct drug dosing (by weight and total volume)
- Pain scale assessment tools that are appropriate for age
- Rigid boards for use in CPR
- Pediatric-specific AED pads

Monitoring Equipment

- Blood pressure cuffs (neonatal, infant, child, adult arm, and thigh)
- Doppler ultrasonography devices
- ECG monitor and/or defibrillator with pediatric and adult capabilities, including pediatric-sized pads and/or paddles
- Pulse oximeter with pediatric and adult probes
- Continuous end-tidal CO_2 monitoring^a

Respiratory Equipment and Supplies

- Endotracheal tubes
 - uncuffed: 2.5 and 3.0 mm
 - cuffed or uncuffed: 3.5, 4.0, 4.5, 5.0 and 5.5 mm
 - cuffed: 6.0, 6.5, 7.0, 7.5 and 8.0 mm
 - Feeding tubes (5F catheter and 8F catheter)
 - Laryngoscope blades (curved: 2 and 3; straight: 0, 1, 2 and 3)
 - Laryngoscope handle
 - Pediatric Magill forceps
 - Nasopharyngeal airways (neonatal, infant, and child)
 - Oropharyngeal airways (infant and child, sizes 0–5)
 - Stylettes for endotracheal tubes (pediatric)
 - Suction catheters (infant and child)
 - Rigid suction device
 - Bag-mask device (manual resuscitator), self-inflating (infant, child, and adult sizes)^b
 - Clear oxygen masks (standard and nonrebreathing) for an infant, child, and adult
 - Masks to fit bag-mask device adaptor (neonatal, infant, child, and adult sizes)
 - Nasal cannula (infant, child, and adult)
 - Gastric tubes: infant (8F catheter) and child (10F catheter)
- **Vascular Access Supplies and Equipment**

SUPPLEMENTAL FIGURE 1

Guidelines for equipment and supplies for use in pediatric patients in the ED. ^a End-tidal CO_2 monitoring is considered the optimal method of assessing for and monitoring of endotracheal tube placement in the trachea; however, for low-volume hospitals, adult and pediatric CO_2 colorimetric detector devices can be substituted. Clinical assessment alone is not appropriate. ^b May substitute anesthesia bag if appropriately trained. AED, automatic external defibrillator; CO_2 , carbon dioxide; CPR, cardiopulmonary resuscitation; IV, intravenous.

- Arm boards (infant, child, and adult sizes)
- Atomizer for intranasal administration of medication
- Catheter-over-the-needle device (14–24 gauge)
- Intraosseous needles or device (pediatric and adult sizes)
- IV administration sets with calibrated chambers and extension tubing and/or infusion devices with the ability to regulate the rate and volume of infusate (including low volumes)
- IV solutions to include NS, D₅0.45% NS, lactated Ringer's solution, and D₁₀W

Fracture Management Devices

- Extremity splints, including femur splints (pediatric and adult sizes)
- Cervical collars (infant, child, and adult sizes)

Specialized Pediatric Trays or Kits

- Difficult airway supplies and/or kit (contents to be based on pediatric patients served at the hospital and may include some or all of the following: supraglottic airways of all sizes (such as the laryngeal mask airway),^c such as the laryngeal mask airway,^c needle cricothyrotomy supplies, the surgical cricothyrotomy kit, or video laryngoscopy)
- Newborn delivery kit (including equipment for initial resuscitation of a newborn infant: umbilical clamp, scissors, bulb syringe, and towel)
- Urinary catheterization kits and urinary (indwelling) catheters (infant and child)

Additional Recommendations for High-Volume EDs (>10 000 Pediatric Patient Visits per Year)

- Alprostadiol (prostaglandin E1)
- Central venous catheters (4.0–7.0F catheter)
- Chest tubes to include infant, child, and adult sizes (infant: 8–12F catheter; child: 14–22F catheter; adult: 24–40F catheter) or pigtail catheter kit (8.5–14F catheter)
- Hypothermia thermometer
- Inotropic agents (eg, digoxin and milrinone)
- Laryngoscope blade size 00
- Lumbar puncture tray, including infant-sized (22 gauge) and pediatric-sized (22 gauge) spinal needles
- Noninvasive ventilation (continuous positive airway pressure or high-flow nasal cannula)
- Self-inflating bag-mask device, pediatric size^b
- Tube thoracostomy tray
- Tracheostomy tubes (tube sizes 0–6)
- Umbilical vein catheters (3.5F catheter and 5.0F catheter)^d
- Video laryngoscopy

SUPPLEMENTAL FIGURE 2

(Continued) Guidelines for equipment and supplies for use in pediatric patients in the ED. ^cLaryngeal mask airways can be shared with anesthesia but must be immediately accessible to the ED. ^dFeeding tubes (size 5F catheter) may be used as umbilical venous catheters but are not ideal. A method to secure the umbilical catheter, such as an umbilical tie, should also be available. D₅ 0.45% NS, dextrose 5% in normal saline; D₁₀W, dextrose 10% in water; ECG, electrocardiography; IV, intravenous; NS, normal saline.