



Airway and Mechanical Ventilation Management Skill Station Equipment List

<p>Overview of Airway Practice</p>	<p>Room Set-up</p> <ul style="list-style-type: none"> • 8' draped table • Power strip 	<p>Equipment/Supplies</p> <ul style="list-style-type: none"> • 2 self-inflating resuscitator bags (i.e., bag-valve mask) • 2 positive end-expiratory pressure (PEEP) valves • 2 (or more) standard face masks • 2 airway mannequins capable of simulating bag-valve mask ventilation and supraglottic airway placement • 2 oral airways • 2 nasal airways • 2 laryngeal mask airways (LMAs) with inflatable cuffs • 2 LMAs with noninflatable cuffs • Any other supraglottic airways used locally in practice (optional) <p><i>If the equipment listed above is not available:</i></p> <ul style="list-style-type: none"> • Substitute any head-only mannequin to simulate elements of mask ventilation and other approaches to airway management • Omit a mannequin and describe approaches to airway management
<p>Intubation Medications</p>	<p>Room Set-up</p> <ul style="list-style-type: none"> • 8' draped table • Power strip 	<p>Equipment/Supplies</p> <ul style="list-style-type: none"> • 5 marked vials (name of relevant drugs) • 5 10-mL syringes • 15 20-mL syringes • ½-liter 16-gauge needles • Saline solution to refill vials • Sharps container <p><i>If the equipment listed above is not available, the cases can be walked through as discussion-only scenarios.</i></p>
<p>Laryngoscopy: Direct Laryngoscopy and Videolaryngoscopy</p>	<p>Room Set-up</p> <ul style="list-style-type: none"> • 8' draped table • Power strip 	<p>Equipment/Supplies</p> <ul style="list-style-type: none"> • At least 2 different high-fidelity intubation mannequins • Several laryngoscope handles with blades of various sizes and styles; at minimum, Macintosh 3 and 4 blades and Miller 2 and 3 blades

		<ul style="list-style-type: none"> • At least 1 videolaryngoscope with blades (ideally with a hyperangulated blade option such as a D-blade) • At least 1 rigid stylet for use with hyperangulated videolaryngoscope blade • 1 videoendoscope, size 3 or 4 • 4 stylets for the endotracheal tube (ETT) • 4 7.0/7.5 ETTs • 2 10-mL syringes • Batteries for laryngoscope handles <p><i>If the equipment listed above is not available, explain the setup and list equipment that can be used to present the course in a low-fidelity situation. The goal is to allow participants to try different and unfamiliar equipment.</i></p>
<p>Surgical Airways</p>	<p>Room Set-up</p> <ul style="list-style-type: none"> • 8' draped table • Power strip • Plastic sheeting • Paper towels • Extra garbage bags • Hand sanitizer • Sharps container 	<p>Equipment/Supplies</p> <ul style="list-style-type: none"> • 1 percutaneous tracheostomy kit • 1 percutaneous wire • 2 12-mL syringes • 30 pig tracheas (thawed to room temperature) • 30 boneless chicken breasts (skin-on) • 5 #15 blades with handles • 1 #5 uncuffed endotracheal tube • 1 curved mosquito or Kelly clamp • 1 intubating bougie • 1 box gloves (S/M/L) <p>Equipment notes: The skin-on boneless chicken breast should be placed atop the pig trachea in order to simulate the experience of cutting through skin and dissecting through tissue before encountering the trachea. Due to the pig anatomy, performing a cricothyrotomy may be more challenging on this simulation model than in an actual human. Therefore, we have found it useful to practice cutting through the trachea (rather than the cricothyroid membrane) so that the learner does not struggle too much. The same pig trachea can be used for multiple practice sessions by incising at different points along the trachea.</p>
<p>Team Approach to Airway Management</p>	<p>Room Set-up</p> <ul style="list-style-type: none"> • 8' draped table • Power strip 	<p>Equipment/Supplies</p> <ul style="list-style-type: none"> • 1-2 cuffed and uncuffed tracheostomies • 1 difficult airway mannequin with ability to simulate tracheostomy • 1 oral airway • 1 gum elastic bougie • 1 bag-valve mask • 1 adult laryngeal mask airway (3.5 or 4.5) • 1 laryngoscope • 1 videoendoscope blade #3

		<ul style="list-style-type: none"> • 1 videoendoscope blade #4 • 1 laryngoscope blade #2 • 1 endotracheal tube size 7 • 1 10-mL syringe • 1 adult tracheostomy • 1 videolaryngoscope • 1 fiberoptic bronchoscope • 1 cricothyroidotomy kit <p><i>If the equipment listed above is not available, the cases can be walked through as discussion-only scenarios.</i></p>
Advanced Airway Techniques	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip 	Equipment/Supplies <ul style="list-style-type: none"> • 1 airway mannequin (head and torso, secure to table if possible) or intubating mannequin • 1 bronchoscope • 3 multipurpose endotracheal tubes (ETTs) (7.0) • 2 bougies • 1 intubating laryngeal mask airway (LMA) • 1 inflatable-type LMA <p><i>If the equipment listed above is not available, the case can be walked through as a discussion-only scenario.</i></p>
Safe Mechanical Ventilation	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip • Monitor 	Equipment/Supplies <ul style="list-style-type: none"> • 1 breathing simulator with test lung • 1 ventilator, with cable to project to monitor • 1 compressed air and oxygen tank to run ventilator • 1 self-inflating resuscitation bag with positive end-expiratory pressure (PEEP) valve and oxygen tubing • 1 12-inch strip of wide-bore corrugated tubing and standard ventilator circuits <p><i>If the equipment listed above is not available, the case can be walked through as a discussion-only scenario.</i></p>
Patient Ventilator Dysynchrony	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip • Monitor 	Equipment/Supplies <ul style="list-style-type: none"> • Ventilator with screen that can display pressure and flow waveforms • Test lung • 1 high-fidelity mannequin, if possible <p><i>If ventilator and test lung equivalent are not available, a dry-erase board can be used to diagram and display the various asynchronies as they occur. The cases can be walked through as discussion-only scenarios.</i></p>

Refractory Hypoxemia: Now What?	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip • Monitor 	Equipment/Supplies <ul style="list-style-type: none"> • 1 ventilator (with cable to project to monitor) • 1 compressor • 1 test lung <p><i>If the equipment listed above is not available, the cases can be walked through as discussion-only scenarios.</i></p>
Noninvasive Ventilation/High-Flow Nasal Cannula	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip 	Equipment/Supplies <ul style="list-style-type: none"> • 1 noninvasive ventilator • 1 plastic tubing circuit • 2 nasal masks • 1 nasal high-flow device • 1 high-flow circuit • 1 high-flow nasal interface <p><i>If the equipment listed above is not available, the case can be walked through as a discussion-only scenario.</i></p>
Disease Specific Strategies	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip 	Equipment/Supplies <ul style="list-style-type: none"> • 1 ventilator with compressed air • 1 test lung <p><i>If the equipment listed above is not available use a whiteboard/chalkboard with writing implements.</i></p>
Weaning the Difficult Patient	Room Set-up <ul style="list-style-type: none"> • 8' draped table • Power strip • Laptop • Monitor • 6 chairs 	Equipment/Supplies <ul style="list-style-type: none"> • Computer and LCD monitor • Flipchart/whiteboard and markers <p><i>If the equipment listed above is not available, use only the flipchart/whiteboard and markers.</i></p>