


## ENDOTRACHEAL TUBE SUCTIONING (OPEN & CLOSED)

<b>Document Owner:</b> E. Levasseur	<b>Program/Service Area:</b> Centre for Prehospital Care	<b>Issue Date:</b> July 2017
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<b>Approval:</b> Corey Petrie, Interim Regional Manager, Centre for Prehospital Care & Trauma Services	<b>Frequency: As Required.</b> In accordance with the Endotracheal and Tracheostomy Suctioning Medical Directive.	
<b>Signature:</b>		

**Purpose:** To ensure a consistent standardized practice for Endotracheal Tube Suctioning (Open & Closed).

	Content	Details
1.	Ensure that the patient qualifies Endotracheal Tube (ETT) suctioning	
2.	Assemble required equipment and wear the appropriate PPE	
3.	Communicate the need for suctioning, and its effects to the patient and family members whenever possible	
4.	Position the patient at 30—90 degree sitting position (if possible) and ask the patient to cough	
5.	Pre-oxygenate the patient	ensure pulse oximeter is affixed
6.	Select the appropriate sized catheter and inspect the catheter packaging for expiration date and/or any defects	Please refer to Appendix A (below)
7.	Open package and remove suction catheter using an aseptic technique.	
8.	Select the appropriate negative pressure setting	<1 year = 60-100 mmHg ≥1 year to <12 years = 100 - 120 mmHg ≥12 years = 100-150 mmHg
9.1	<b>** Specific to Open Suctioning :</b> While securing the ETT, disconnect the filter and BVM/Ventilator from the ETT	
9.2	Lubricate the catheter by suctioning prepared saline/water	
9.3	Gently & slowly advances the catheter into the ETT until proper depth (cough reflex or resistance is met)	Do not suction while advancing catheter
9.4	Apply suction by placing a finger over the vent hole and gently withdraw the catheter smoothly with twisting motion until the suction catheter is removed from the ETT	<ul style="list-style-type: none"> <li>Apply intermittent suction and do not suction for longer than 10 seconds</li> </ul>
10.1	<b>** Specific to Closed Suctioning :</b> Disconnect the all components of the BVM including filter and install the Closed Suction Catheter patient port directly onto the ETT and reattach the BVM with filter and ETCO2 all while keeping the ETT secure	
10.2	Support the elbow connector and the ETT with one hand, grasp the catheter through the sleeve and advance the catheter slowly until proper depth (cough reflex or resistance is met)	Do not suction while advancing catheter
10.3	Engage the thumb valve and gently pull back until the suction catheter is fully retracted. Release thumb valve once suctioning is	<ul style="list-style-type: none"> <li>Apply intermittent suction and do not suction for longer than</li> </ul>

	complete	10 seconds
11.	Re-oxygenate the patient after each suction attempt	wait 1 minute between suction attempts
12.	Rinse catheter thoroughly prior to next attempt	
13.	<p>Document the procedure on the patient care record as per the Ministry of Health and Long Term Care Emergency Health Services Branch Ambulance Call Report Documentation Standards and your Service Provider policy, which includes:</p> <ul style="list-style-type: none"> <li>• name of the skill</li> <li>• time of attempt</li> <li>• catheter size and type</li> <li>• each suction attempt</li> </ul>	

**Expected Outcome:** To successfully perform Endotracheal Tube Suctioning (Open & Closed).

## APPENDIX A

### ETT and Catheter Size Chart

Age	ETT Size	Suction Catheter Size
Premature	2.5 – 3.5 mm	6 Fr
Newborn	3.0 mm	6 Fr
6 months old	3.5 mm	6 Fr
18 months old	4.0 mm	6 Fr
3 years old	4.5 mm	6 Fr
5 years old	5.0 mm	10 Fr
6 years old	5.5 mm	10 Fr
8 years old	6.0 mm	10 Fr
12 years old	6.5 mm	10 Fr
16 years old / Small adult	7.0 mm	14 Fr
Adult Female	8.0 mm	14 Fr
Adult Male	9.0 mm	14 Fr

Source: Lakeridge Base Hospital CEPCP