Suctioning

Nasal, Oral & Nasopharyngeal (NP)

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1) Verbalize when suctioning is necessary.
2) Select the correct size suction catheter given the age/size of the patient.
3) Demonstrate how to measure the proper suction depth for nasopharyngeal (NP) suctioning.
4) Successfully demonstrate on a mannequin the technique of nasopharyngeal (NP), nasal, and oral suctioning.
5) Locate the Children's Hospital and Health System Patient Care Policy and Procedure on suctioning.
6) Demonstrate correct documentation of suctioning in Epic.
7) Understand different techniques of how to soothe patients during suctioning in order to make the experience as comfortable as possible.
Why do we suction?
**YES to suction**

- Infants, young children, total care kids who are unable to remove their own secretions
- Secretion removal for patients with bronchiolitis
  - Bronchiolitis is caused by a respiratory virus (most often RSV)
  - Causes congestion and swelling of the small airways of the lungs

**NO to suction**

- Child with a basilar skull fracture
- Child with suspected croup or epiglottitis
- Patient who demonstrates adequate ability to clear own secretions
  - Able to spontaneously cough
  - Able to blow nose
Bronchiolitis Lungs

- A provider’s order is NOT needed for any type of suctioning
- If unsure due to medical hx (acute head/facial/neck surgery) discuss with provider for risk/benefit assessment
Suctioning Devices

- Suction catheter
- Mushroom tip nasal aspirator
- Yankauer
- Bulb syringe
- Neosucker
What size catheter should I use?
<table>
<thead>
<tr>
<th>Age</th>
<th>Catheter Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preemie</td>
<td>5/6 fr.</td>
</tr>
<tr>
<td>Term Newborn</td>
<td>5/6 – 8 fr.</td>
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<tr>
<td>Newborn – 6 mo.</td>
<td>8 – 10 fr.</td>
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<tr>
<td>1 yr. – 8 yrs.</td>
<td>10 fr.</td>
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<tr>
<td>8 yrs. or older</td>
<td>10 – 14 fr.</td>
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What suction pressure should I use?
<table>
<thead>
<tr>
<th>Age</th>
<th>Suction Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonates</td>
<td>60 – 80 mmhg</td>
</tr>
<tr>
<td>Infants</td>
<td>80 – 100 mmhg</td>
</tr>
<tr>
<td>Children</td>
<td>100 – 120 mmhg</td>
</tr>
<tr>
<td>Adults</td>
<td>100 – 150 mmhg</td>
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</table>
How do I measure for NP suctioning?
**Measurement**

* Measure from the tip of the nose to the bottom of the earlobe
* Note on catheter how many mm this is
Technique

Materials needed:
- Clean gloves
- Suction catheter
- Facemask with shield
- Surgi-lube
- Saline drops

- Place 2-3 saline drops in each nostril
- Lubricate tip of catheter with surgilube
- Insert the catheter down to your measurement
- Initiate suction by putting thumb over suction port
- Pull back slowly while moving the catheter in a circular motion
NP Space

* Tip of the catheter will go into the nasopharyngeal (NP) space = area just above the back of the throat.
What can I do to help keep my patient comfortable through this potentially traumatizing experience?
Positioning

- Allow child position of comfort until you are all set up and ready to suction
- Restrain only just before and during suctioning
- Give parents option of being present for support, but don't ask them to restrain child during the procedure
- Explain procedure to parents if they are present
  - Let them know that their child may scream and cry
- Make sure you have enough help prior to starting
- Comfort wrapping/swaddling “like a burrito” or “angel wrap”
Comfort Measures

* Reassurance, talking, singing, playing music, patting

* Sucrose pacifier: Sweet-ease®
  - All natural, non-pharmacologic intervention made of 24% sucrose and water solution
  - Onset—give at least 2 minutes before procedure
  - Elevates pain threshold, increases calmness, and decreases crying
Case Studies
Case Study #1

* John is a 28 day-old full term infant, presenting with upper airway congestion and respiratory distress.

  - What size catheter would you consider using for NP suctioning?
  - What suction pressure will you use?
  - What comfort measures would you consider?
Jack is an 8-month old diagnosed with bronchiolitis. He is hospitalized for oxygen needs and frequent suctioning.

- What size suction catheter would you consider using?
- What pressure should you set the suction canister to?
- What comfort measures would you consider using?
Epic Documentation
What you need to document:

- Type of suctioning
  - Nasal, oral, NP

- Frequency/hour
  - Time

- Amount
  - None, scant, small, medium, large, copious

- Color
  - Clear, white, yellow, green, red streaks

- Thickness
  - Thin, thick, frothy

- How the patient tolerated the procedure
  - Cooperative, crying, resisting
Resources

* Children’s Hospital and Health System Patient Care Policy and Procedure: Suctioning—Oral—Nasal Secretion Clearance
  - Found on the Intranet under Quick Links “Policies and Procedures”
  - https://ssl11.chw.org/dana/home/index.cgi

* Nasal Suctioning in the Hospital
  - Found on the Intranet under Quick Links “Teaching Materials”
Mini-Quiz!
Which of the following patients do you NOT want to NP suction? A patient diagnosed with:

A. Bronchiolitis
B. Croup
C. RSV
A provider’s order is needed for suctioning: TRUE or FALSE?
Which of the following equipment is NOT required for NP, oral, or nasal suctioning?

A. Saline drops
B. Sterile gloves
C. Facemask with shield
D. Surgi-lube
What is the appropriate way to measure for NP suctioning:

A. From the tip of the nose to the ear to the xiphoid process
B. From the bridge of the nose to the clavicle
C. From the bridge of the nose to the chin
D. From the tip of the nose to the bottom of the earlobe
If you see blood in the secretions that you suction, you should call the doctor immediately.

TRUE or FALSE
Let’s Practice!