

# Pediatric Bronchiolitis

## Tips & Tricks to Diagnosis and Management

### Bronchiolitis

#### #1 Cause of Hospitalization in Infants/Children

We are all aware of the inevitable surge in pediatric bronchiolitis every fall and winter. Please share this sheet for discussion at your site about common questions and controversies around the treatment and diagnosis of bronchiolitis. Please reach out to DCMC educational champions to ensure your site is ready for bronchiolitis season. We are here to help with education and provide a more seamless mechanism to ensure safe and direct admits/transfers to DCMC when needed.

#### TOP TIPS

- Always suction in triage and before feeds (see tips)
- NO indication for albuterol in routine cases
- NO indication for antibiotics in routine cases
- NO indication for viral testing in routine cases
- NO indication for CXR in routine cases. Use only to evaluate for complications. Over-testing may lead to inappropriate antibiotic prescribing.
- Good anticipatory guidance should teach suctioning, explain the natural course and reasons to return to the ED.

#### DIAGNOSIS

- Clinical diagnosis alone: child less than 2 with fever, cough, lower respiratory findings
- **EXPECTED COURSE:**
  - Day 1-3: Starts as URI
  - Day 2-3: Lower respiratory signs (crackles, wheezes, rhonchi)
  - Day 3-5: Peak of lower respiratory symptoms and distress
  - Cough takes 1-3 weeks to resolve

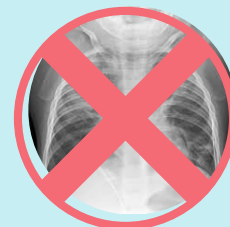
#### SUCTION TIPS

- There is NO indication for deep suctioning in bronchiolitis in the ED
- Use the mushroom tip suction
- Always use saline drops in nares for suctioning
- Teach parents proper holding techniques and to wash their bulb suction at home in warm soapy water
- Teach families to suction before feeds, before bed and when in severe distress. Over-suctioning can lead to bleeding.



#### Nasal suctioning

At triage and before feeds. Ensure you know standards in suctioning in the ED



#### NO Indication for routine CXR

See Tips on Keys to treatment and what really is needed/works



#### High Flow Nasal Cannula

Reduces need for intubation. **See back** for tips to start in ED

# HIGH FLOW NASAL CANNULA (HFNC)

Having a reliable setup and process to start high flow nasal cannula for your children in severe respiratory distress can be valuable in ensuring proper stabilization and transfer. Some tips on the use of high flow are below:



- Always perform adequate suctioning, repositioning and hydration first.
- If moderate to severe work of breathing symptoms persist, consider starting HFNC and initiating early transfer call. If only symptoms of hypoxemia, try nasal cannula first.
- Ensure your site has proper humidification setup and facial protection for infant
- Watch child for at least 20-30 minutes on HFNC before adjusting settings. FLOW and FiO2 are two separate settings and should be based on need separately (flow for work of breathing, FiO2 for hypoxemia - goal is to keep sats > 90%)
- Suggested flow rates when starting HFNC are shown

Weight (Kg)	Initial Flow rate (lpm)	Max flow rate (lpm)
<7	4	6
7-9	6	8
>9	6	10

**ANTICIPATORY GUIDANCE FOR FAMILIES**

1. Explain expected course
2. Teach proper suctioning
3. Monitor hydration status
4. Avoid cough medicines and OTC decongestants
5. Reasons to return: apnea, cyanosis, poor feeding, new fever outside of expected, persistent increased work of breathing

KEY CONTACTS	
DCMC ED Physician Back Line (talk to an ED doc)	512-324-0150
DCMC Transfer/ Direct Admit (gets you transport team also)	512-324-3262 (DCMC)
DCMC Hospitalists	512-324-3262 (DCMC)
DCMC Critical Care	512-324-9999 x 86312

**EDUCATIONAL RESOURCES:**

Physician: Sujit Iyer, M.D.  
[ssiyer@ascension.org](mailto:ssiyer@ascension.org)

Nursing: Denita Lyons, R.N.  
[dlyons@ascension.org](mailto:dlyons@ascension.org)

Respiratory Therapy: Kendra Sullivan, R.T.:  
[ksullivan1@ascension.org](mailto:ksullivan1@ascension.org)

Dell Children's Evidence Based Outcomes Center (guidelines/ pathways):  
<https://www.dellchildrens.net/for-healthcare-professionals/evidence-based-care-guidelines/>