## High Flow Nasal Cannula

#### What:

Delivers heated, humidified oxygen mixed with air at high flow levels



#### Benefits:

- Helps reduce inflammation and clear mucous
- Heated air allows for higher flows than a standard cannula
- Longer, more flexible prongs delivers oxygen deeper into the nasal cavity allowing for more accurate delivery of FiO2

#### Safety & Management

- HFNC circuit will be assembled, monitored, & weaned by RCP
- RNs will continue to monitor patients for signs of respiratory distress and alert RCPs and Medical Team of any signs of clinical worsening (increased WOB, tachypnea, tachycardia)
- Acute Care max is 50% FiO2 (50% oxygen & 50% medical air)
- HFNC Heater is set to invasive setting (37 degrees) or non-invasive setting (31 degrees)
- Notify RCP if significant condensation forms in hose
- RN will coordinate with RCP for set-up for off-unit transports. Have a team discussion regarding need for RCP to accompany

#### References

High Flow Nasal Cannula Policy: https://lpchs.ellucid.com/documents/view/548 High Flow Nasal Cannula Procedure: https://lpchs.ellucid.com/documents/view/549 High Flow Nasal Cannula Initiation & Weaning Pathway



### High Flow Nasal Cannula Circuit





Review this video to learn more about the HFNC device. The HFNC heater may alarm. Please contact RCPs for troubleshooting.



## Assessment of & Interventions for the Patient on HFNC



- Monitor work of breathing
- Assess for signs of clinical worsening: increased retractions, tachypnea, nasal flaring, head bobbing, grunting
- Assess for sustained desaturations
- Assess lung sounds
- Continue to suction for airway clearance as first-line intervention for bronchiolitis
- Assess nares-especially with feeding tubes + HFNC (see page 4)
- Assess behind ears where cannula sits
- Assess occiput if child is laying on O2 devices
- Assess for signs of clinical worsening (tachycardia)
- If febrile, treat with antipyretics



11.15.2022-Acute Care NPDS Team

Children's Health

## Two's a Crowd!





Children have minimal room in their nares and it gets crowded with a feeding tube and nasal cannula

Best practice: the NG/NJ/ND/Repogle should be BELOW the nasal cannula/HFNC The feeding tube should come straight down out of the nare before looping to the side to avoid pressure on the side of the nare



Don't forget to pad your oxygen cannulas especially by the ears and cheeks. These areas are vulnerable to skin breakdown and can easily be protected by either padding the skin or padding the device directly.



# Escalation of Care when on HFNC

After initiation, continue to monitor & support via clustering care, suction, hydration, fever management, etc. Transient desaturations are expected.

Within the **first few hours**, if you're still seeing signs of respiratory distress, notify the Provider & RCP

Call a RRT if seeing signs of respiratory failure: prolonged desaturations, lethargy, extreme change in respiratory rate, increased retractions

\*Calling a RRT is not a reflection of your care. RSV Bronchiolitic patients all have different courses and some may need additional respiratory support

