



London Health Sciences Centre



Guidelines for Airway Management of Suspect and/or Confirmed COVID-19 Patients

Paediatric Critical Care & Respiratory Therapy
2020-March-23

Paediatric Patient with ARI

Manage with low flow



If unable to keep Sat > 90



Give higher conc via highox (if available)



Still not acceptable sat, use NIV



HFNC, CPAP, BiPAP, (in negative pressure under D+C+E*)



Unsatisfactory Sat, intubate and ventilate

* Droplet + Contact + Enhanced Protection

Paediatric Patient with Respiratory Illness Requiring Intervention/Hospitalization

1. Appropriate droplet/contact precautions for HCP and patient
2. Early sample for 2019-nCoV
(if specimen sent to PH at referring site, re-do at LHSC)

2019-nCoV **NEGATIVE** or
not meeting criteria for testing

**TREAT AS USUAL
D+C Precautions**

2019-nCoV **UNKNOWN**,
but potential PUI
Also see next page

2019-nCoV **POSTIVE**
– Avoid aerosolizing procedure, perform under airborne/droplet precautions if needed
– Avoid excess fluid administration

Principle: avoidance of AGMP is possible until 2019-nCoV result available, due to risk to staff and need for airborne isolation

- Consider risk factors for likely 2019-nCoV (presenting features, level or exposure)
- If hypoxic: apply standard LF02 protocol via nasal prongs, face mask, NRB) → early transfer to PCCU
- If ongoing concerns requiring resp support, not adequately improving with LF02: particularly
 1. **High risk groups:** Extreme Prems, paediatric patients with asthma/croup, complex care paediatric patients who if intubated would be challenging to extubate/ventilate and may require only transient need for HF02/CPAP/BIPAP can be put on these AGMPs (in airborne isolation if possible).
 2. Some rapidly deteriorating patients may require early intubation.

Recognition

Paediatric Patient with Infection
related Respiratory Distress
&
2019-nCoV UNKNOWN

Assessment

Croup Presentation
(stridor, barking
cough)

Asthma Presentation
(wheeze, diminished
AE, prolonged
expiration)

LRTI
(cough, crackles, fever,
hypoxia, tachypnea)

Management

1. *Nebulized Epinephrine in airborne precautions
2. Dexamethasone

1. Salbutamol MDI w/spacer
2. + Systemic Steroids
3. +/- Magnesium Sulfate
4. IV salbutamol if MDI ineffective (If failed, may need NIV under enhanced precautions)

1. Antibiotics as indicated
2. Avoid excess fluids
3. Avoid ACMP's, but if needed perform under airborne precautions

Steps in intubation

- 1) Utilize an observer to assist with donning of PPE if not familiar with procedure
- 2) Don appropriate PPE (See Appendix B)
- 3) Provide five minutes of preoxygenation with oxygen 100% (via non-rebreather mask) to avoid manual ventilation
- 4) The most experienced HCW should attempt the intubation to maximize chances of first pass success
- 5) Utilize rapid sequence induction (RSI) when possible
- 6) Utilize video assisted intubation when possible
- 7) Avoid awake intubation and use of atomized anesthetic
- 8) Avoid Manual ventilation. If necessary, small tidal volumes should be applied
- 9) Ensure high efficiency hydrophobic filter interposed between facemask and breathing circuit or between facemask and Ambu bag (see Appendix C for diagram)
- 10) Post intubation auscultation and ventilation should only initiate once endotracheal balloon has been inflated
- 11) If intubation fails, either insert LMA, ventilate with bag-valve-mask (BVM) with filter attached (see Appendix C for diagram)
OR
Consider 2 person BVM with PERSON #1 dedicated to proper positioning of the airway while ensuring seal of mask and PERSON #2 bagging with low volume breaths
- 12) Practice appropriate hand hygiene after procedure and in the process of doffing PPE (See Appendix B)
- 13) Utilize an observer to assist with doffing of PPE if not familiar with procedure