

**CLINICAL
PRACTICE
GUIDELINE**

SITE-SPECIFIC - Applies to all Shared Health staff at the site indicated in the policy name.

Practice Guideline:

Nurse Initiated Croup Treatment Care Pathway in the Emergency Department

Approval Signature:

Shared Health Executive

Guideline Number:

EIPT-100-01

Page:

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Approval Date:

August 2024

Supersedes:

n/a

1.0 PURPOSE:

- 1.1. One of the priorities of Emergency Department (E.D.)/Urgent Care Centre (UC) is to reduce patient wait times while continuing to provide safe, evidence-based patient care. One method to accomplish this is the use of nurse-initiated clinical pathways. These have been proven to increase efficiency and allow for rapid treatment of symptoms, decrease variations in care, decrease total length of hospital stay, and are associated with higher parental and patient satisfaction.
- 1.2. Croup is a common, easily identifiable childhood illness with a standardized treatment pathway that can safely be initiated by a Registered Nurse (RN). This will decrease time to treatment and will potentially decrease the total treatment time in the E.D./UC.

2.0 PRACTICE OUTCOME:

- 2.1 All pediatric patients from the ages of 6 months to 5 years presenting to the E.D./UC with symptoms suggestive of mild to moderate croup will have the Croup Treatment Care Pathway ([Appendix A](#)) initiated by the RN. This is based on the RN's assessment, clinical judgement, and the protocol outlined in this clinical practice guideline.
- 2.2 The RN will administer an oral steroid to all children who meet the inclusion criteria prior to physician assessment.
- 2.3 The croup treatment care pathway will be used by E.D./UC nurses and physicians to guide the care of all children presenting to the E/UC with signs and symptoms of croup.
- 2.4 The E.D./UC physician must complete a patient assessment on every patient who presents to the E.D./UC that have been initiated on the Croup Treatment Care Pathway.

3.0 BACKGROUND:

- 3.1 Croup is the most common cause of upper airway obstruction in children and is easily identifiable by the presence of an acute onset barking cough. Further diagnostics are rarely required to confirm the diagnosis of croup.
- 3.2 Oral dexamethasone should be given to all children who present to the E.D./UC with croup-like symptoms.
- 3.3 Registered Nurses (RNs) practicing in the E.D./UC who have completed all necessary training, demonstrate an understanding of pediatric assessment and all other components of the Croup Treatment Care Pathway are able to initiate timely treatment for patients that present with suspected croup. This includes:
 - Pediatric respiratory assessment
 - Understanding of the disease process of croup
 - The Westley Croup Scoring Tool ([Appendix B](#))

- Medication (oral corticosteroid) within the standard order set
 - Croup education for families (see 5.0 for [patient handout](#) and [TREKK video](#))
- 3.4 The E.D./UC RN is accountable and responsible to assess their competency in all aspects of the Croup Treatment Pathway. If the RN identifies gaps in their knowledge or skill they must act to address this in order to provide safe care.
- 3.5 Ongoing care of the patient with suspected croup will be determined by the E.D./UC physician using evidence-based best practice guidelines.
- 3.6 Other causes of upper airway obstruction such as bacterial tracheitis, epiglottitis, and retropharyngeal abscess should be considered in children who present with severe symptoms with a transient or lack of response to croup treatment.

4.0 GUIDELINES:

- 4.1 E.D./UC RNs are authorized to initiate the croup treatment care pathway for all children identified as having mild to moderate croup as determined by the Wesley Croup Score ([Appendix A](#)), prior to a physician assessment based on the following criteria:

4.1.1 Inclusion Criteria (all criteria required)

- Age between 6 months and 5 years old
 - Non-toxic appearance (i.e., alert, interactive and well-perfused)
 - Barky cough (seal-like) on presentation or by parent/caregiver description
 - Westley Croup Score of 0-5
- NOTE: Patient may also have a history of acute onset of shortness of breath, stridor at rest or when upset, hoarse voice, mild to moderate chest wall retractions, fever

4.1.2 Exclusion Criteria

- Children with severe croup
- Westley Croup Score of 6 or greater
- Received an oral or parenteral steroid in the last 7 days
- Drooling
- History of stridor for greater than 3 days
- Toxic appearance (i.e., pallor or cyanosis, lethargic, inconsolably irritable, pronounced tachypnea, prolonged capillary refill time (greater than 2 seconds), oxygen saturation of less than 92% on room air)
- Severe respiratory distress (marked chest wall retractions) or impending respiratory failure
- Suspected foreign body ingestion/aspiration
- Known airway abnormality
- Immunocompromised

- 4.2 Patients who are excluded from the nurse-initiated croup treatment care pathway may still be placed on the croup treatment pathway in discussion with the E.D./UC physician.
- 4.3 The E.D./UC physician must always be available for consultation and collaboration with the RN.
- 4.4 The E.D./UC RN will complete all actions as outlined in [Appendix A](#).

5.0 COMPONENTS:

- 5.1 Children's Hospital Emergency Department Pediatric Croup Standard Orders (PHOR #577)
- 5.2 Standing Order for Nurse Initiated Croup Treatment Care Pathway (FORM # NS02184)
- 5.3 About Kids Health: Croup - [Croup \(aboutkidshealth.ca\)](#)
- 5.4 TREKK video: A Barky, seal-like cough in children - [Video: A barky, seal-like cough in children - Croup \(trekk.ca\)](#)

6.0 REFERENCES:

- 6.1 Translating Emergency Knowledge for Kids. (2016, December). Bottom line recommendations: croup.
https://kte01.med.umanitoba.ca/assets/trekk/assets/attachments/156/original/croup-blr_reformatted-aug-2017.pdf?1505224620
- 6.2 Browne GJ, Giles H, McCaskill ME, Fasher BJ, Lam LT. The benefits of using clinical pathways for managing acute paediatric illness in an emergency department. J Qual Clin Pract. 2001; 21 (3):50-55
- 6.3 IWK Care Directive for the Initiation of the Croup Treatment Pathway by Registered Nurses in the Emergency Department. May 2020. [TITLE: Policy Title \(nshealth.ca\)](#)
- 6.4 Canadian Pediatric Society. (2017, January). Acute management of croup in the emergency department, practice point.
<https://www.cps.ca/en/documents/position/acute-management-of-croup>

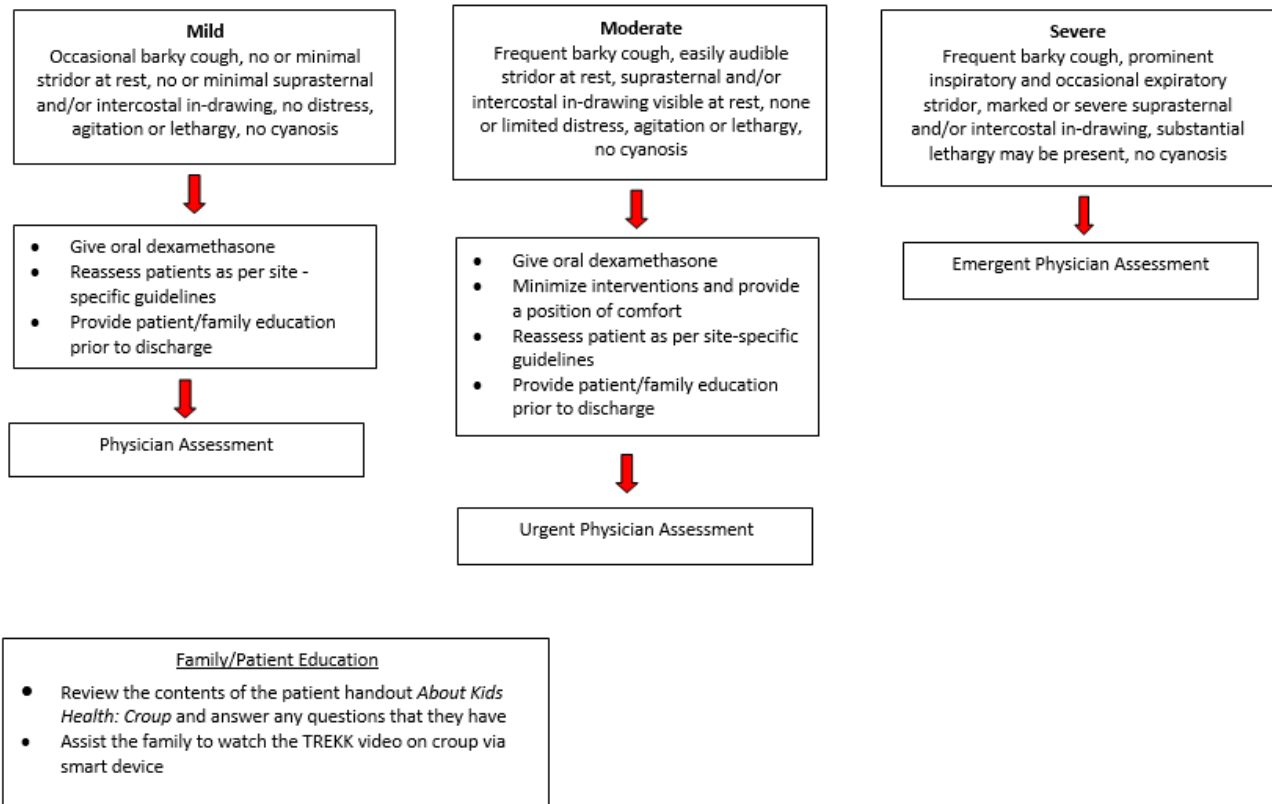
7.0 PRIMARY OWNER(S):

Nurse Educator, Children's Emergency, Health Sciences Centre
Medical Directors, Children's Emergency, Health Sciences Centre
Manager of Patient Care, Children's Emergency, Health Sciences Centre
Pharmacist, Children's Emergency, Health Science Centre

Appendix A – Croup Treatment Care Pathway

- Complete a patient assessment including: respiratory assessment, vital signs (HR, RR, oxygen saturation) including weight, and an initial Westley Croup Scoring Tool score to determine the appropriate treatment regimen
- Document assessments and medication administration as per site-specific standards
- Provide supplemental oxygen if oxygen saturations are less than 92% on room air

***NOTE: The Westley Croup Score is to be used only by the RN on initial assessment**



Appendix B – Westley Croup Scoring Tool

*** To be used only by the RN on initial assessment**

	0	1	2	3	4	5
Chest Wall Retractions	None	Mild	Moderate	Severe		
Stridor	None	With agitation	At rest			
Cyanosis	None				With agitation	At rest
Level of Consciousness	Normal					Disoriented
Air Entry	Normal	Decreased	Markedly decreased			

Westley Croup Score: _____ / 17

Score: **0 – 2** Mild, **3-5** - Moderate, **6 or greater** - Severe