

 <p style="text-align: center;"><b>CREDIT VALLEY</b> THE CREDIT VALLEY HOSPITAL</p>	<b>CLINICAL PRACTICE GUIDELINE</b>	<b>PROFESSIONAL PRACTICE</b>
<b>TITLE: Paediatric Croup (Acute Laryngotracheobronchitis)</b>		
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**Purpose:**

To provide a guideline for the medical management of Paediatric Croup (Acute Laryngotracheobronchitis).

**Definition:**

Croup is defined as an acute viral inflammation of the upper and lower respiratory tracts, characterized by inspiratory stridor, subglottic swelling, and respiratory distress that is most pronounced on inspiration.

**Criteria:**

**Inclusion Criteria:**

Children presenting with respiratory symptoms characterized by stridor and a croupy cough with or without respiratory distress including retractions, decreased air entry, agitation or cyanosis.

**Exclusion Criteria:**

- Severe respiratory distress requiring immediate intubation
- Congenital upper airway anomaly e.g. Tracheomalacia or Subglottic stenosis

**Implementation:**

**Assessment and Management:**

Patients presenting to the emergency department will be assessed initially by the triage nurse and at this time a patient priority will be assigned.

Assessment of the severity of illness and appropriate treatment intervention will be according to the **Guideline for the Treatment of Paediatric Croup**.

The nurse will initiate humidified air/oxygen and oximetry monitoring based on his/her assessment.

A physician order is necessary to initiate medication therapy and to continue therapy and monitoring if necessary.

Administration of aerosol therapy will be according to RT policy (RT 002)

**Guideline for the Treatment of Paediatric Croup**

- All children, including those with mild croup benefit from treatment.
- Children should receive humidified O<sub>2</sub> according to the oxygen protocol.
- Dexamethasone 0.6mg/kg (maximum 10mg) should be given orally or intravenously, if an intravenous is already established.
- Budesonide 2mg once by inhalation, is a reasonable alternative for mild or moderate croup, if dexamethasone cannot be given (refused or not retained).
- Racemic epinephrine 2.25% solution, 0.05ml/kg (maximum 0.5ml) every 30 minutes for severe croup. Croup is defined as severe when there are moderate or severe retractions, decreased air entry, agitation or cyanosis.

**Observation:**

Four hour observation before discharge is required after administering racemic epinephrine.

**Discharge Criteria:**

The patient will be well at rest but may have a croupy cough and mild stridor when upset, at the time of discharge.

**Evaluation Criteria:**

Monthly Indicators:

- Number of ER visits with a discharge diagnosis of croup
- Number of ER return visits within 48 hours with a diagnosis of croup
- Number of admissions with croup

Clinical Focus Study: Audit to review compliance with guideline

**References:**

This guideline is based on the consensus of all paediatricians at the Credit Valley Hospital. It is recognized that continuing research is needed on this topic.

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**Approval:**

Emergency Steering Committee: April 15, 1997

Paediatric Steering Committee: April 23, 1997

Professional Practice Committee: December 1998

Clinical Quality Care Committee: December 1998 / May 1997

Medical Advisory Committee: January 1999 / June 1997