

# DEXAMETHASONE

Read in conjunction with [Disclaimer](#)

<b><u>Formulary: Restricted</u></b> Requires Neonatologist or relevant specialist review within 24 hours of initiation	
<b>Presentation</b>	<b>Oral solution:</b> 1 mg/mL (1000 microg/mL) <b>Vial:</b> 8 mg/2 mL (4000 microg/mL)
<b>Drug Class</b>	Corticosteroid
<b>Indication</b>	<ul style="list-style-type: none"> <li>• Treatment of preterm infants with chronic lung disease (DART Regimen)</li> <li>• Treatment of confirmed COVID-19 where the neonate requires oxygen and/or ventilation</li> <li>• Prevention of post extubation stridor in neonates who have had repeated, traumatic or prolonged intubation</li> <li>• For respiratory insufficiency and oedema with acute non-infectious laryngospasm</li> </ul>
<b>Monitoring</b>	Monitor blood glucose levels, blood pressure, electrolytes.  Bone bloods for long term therapy. Signs and symptoms of sepsis.
<b>Compatibility</b>	<b>Fluids:</b> Sodium Chloride 0.9%, Glucose 5%  Refer to KEMH Neonatal Medication Guideline: <a href="#">Y-Site IV Compatibility in Neonates</a>
<b>Interactions</b>	Preferable to avoid concurrent use with indomethacin for PDA treatment
<b>Side effects</b>	<b>Common:</b> hyperglycaemia, hypertension, behavioural disturbances, increase in urinary calcium excretion, sodium and water retention  <b>Serious:</b> sepsis, masking of signs of infection, adrenal suppression, acute adrenal insufficiency in abrupt withdrawal, G.I. bleeding, osteoporosis, fractures, growth restriction, increased risk of cerebral palsy, delayed wound healing, skin atrophy, cushingoid appearance
<b>Storage &amp; Stability</b>	<b>Vial:</b> Store at room temperature, below 25°C. <b>Oral solution:</b> Refrigerate, do not freeze.

**Presentation  
(for oral use)****Oral solution:** 1 mg/mL (1000 microg/mL)**Dosage****To treat preterm infants with chronic lung disease (DART Regimen):**

Note – Adjust dose according to response as per consultant advice. The weaning regime can be shorter or lengthened depending on the infant's clinical response.

**\*\* For oral doses less than 100 microgram – prescriber to annotate medication order with “dilution required” in ‘additional information’ section on medication chart. See Preparation section below for dilution instructions. \*\***

Day	Dose	Frequency	Duration
Day 1-3	75 microgram/kg	12 hourly	72 hours
Day 4-6	50 microgram/kg	12 hourly	72 hours
Day 7-8	25 microgram/kg	12 hourly	48 hours
Day 9-10	10 microgram/kg	12 hourly	48 hours

**Treatment of confirmed COVID-19 where the neonate requires oxygen and/or ventilation:**

Per DART regimen in table above.

**Prevention of post extubation stridor in neonates who have had repeated, traumatic or prolonged intubation**

250 microgram/kg/dose every 8 hours for a total of 3 doses.

Recommended to begin at least 4 to 12 hours prior to extubation.

**For respiratory insufficiency and oedema with acute non-infectious laryngospasm**

250 microg/kg/dose every 8 hours for a total of 3 doses.

**Dilution required for doses less than 100micrograms:**

**WARNING: error prone dilution – take extra care**

**Preparation**

Take 0.5mL (500 micrograms) of oral dexamethasone solution and dilute to a final volume of 10mL with Water for Injection.

**Concentration = 500 microgram/10mL = 50 microgram/mL**

**Administration**

Give with or soon after a feed to minimise gastric irritation

**Presentation  
(for IV use)**

**Vial:** 8 mg/2 mL (4000 microg/mL)  
**Available from CIVAS (KEMH Only):** 100 microgram/mL



**Dosage**

**To treat preterm infants with chronic lung disease (DART Regimen):**

Note – Adjust dose according to response as per consultant advice. The weaning regime can be shorter or lengthened depending on the infant’s clinical response.

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Recommended to begin at least 4 to 12 hours prior to extubation.

**For respiratory insufficiency and oedema with acute non-infectious laryngospasm**

250 microg/kg/dose every 8 hours for a total of 3 doses.

**Preparation**

**IV push (diluted):**

Withdraw **0.5 mL** (2 mg) of **dexamethasone** and add **19.5 mL** of compatible fluid.

Concentration = 2 mg/20 mL = 2000 microgram/20 mL

Concentration is now equal to **100 microgram/mL**

**IV infusion (undiluted):**

*For 250 microgram/kg doses for post-extubation stridor only.*

Straight draw up

**Administration**

**IV push (diluted):**

Inject over 3 to 5 minutes

**IV infusion (undiluted):**

*For 250 microgram/kg doses for post-extubation stridor only.*

Infuse via syringe driver pump over 15 minutes.

## Related Policies, Procedures, and Guidelines

### CAHS COVID-19 Resources:

[Clinical Care of Paediatric Patients During the COVID-19 Pandemic](#)

### Australian Guidelines for Clinical Care of People with COVID19:

[Section 7.1.3.3: Corticosteoids \(systemic\) for children and adolescents](#)

### CAHS Pharmaceutical and Medicines Management Guidelines:

[Medication Administration](#)

## References

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## Document history

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