		Type: Drug Guideline	Document reference: 6370	Manual Classification: Waikato DHB Drug Guidelines
Title: Phosphate Oral for Neonates			Effective date: 1 April 2021	
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			Document expiry date: 1 April 2024	

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BRIEF ADMINISTRATION GUIDE

For detailed information refer to The Australasian Neonatal Medicines Formulary [phosphorus](#) guideline



Critical Note: there are minor variations between the ANMF and Waikato DHB best practice within this drug guideline – see **yellow shaded text**

Indications:

- Treatment of hypophosphataemia
- Raised alkaline phosphatase (ALP > 400 U/L)
Note: for <32/40 measure initial ALP at 3 weeks of age, and exclude liver dysfunction

Route: Oral

Supplied as:

- phosphate 0.5 mmol/mL oral solution (made by Pharmacy from tablets)
- phosphate effervescent tablet, equivalent to phosphate 16 mmol

Dose: Treatment of Raised ALP
0.25 mmol (0.5 mL) twice daily, up to **0.5 mmol** (1 mL) three times daily
Titrate dose up or down in small increments according to ALP trend
Stop when ALP < 400 U/L.

Treatment of mild asymptomatic hypophosphataemia
1 – 2 mmol/kg/day orally in 2 to 3 divided doses scheduled around oral feeds
Recommended starting dose 1 mmol/kg/day. Adjust according to response.

Note: 1mmol phosphate = 1mmol elemental phosphorus = 31 mg elemental phosphorus

Preparation and administration

- Draw up prescribed dose in an oral syringe, dilute as appropriate and administer orally with feeds


If using tablets:

- Add one tablet to approximately 30 mL of water for injection
- Allow tablet to dissolve, stirring if necessary
- Make volume up to 32mL and mix thoroughly

Note: If administering in breast milk alternate giving calcium and phosphate in the feeds

Monitoring

- Alkaline phosphatase levels weekly (needs time for effect to be noticed)
- Monitor electrolytes, especially serum calcium and phosphate
- Assess for gastrointestinal intolerance
- Confirm adequate renal function

	Document reference: 6370	Effective date: 1 Apr 2021	Expiry date: 1 Apr 2024	Page: 2 of 2
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Storage and Stability

- Store Pharmacy manufactured phosphate solution in the fridge. Expiry is 7 days from manufacture.
- Discard any unused solution if prepared from the tablets on the ward

Competency for administration

This procedure is carried out by, or under, the direct supervision of a registered nurse/registered midwife who holds current Waikato DHB Generic Medicine Management.

Associated Documents

- Waikato DHB guideline #1526 [Vitamin and mineral, and enteral supplementation](#) – NICU

References

- Australian Neonatal Medicines Formulary. Phosphorus Drug Guideline 2018, available from: https://www.slhd.nsw.gov.au/RPA/neonatal%5Ccontent/pdf/Medications_Neomed/Phosphorus_NMF2.0_Full_20181122.pdf
- Waikato DHB guideline #1526 [Vitamin and mineral, and enteral supplementation](#) – NICU
- New Zealand Formulary for Children (NZFC). Phosphate (oral). Accessed 9th December 2020. Available from: https://www.nzfchildren.org.nz/nzf_70292
- Lexicomp. Potassium phosphate: Pediatric drug information monographs. UpToDate Accessed 9th December 2020. Available from: <https://www.uptodate.com>.
- Auckland DHB Newborn Services. Phosphate (oral) for neonates drug guideline. Available from <https://www.starship.org.nz/guidelines/phosphate-oral-for-neonates/>
- Paediatric Pharmacopoeia 13th edition.
- Truven Health Analytics Inc. Pediatrics and Neofax®. Phosphorus monograph. Accessed 31.3.2021. Available from: <http://www.micromedexsolutions.com>.

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