



Treatment of Vitamin D deficiency in refugee patients

Vitamin D deficiency is common in newly arrived refugees.

This document is a guideline to assist in the treatment of your refugee patients diagnosed with vitamin D deficiency.

The guideline has been developed by Dr Megan Evans, Clinical Director, Refugee Health Queensland (RHQ) and is based on Victorian guidelines, advice from relevant clinical specialists, current literature, as well as clinical experience at RHQ's South Brisbane Clinic and community GPs in Queensland.

If you have any questions, please contact Dr Megan Evans on megan.evans@mater.org.au or 07 3163 2880.

Classification of Vitamin D levels (in nmol/L)

1. Adequate	>50
2. Mild deficiency	26-50
3. Moderate deficiency	12.5-25
4. Severe deficiency	<12.5

Adult dosing schedule for supplementation

Vitamin D level nmol/L	ADULT alternative dosing regimens		Testing regimen (target Vit D3 >50nmol/L)
	Daily dose Vitamin D3	High dose regimen Vitamin D3	
26-50	1,000-2,000 IU/day	50,000 IU/month	Re-check vitamin D level at 3 months then every 12 months
12.5-25	1,000-2,000 IU/day	50,000 IU/month	
<12.5	1,000-2,000 IU/day	50,000 IU/month	

NB: High dose formulation not recommended in pregnancy
Calcium intake of 1,000-1,300mg per day is also recommended

Paediatric dosing schedule for supplementation

Vitamin D level nmol/L	Treatment doses Vitamin D3	Maintenance/prevention in children with ongoing risk factors	Testing regimen (target Vit D3 >50nmol/L)
Neonate (age <3months)			
25-50	400 IU daily for 1 month	400 IU daily Promote breast feeding	Recheck Vit D, Ca, PO4, ALP at 1 month, and ALP annually
<25	1,000 IU daily for 3 months		
Infant (age 3-12 months)			
25-50	400 IU daily for 3 months	400 IU daily Promote breast feeding	Recheck Vit D, Ca, PO4, ALP at 3 months, then Vit D and ALP annually. If high dose used, may need re-testing at 1 month
<25	1,000 IU daily for 3 months OR 50,000 IU stat then review after 1 month, consider repeating dose		
Children and adolescents (age 1-18 years)			
25-50	1,000-2,000 IU daily for 3 months	400 IU daily OR 150,000 IU at the start of Autumn	Recheck Vit D, Ca, PO4, ALP at 3 months, then Vit D and ALP annually.
<25	1,000-2,000 IU daily for 6 months OR 150,000 IU stat and repeat at 6 weeks		



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Some available oral Vitamin D preparations				
	Strength	Upfront Cost (approx)	Cost per month	Dose required to dispense 50,000IU stat
Ostelin	1000 IU caps	\$15/60 tabs	\$7.50	N/A
OsteVit-D	1000 IU caps	\$14/90 tabs	\$4.60	N/A
Penta-vite	400 IU/ 0.45ml syrup	\$14/60ml	\$3.80	N/A
OsteVit-D liquid (50ml bottle/ 250,000IU)	1000 IU/ 0.2ml	\$35/50ml	\$4.20	10mls
BioCeuticals D3 Drops Forte (20ml bottle/ 444,000IU)	1000IU/ drop	\$32/20ml	\$2.30	50 drops (2.25mls)
HIGH DOSE FORMULATIONS AVAILABLE UNDER THE SPECIAL ACCESS SCHEME (SAS)*				
Cal.D forte**	50,000 IU tabs	\$25/12 tabs	\$2	1 tab
BioCeuticals 50,000IU single dose vials	50,000 IU vials	\$70/8 vials	\$8	1 vial

* [Link to TGA website for SAS application forms](#)

**Cal.D forte is an unregistered (S4) product in Australia. As such it can only be obtained under the Special Access Scheme (SAS) or as an authorized prescriber PBAC Section 19(5) of the *Therapeutics Goods Act 1989*

Funded Vitamin D supplements for newly arrived refugees
<ul style="list-style-type: none"> • Queensland Health funds RHQ for oral Vitamin D supplementation for newly arrived refugees (within 6 months of arrival) as required. • When prescribing Vitamin D to eligible patients, provide them with a copy of the "Free Non-PBS Medications for newly arrived refugees, Letter to Pharmacist", available in the Clinical Resource section at www.refugeehealthqld.org.au • Please contact Sarah Grealy, Statewide Coordinator on sarah.grealy@mater.org.au or on 3163 2880 for further information

Acknowledgements
<ol style="list-style-type: none"> 1. Low vitamin D in Victoria. Key health messages for doctors, nurses and allied health. June 2011. Victorian Department of Health. 2. Ebeling P, Paxton G, Richardson S. High dose vitamin D information sheet for prescribers and pharmacies: Victoria, October 2008 3. Munns C, Zacharin MR, Rodda CP, Batch JA, Morley R, Cranswick NE, et al. Prevention and treatment of infant and childhood vitamin D deficiency in Australia and New Zealand: a consensus statement. <i>Med J Aust.</i> 2006 Sep 4;185(5):268-72.

Questions
<p>If you have any questions, please contact Dr Megan Evans, Clinical Director, Refugee Health Queensland on megan.evans@mater.org.au or on telephone: 07 3163 2880.</p> <p>Additional refugee health resources available at www.refugeehealthqld.org.au</p>