

State of California—Health and Human Services Agency  
Department of Health Services



California  
Department of  
Health Services

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**TO: PRIMARY WOMEN, INFANTS AND CHILDREN (WIC) SUPPLEMENTAL NUTRITION PROGRAM CONTACTS, CHILDREN'S MEDICAL SERVICES (CMS) BRANCH CONTACTS, AND MATERNAL, CHILD AND ADOLESCENT HEALTH/ OFFICE OF FAMILY PLANNING (MCAH/OFP) BRANCH CONTACTS**

**SUBJECT: VITAMIN D AND RICKETS**

We are writing to you in response to media coverage regarding a reported resurgence of rickets in California. Although the California Department of Health Services (CDHS) does not currently collect surveillance data on rickets to identify the extent of the increased diagnosis, we are greatly concerned about any incidence of this debilitating chronic condition. As a first step, we are providing you with Recommendations as listed below, the attached "Rickets/Vitamin D Background Information and Resources" (attachment 1) as well as an attachment entitled "Frequently Asked Questions and Answers about vitamin D Supplementation for Infants and Children" (attachment 2).

### **Background**

On August 23, 2006, the Oakland Tribune reported on rickets in the East Bay. A chart review of all patients seen at Children's Hospital Oakland revealed a large number of cases of rickets diagnosed among children up to age two. Many cases were serious and one required surgery to correct malformed bones. Other news articles and radio discussions have followed.

### **Recommendations**

Steps to ensure appropriate vitamin D supplementation should be provided in situations where there is a risk of vitamin D deficiency, such as lack of dietary vitamin D, restricted sunlight exposure, or dark skin. The California Department of Health Services endorses the AAP guidelines on vitamin D supplementation. (Gartner, L., et. al. "Prevention of Rickets and Vitamin D Deficiency: New Guidelines for Vitamin D Intake" Pediatrics, April

2003, Vol. 111(4)) According to the AAP, beginning by two months of age, 200 IU of vitamin D should be given in the following situations:

1. **Exclusively breastfed infants under one year of age** (no formula),
2. **Breastfed infants under one year of age, who ingest less than 500 mL per day** (approximately 16 oz.) **of vitamin D fortified infant formula,**
3. **Non-breastfed infants under one year of age who ingest less than 500 mL per day of vitamin D fortified infant formula, and**
4. **Children and adolescents who do not get regular sunlight exposure, and do not ingest at least 500 mL per day of vitamin D fortified milk, or do not take a daily multivitamin supplement containing at least 200 IU of Vitamin D.**

The California Department of Health Services supports the AAP guidelines by reimbursing for vitamin D supplementation as a Medi-Cal drug benefit. Covered products are found under the prescription drugs section in the Contract Drug List (CDL):

[http://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/drugscdlp2\\_p00.doc](http://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/drugscdlp2_p00.doc)

### **Action Needed**

CDHS strongly recommends that all parents and caretakers of young children be provided anticipatory guidance on infant and toddler feeding practices and nutrition, including the following:

- **Breastmilk is the optimal feeding for infants.** Vitamin D drops are recommended by two months of age. At six months, begin including foods rich in both vitamin D and calcium in order to promote adequate bone mineralization. Breastfeeding should continue as long as mutually desired.
- **Initiate vitamin D supplementation when infants are fully and/or partially breastfed** (see AAP guidelines). Discuss parental questions regarding vitamin D supplementation and UVB exposure for breastfed infants. The AAP does not recommend direct sun exposure or sunscreen use for infants under six months of age.
- **The presence of adequate vitamin D is necessary in order to utilize the calcium available in foods such as cheese and yogurt.** When conventional dietary sources of vitamin D get displaced, children will need supplementation. For instance, when using soy milk, tofu or calcium-fortified juices not fortified with Vitamin D, supplementation or the addition of Vitamin D-fortified food products is needed.

