DATE: March 23, 2016  
TO: WIC Coordinators & Staff  
FROM: State WIC Staff  
SUBJECT: Vitamin D Deficiency in Refugees

Minnesota WIC welcomes new participants from other parts of the world. Immigrants and refugees may have special needs.

The MDH Refugee Health Program has reported that Vitamin D deficiency is a concern. Health screening done at the HealthPartners/Center for International Health (CIH) from September 2012 to November 2014 was analyzed. The initial analysis found vitamin D deficiency in:

- 73% of Burmese refugees
- 79% of Bhutanese refugees
- 81% of Somali refugees

Deficiency rates varied by ethnicity, gender, age, and behavioral and health factors. Female refugees were more likely to be deficient than men, with 79% of women and 71% of men. Prevalence was 94% among Burmese women. Although data for other refugee groups in Minnesota is not available, other studies suggest that there is a high rate of vitamin D deficiency among diverse refugees arriving to the U.S. Participants at risk for vitamin D deficiency should discuss concerns with their health care provider.

These findings support the importance of WIC assessment and counseling around vitamin D for all participants. Since it can be difficult to obtain adequate vitamin D from food sources or from sun exposure during the year, the American Academy of Pediatrics (AAP) recommends a daily vitamin D supplement to prevent rickets and vitamin D deficiency in healthy infants and children.

Vitamin D considerations for WIC:

**Infants:**

- RDA (AI): 400 IU/day
- The AAP recommends a vitamin D supplement of 400 IU daily for:
  - All breastfeed infants unless they are weaned to at least 32 oz vitamin-D fortified formula/day.
  - All non-breastfed infants who are ingesting less than 32 oz vitamin D-fortified formula.

  Note: all WIC formulas are vitamin D-fortified.

- Vitamin D drops and multivitamin drops with vitamin D are available without a prescription. It’s important that parents know to measure the dose carefully to prevent
overdosage and toxicity. *Medical Assistance will cover the cost of vitamin supplementation with a doctor’s prescription.*

- Risk code **411K**

**Children**

- RDA: 600 IU/day
- The AAP recommends a vitamin D supplement of 400 IU daily.  
  Note: 2 cups milk/day will provide 200 IUs.
- Not all children’s multivitamins contain 400 IU vitamin D. Check the label.
- Risk code **425H**

**Women**

- RDA: 600 IU/day
- A prenatal vitamin supplement is *recommended* and ideally started preconception.  
  Most prenatal vitamins contain *400 IU* vitamin D.
- Research suggests that for infants to be born with adequate vitamin D status, their mothers must be vitamin D sufficient during pregnancy.

CPAs can share these important national health recommendations with participants and encourage them to discuss supplementation with their health care providers.