



## Children's Health Services Newborn Vitamin K Policy

### *What is Vitamin K?*

Vitamin K is needed to form blood clots and to stop bleeding. Babies are born with very small amounts of vitamin K stored in their bodies. In the past, one out of every 100 babies had some bleeding, and one out of every 1,000 babies had serious bleeding—often brain bleeding—in the first days to months after birth. Once called “Hemorrhagic Disease of Newborn,” it is now called Vitamin K Deficiency Bleeding (VKDB). VKDB can lead to brain damage and death.

Since the US began to give babies Vitamin K shots in 1961, VKDB has become a rare event. VKDB presents in three forms: early, classic, and late. Early bleeding occurs in the first 24 hours and is often severe. The classic form of VKDB occurs in the first week of life and can have a milder presentation. Late VKDB presents with severe bleeding, primarily in infants who are exclusively breastfed, and may occur many weeks after birth. Of infants late VKDB, 50% have brain bleeding with risk of neurologic injury; mortality rates are estimated at 20%.

### *What about baby's natural Vitamin K?*

Infants get very little Vitamin K from mom during pregnancy even if she takes a supplement. Breast milk also is low in vitamin K even if mom is taking a supplement.

### *What about oral Vitamin K?*

Oral Vitamin K is not consistently absorbed through the stomach and intestines. There is no studied or tested liquid form appropriate for babies in the U.S. There is no standard regimen for oral Vitamin K and no standard preparation available for babies.

### *Why is the injection better?*

The injection places the Vitamin K in the muscle where it will gradually release into the bloodstream over several weeks. The injection avoids all the problems with unreliable absorption into the baby's blood that we worry about with oral Vitamin K. Vitamin K injection protects best against all types of VKDB, even the type that happens after 1 month of age. The shot can be given to your baby when they are skin-to-skin or on the breast.

### *Is Vitamin K toxic?*

There are no known harmful systemic effects from the standard 1 mg intramuscular shot. Large studies have not found an association between Vitamin K shots at birth and childhood leukemia. There is no mercury preservative in Vitamin K.

### **Where we stand:**

We ask that you give your baby the 1 milligram injection of Vitamin K within 6 hours of birth to prevent bleeding and other life-threatening complications. We are happy to delay it until the baby has had some breastfeeding and skin-to-skin time.

*If choose not to give your baby the injectable Vitamin K within 6 hours, then we cannot accept your baby as our patient.*

**The American Academy of Pediatrics recommends that all newborns, whether breastfed or formula fed, receive a one-time intramuscular shot of vitamin K within 6 hours of age.**

**A vitamin K injection given at birth is the best way to prevent VKDB in infants. This is not a vaccine.**