



Q & A

Question: Why do we give Vitamin K to newborns? What are the benefits and risks?

Answer: Vitamin K is given to prevent a rare but possibly deadly brain bleed in the first 6 months of life. The benefit is protection against bleeding in the brain and stomach. The risks of the shot include pain at the injection site, bruising, and swelling.

Question: What is Vitamin K?

Answer: Vitamin K is a vitamin we need to clot blood. We do not make Vitamin K ourselves, and we get most of our Vitamin K from plants. Babies are born with very small amounts of Vitamin K. There is very little Vitamin K in breast milk. Babies who are exclusively breastfed have low Vitamin K levels until they start eating solid foods at around six months.

Question: What is Vitamin K Deficiency Bleeding?

Answer: A baby who does not have enough Vitamin K can start bleeding spontaneously, without warning. This type of bleeding can happen after birth (*early bleed*), in the first week of life (*classical bleed*), and from week two until six months (*late bleed*).

Late bleeding is the most dangerous kind, because it often starts out as bleeding in the brain. These babies do not have any type of head trauma— they simply start bleeding because they cannot clot anymore.

Question: How often does this type of late bleeding occur?

Answer: Late bleeds are rare, but they can be prevented with Vitamin K. Late bleeds happen to:

- 4 to 7 babies out of every 100,000 who do not receive any Vitamin K at birth; more common in Asian countries
- 0 to 0.9 babies out of every 100,000 who receive 2 mg of oral Vitamin K1 after birth, at 4 to 6 days, and at 4 to 6 weeks OR who receive 2 mg of oral Vitamin K1 after birth and 1 mg oral Vitamin K1 every week for 3 months
- 0 to 0.4 babies out of every 100,000 who receive 1 mg injectable Vitamin K1 after birth

Myths vs. Facts

There are several myths on the internet about Vitamin K:

Myth: You do not need Vitamin K if you have a gentle birth.

Fact: Late bleeds can happen to any baby who is exclusively breastfed and does not receive Vitamin K.

Myth: The shot causes leukemia.

Fact: Research has shown that the shot does not cause leukemia.

Myth: You do not need Vitamin K if you use delayed cord clamping.

Fact: There is little-to-no Vitamin K in cord blood and taking extra Vitamin K during pregnancy has not been shown to prevent newborn bleeds.

Myth: The shot is full of toxins.

Fact: The ingredients in the Vitamin K shot are thought to be safe for babies. Also, you can request a preservative-free version of the shot if you like.

Myth: One dose of oral Vitamin K1 at birth is just as effective as the shot.

Fact: The shot is more effective than a single oral dose. There are two oral regimens that seem to be nearly as effective as the shot. However, there is no FDA-approved oral version in the U.S.

Disclaimer & Copyright:

This information does not substitute for a care provider-patient relationship and should not be relied on as personal medical advice. Any information should not be acted upon without professional input from one's own healthcare provider. © 2019. All rights reserved. Evidence Based Birth[®] is a registered trademark. Permission is granted to reproduce this handout in print with complete credit given to the author. Handouts may be distributed freely in print but not sold. This PDF may not be posted online.

“The main risk factors for bleeding are exclusive breastfeeding and not receiving enough Vitamin K after birth.”

1. [Mihatsch et al. \(2016\)](#). "Prevention of Vitamin K Deficiency Bleeding in Newborn Infants: A Position Paper by the ESPGHAN Committee on Nutrition. *JPGN* Vol. 63(1).
2. [Puckett and Offringa. \(2000\)](#). "Prophylactic vitamin K for vitamin K deficiency bleeding in neonates." *Cochrane Database Syst Rev* (4): CD002776.
3. [Shearer \(2009\)](#). "Vitamin K deficiency bleeding in early infancy." *Blood Reviews* 23(2): 49-59.
4. [Van Hasselt et al. \(2008\)](#). "Prevention of Vitamin K deficiency bleeding in infants." *Pediatrics* 121(4): e857.

