

# Vitamin K Deficiency Bleeding (VKDB)

Newfoundland & Labrador – Patient Information



NL Health  
Services

## What is Vitamin K?

- Vitamin K is a substance that our bodies need to form clots and to stop bleeding
- All babies are born with very low levels of vitamin K. This is called “vitamin K deficiency” and babies need vitamin K from another source.
- Without enough vitamin K, babies cannot make the substances used to form clots

## What is Vitamin K deficiency bleeding (VKDB)?

- When bleeding happens because of low levels of vitamin K, this is called vitamin K deficiency bleeding (VKDB)
- Without enough Vitamin K, your baby has a chance of bleeding anywhere in their body. When bleeding happens inside their body it can be difficult to notice.
- **This bleeding can be minor or can be very serious, including bleeding into the brain causing brain damage, lifelong disability and/or death.**

## Why do newborns need Vitamin K?

- Vitamin K from the birth parent is not easily shared with the developing baby during pregnancy
- The intestine of the newborn baby has very little bacteria, which is needed so they can make enough vitamin K on their own
- Your baby’s natural levels of Vitamin K will rise slowly over the next few months but will not fully protect your baby in the newborn period.
- The only way to provide your baby with vitamin K is to give it to them after they are born.

## How is Vitamin K given?

- Vitamin K is given to newborns by one intramuscular (IM) injection (one needle) in their thigh after they are born.
- The Canadian Paediatric Society, College of Family Physicians of Canada, and the American Academy of Pediatrics all agree that this one-time vitamin K dose, given as an IM injection after birth, is the best way to protect newborns from vitamin K deficient bleeding.
- Many research studies have shown that a vitamin K needle is safe for your baby.
- Having your baby skin-to-skin on your chest or breastfeeding will comfort your baby during and after the needle.

## Can I refuse?

Yes, it is your right to receive or decline vitamin K administration for your baby after you discuss the information with your healthcare team.

## Is there an alternative to the Vitamin K needle?

There is an oral Vitamin K product, a liquid given by mouth, that is less effective to protect against this serious condition called vitamin K deficiency bleeding. Three doses are needed.

- Dose 1: at birth
- Dose 2: between 2 – 4 weeks of age
- Dose 3: between 6 – 8 weeks of age

Less research studies have been done on vitamin K given by mouth. However, the studies do show that giving vitamin K by mouth is less effective than giving vitamin K by needle.

Babies who do not receive a vitamin K shot at birth are 81 times more likely to develop late VKDB than infants who do receive a vitamin K shot at birth

## Vitamin K Refusal Form

Your doctors, nurse practitioners, and / or midwives will discuss the benefits and risks of vitamin K with you. If you decide to give your baby the less effective oral vitamin K or not to give vitamin K, there will be additional forms to read and sign.

## References:

Canadian Paediatric Society Fetus and Newborn Committee. Guidelines for vitamin K prophylaxis in newborns. Retrieved from <https://cps.ca/en/documents/position/vitamin-k-prophylaxis-in-newborns>

American Academy of Pediatrics Committee on Fetus and Newborn. Vitamin K and the Newborn Infant Retrieved from <https://publications.aap.org/pediatrics/article/149/3/e2021056036/184866/Vitamin-K-and-the-Newborn-Infant?autologincheck=redirected>

Centre for Disease Control. Vitamin K Deficiency Bleeding. Retrieved from <https://www.cdc.gov/vitamin-k-deficiency/index.html>