Testimony of Amanda Woods, RN, MSN, Neonatal Nurse Practitioner, Board Certified Maine Medical Center
In Support of LD 443 “An Act to Prevent Vitamin K Deficiency Bleeding and Eye Damage in Infants”
Tuesday, February 19, 2019

Senator Gratwick, Representative Hymanson, and distinguished members of the Health and Human Services Committee, I am Amanda Woods and I am a board certified neonatal nurse practitioner at Maine Medical Center. I am here today to testify in support of LD 443, “An Act to Prevent Vitamin K Deficiency Bleeding and Eye Damage in Infants.”

Vitamin K deficiency bleeding (VKDB) occurs when a newborn does not receive a one-time vitamin K injection soon after birth. Infants are prone to VKDB because they are born with low blood clotting factors due to the fact that vitamin K does not cross the placenta and the good bacteria found in the intestinal tract that produces vitamin K are not yet present. Levels can remain low for up to 6 months of life, making infants prone to bleeding. For example, babies can have bruising, bleeding from the umbilical cord or circumcision, nose bleeds, internal bleeding in the gastrointestinal tract, blood in their urine and most significantly intracranial (brain) bleeding, and some babies can even die. In addition, breast milk contains low levels of vitamin K regardless of whether mothers take vitamin K supplements or increase their intake of vitamin K enriched foods. This makes exclusively breast fed infants who did not receive vitamin K, even more susceptible to VKDB. When vitamin K is given shortly after birth, the clotting factors quickly start to normalize. There is a case report in the literature of a male infant who did not receive vitamin K at birth and had bleeding from his circumcision. The bleeding stopped within 30 minutes after vitamin K was given.

In 1961, the American Academy of Pediatrics (AAP) starting recommending the vitamin K injection to all infants within 6 hours of birth. Throughout the years, they have reviewed their recommendation and still affirm that all infants should receive vitamin K after birth. The vitamin K injection is covered by MaineCare and insurance companies. In addition to the AAP, the Centers for Disease Control and Prevention deem the vitamin K injection safe when given to newborns. VKDB is easily prevented by a one-time vitamin K injection when given shortly after birth.
The United States (US) does not surveillance vitamin K administration at birth and does not surveillance cases of VKDB because up until this last decade, cases were rare. In the literature over the last decade, there have been increased reports of VKDB secondary to parents refusing vitamin K administration at birth in the US and internationally. The most devastating side effect can include an intracranial (brain) bleeding, leaving the infant with life-long disabilities that require life-long medical care. Uzbekistan is the only country that has evaluate the cost of giving vitamin K with the cost of treating a baby with VKDB. They found that the cost of caring for an individual with VKDB profoundly outweighed the cost of giving a one-time dose of vitamin K. In the state of Maine the one-time cost of the vitamin K injection is approximately $27. The cost of caring for a child with long-term disabilities places financial burdens on the state as well as the family.

Historically, oral vitamin K administration has been found to be ineffective at preventing VKDB. Oral vitamin K is not approved by the FDA; therefore, the ingredients and the ingredient amounts are unknown.

In the literature, there have reports of parents also refusing prophylactic eye ointment for newborn infants. Erythromycin eye ointment given soon after birth prevents blindness cause by maternal sexually transmitted infections, in particular Neisseria gonorrhea. Even if a mother tests negative for sexually transmitted diseases during her pregnancy, she could have contracted an infection prior to deliver, placing her newborn at risk during the labor and birthing process.

Because of the factors noted above, I urge the Committee to vote Ought to Pass on LD 443 “An Act to Prevent Vitamin K Deficiency Bleeding and Eye Damage in Infants.” Thank you for your time and consideration and I would be happy to answer any questions.