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

First, thank you for the opportunity to discuss an infant which I provided care for in 2012. For privacy reasons, I will refer to her as Pam. Pam was a healthy term infant born after an uncomplicated pregnancy and delivery. She had an uneventful life, until at 27 days of age, when she developed severe bleeding from her umbilicus. Her parents applied direct pressure but were unable to stop the bleeding. They were directed by their pediatrician to take her straight to the emergency department where coagulation studies and a sepsis evaluation was performed. They were unable to stop the bleeding and she was transferred to a major medical center. On admission, she continued to bleed profusely and was noted to be in hemorrhagic shock, which quickly worsened over the next 2 hours. Parents also reported oozing from a small scratch on her leg and a small nose bleed during the previous 24 hours. It was also ascertained that Pam did not receive vitamin K at birth per parental preferences. Laboratory studies were consistent with vitamin K deficiency bleeding. She was immediately given fresh frozen plasma and vitamin K. She required numerous blood product transfusions in order to stop the bleeding and normalize her blood work. Pam’s CT scan showed a small intracranial hemorrhage.

Pam’s parents wanted to help increase awareness of vitamin K deficiency bleeding and consented to allow us to publish a case study, which went to press in 2013. At that time, we could not locate any recent reports of late vitamin K deficiency bleeding in the literature.
In 2013, the Tennessee department of health requested assistance from the Centers for Disease Control (CDC) in investigating a cluster of four late vitamin K deficiency bleeding cases. In each case, parents declined intramuscular vitamin K administration at birth. Three of the infants had diffuse intracranial hemorrhage. In roughly ½ million live births from 2007-2012, investigators found no confirmed cases of vitamin K deficiency bleeding. Random sampling of infants born January–October 2013 at three Nashville area hospitals and 4 major Tennessee nonhospital birthing centers showed rates at which infants did not receive vitamin K intramuscular injection at birth as high as 3.4% in hospitals and 28% in nonhospital birthing centers.

The rise of parental refusal of vitamin K, often related to inaccurate information, is well recognized in the literature. Copious case studies can now be found, including a recent case study from Maine in 2016. A 2018 study published in Pediatrics, the American Academy of Pediatric Journal, in evaluating parental refusal of vitamin K at births in twenty-three states in all regions of the country, confirms that parental refusal of vitamin K is not isolated.

Thank you for allowing me to share Pam’s story with you. 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.