

**New Zealand Paediatric Surveillance Unit  
VITAMIN K DEFICIENCY BLEEDING ,  
(includes Haemorrhagic Disease Of The Newborn) (HDN)**

**Background to Study**

HDN is a rare potentially fatal disorder which presents with spontaneous bleeding/bruising or intracranial haemorrhage. It is associated with prolonged clotting times. Three types of HDN are recognised:

- Early - in the 48 hours of life, almost always related to maternal drug therapy eg phenytoin.
- Classical - 2nd to 7th day of life.
- Late - occurring between one week and six months of age.

In New Zealand, vitamin K prophylaxis is given routinely to almost all newborn infants to prevent HDN. In most cases it has been given intramuscularly. Recent studies suggesting an associated between intramuscular vitamin K and childhood malignancy lead an expert panel of the NH&MRC, ACP, and RACOP to recommend that:

- All healthy full term infants could receive 0.5mg intramuscular vitamin K at birth.
- Infants who are pre-term, unwell or unable to tolerate or absorb vitamin K should receive 0.1 mg intramuscular vitamin K at birth. The mode of the subsequent doses will depend on the condition of the infant.

This study provides a mechanism for the National Epidemiological surveillance of HDN. It allows the effectiveness of various vitamin K regimes to be assessed and the morbidity and mortality associated with HDN to be quantified.

**Objectives:**

1. To provide a mechanism for the national epidemiological surveillance of HDN
2. Determine the morbidity and mortality associated with HDN
3. Evaluate the efficacy of Vitamin K prophylaxis

**CASE DEFINITION AND REPORTING INSTRUCTIONS**

***Any infant under 6 months of age with spontaneous bruising/bleeding or intra cranial haemorrhage associated with prolonged clotting time, not due to an inherited coagulopathy or disseminated intravascular coagulation.***

Please report any definite or probable cases of HDN seen during the proceeding month that satisfy the clinical case definition above.

**Follow-up of positive returns**

A questionnaire requesting further details will be forwarded to the practitioners who report a case. A follow-up questionnaire will be sent 12 months later.

**If you have any questions please contact:**

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