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Updating arrangements for the formulary should be decided upon and implemented at a local level.

## Introduction to monographs on Vitamin K (neonate)

Vitamin K is needed for the blood clotting process and deficiency can increase the risk of vitamin K deficiency bleeding (VKDB). Without vitamin K supplementation, a small number of otherwise healthy newborn infants would develop this serious condition. Many neonates are deficient in vitamin K at birth as its passage across the placenta is poor. Early disease is most likely to occur within 7 days of life. Rarely (4.4-10.5 per 100,000 births) babies can develop a late and more severe form of this disease after the first week and up to 26 weeks (about 6 months) of life. Intracranial bleeding may result. Of those affected, 30-50% will die or suffer severe brain damage. Prophylactic vitamin K can prevent VKDB and the current guideline recommends one dose of intramuscular vitamin K for all newborn babies.

Babies at high risk of early VKDB are those whose mothers have received anticonvulsants, had a traumatic or prolonged delivery, premature babies, birth asphyxiated babies or those with serious illness. Late VKDB risks are higher in babies with hepatic disease, or biliary obstruction, or babies who have bleeding or spontaneous bruising in the neonatal period, or babies who are ill from other causes that make them unable to absorb sufficient vitamin K such as chronic diarrhoea and cystic fibrosis. These risks are greater in exclusively breastfed babies as breast milk contains less vitamin K and its absorption may be poor.

It is essential to discuss these issues with parents who have any concerns about prophylactic vitamin K. Parents must give permission for administration (by any route). Information should be provided to allow parents to make an informed decision. For example that current expert opinion has concluded that available data does not support an increased risk of cancer, including leukaemia, with vitamin K.

Each NHS board should have a policy for the administration of vitamin K to the newborn which should be followed.

It is important that if women do not wish their baby to have a particular form of vitamin K there is an alternative available. If vegetarian parents do not want Konakion® MM Paediatric, NeoKay® may be given. Some health boards require this to be prescribed by a paediatrician. It should however be shared with woman that the content (vitamin K) is contained in a capsule that contains gelatin, derived from animal source, but the capsule will not be given to baby.

**If a woman refuses any form of vitamin K to be administered a paediatrician should be informed.**

Some babies may require intravenous phytomenadione. These babies must be referred to a neonatologist/paediatrician as intravenous administration is not covered by the Midwifery Exemptions and it must be prescribed by an authorised prescriber/doctor.

The options for administering vitamin K are either intramuscular or orally in accordance with local dose schedules and local guidelines.

### Monographs on Vitamin K for neonate

1 <sup>st</sup> choice - Phytomenadione (Konakion MM Paediatric®) IM – Neonate	POM M Ex
2 <sup>nd</sup> choice - Phytomenadione (Konakion MM Paediatric® or Neokay®) Oral – Neonate	POM M Ex

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### References

1. <http://www.bnfc.org/>
2. Summary of product characteristics (Konakion MM Paediatric®) Text revision 3.4.2019  
<http://www.medicines.org.uk> Accessed 2.1.2020
3. Summary of product characteristics (Neokay®) Text revision 7.6.2017  
<http://www.medicines.org.uk> Accessed 2.1.2020