Purpose: To identify phenytoin and fosphenytoin as high alert medications and provide guidelines for the safe intravenous administration of these medications to patients. These medications have cardiovascular effects that can be more pronounced when given parenterally.

Prescribing:
1. To prevent and treat seizures

Dispensing:
1. Available on the automated dispensing system (ADS) in critical care areas only
2. Pharmacy will dispense to general care areas if needed

Administration:
1. Restricted in the general care areas and can only be administered parenterally by a physician.
2. Critical care areas may use these medications as detailed in their approved unit specific policy.

Specific Monitoring Parameters:
1. A physician must monitor the patient's EKG continuously during administration and for the first hour after administration on general care floors.
2. Seizures
3. Phenytoin Serum levels - Therapeutic 10-20 mcg/mL. Levels should be drawn after treatment initiation or dosage change. Phenytoin is highly protein bound – the level must be corrected for low albumin.
4. Albumin
5. Serum Creatinine

Adverse Effects:
   The patient should be monitored for the following adverse effects:
1. CNS (dose related): Slurred speech, dizziness, drowsiness, ataxia
2. Cardiovascular (IV): Hypotension, bradycardia, arrhythmias, Cardiovascular collapse (especially with rapid I.V. use)
3. Ocular (dose related): Nystagmus, blurred vision

References:
1. Thompson Micromedex. http://www.thomsonhc.com/hcs/librarian/ND_T/HCS/ND_PR/Main/CS/06E2ED/DUPLICATIONSHIELDSYNC/1A428B/ND_PG/PRIH/ND_B/HCS/SBK/1/ND_P/Main/PFActionId/hcs.common.RetrieveDocumentCommon/DocId/923833/ContentSetId/100/SearchTerm/fosphenytoin/SearchOption/BeginWith Accessed 10/28/10.
2. Lexi-Comp Pediatric Handbook 17th edition.