

NURSING POLICY AND PROCEDURE

TITLE: DOUBLE CHECK OF HIGH RISK MEDICATIONS

NUMBER: 02-13-

04

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PURPOSE: To provide safe and effective medication therapy as prescribed by the physician.

BACKGROUND:

Certain medications or classes of medications are known to have a higher incidence of administration errors. Special precautions should be taken when administering these "high risk" medications to prevent adverse events and outcomes in patients.

Calculations are also a known cause of dosage errors. Miscalculation can be caused by a confusion of products, non-standard dosage forms, lack of unit dose packaging and misunderstanding of calculation skills.

POLICY:

1. A second check by a second person will be required for all "high risk" medications (as defined below).

2. Assistance in calculations, including dosage charts, weight charts, pre-programmed infusion pumps, and clear labeling on the dispensed dose and the computerized Medication Administration Record (MAR) will promote medication safety by helping to facilitate a second check of calculations.

Scope Statement: All RN, LPN (for SQ/IM injections), Paramedics, pharmacist

Guidelines:

1. High risk medications are those medications identified by JCAHO, ISMP or other

publications on medication safety and include:

- a. Insulin products
- b. Opiates and narcotics - (PCA and epidural therapy only)
- c. Potassium chloride or potassium phosphate (IV piggybacks greater than 20 mEq)
- d. Anticoagulants (heparin, weight based LMWH doses) - IV, SQ
- e. Concentrated NaCl (3% or higher)
- f. Calcium (IV)
- g. Magnesium (IV)
- h. Neuromuscular blockers
- i. Chemotherapy - IV, PO, intrathecal
- j. Neonatal TPNs
- k. All high risk medication infusions that involve calculations based on body weight

and are infused via a controlled infusion device. (See HOSPITAL's adult critical care infusion chart posted in ICU and PCU). Including: amrinone, diltiazem, dobutamine, dopamine, epinephrine, esmolol, amiodarone, isoproterenol, lidocaine, milrinone, cardene, nitroglycerin, nitroprusside, norepinephrine, pentobarbital, phenylephrine, procainamide, quinidine, thiopental, fenoldopam, nesiritide.

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AUTHORIZED BY: Nursing Practice Council
AUTHOR: Council
REVISION DATE: 8/03
NEXT REVIEW DATE: 8/06

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2. A double check of all doses and calculations is needed prior to administration of the above high risk medications.
- a. Two individuals should independently check calculations of high-risk drugs.
 - b. The double check should include the chart order, the calculated dose and the pump infusion.
 - c. For individual doses drawn up to give IV push (example: insulin or heparin bolus):
 - Double check that the correct product is selected (and the correct concentration) and double check the dose drawn up.
 - d. For infusions via controlled infusion devices (example: IV potassium, heparin, dopamine, etc):
 - Double check that the correct product is selected (and the correct concentration)
 - Double check the initial set up of the infusion device
 - A double check is needed when a new bag is hung
 - A double check is needed if there is an addition/deletion of one of the additives
 - A change in concentration/strength (double/quad)
 - 1 Person should ready the solution/medication for administration.

-Second person should independently verify correct drug, drug concentration, rate of infusion, patient and line attachment

e. A double check can be performed by:

- registered nurses
- LPNs (IM, SQ doses only)
- Paramedics
- Pharmacist

f. Distal end of tubing shall be clearly marked with medication infusing.

g. IMED chamber shall be clearly labeled with medication infusing.

h. Documentation on the MAR will be required by two registered nurses (or LPN

for IM/SQ injections) when:

- a dose is drawn up (for insulin, or bolus IV doses of medications)
- an infusion of a high risk IV product is initiated or changed:
 - initial set up of the infusion
 - change in concentration
 - change in medication
 - any bolus of medication is needed

i. If there is a question regarding the drug, dosage, concentration, or calculation,

consult reference materials, another nurse, a physician or a pharmacist.

j. Administer individual medications as soon as possible after the dose has been

prepared.

References:

Institute For Safe Medication Practices (ISMP) Medication Safety Alert:
March 6, 2003
December 12, 2001