PURPOSE:
To provide a safe environment for nurses, patients and caregivers during administration of IV/IM/SC chemotherapy in the home.

CONSIDERATIONS:
1. Nurses administering IV/IM/SC chemotherapy in the home should have specialized education in the administration of antineoplastic agents.
2. All chemotherapy solutions should be premixed in a biological safety cabinet (BSC)-Class II Type B, or Class III (done in a pharmacy).
3. Syringes and IV sets with luer-lok type fittings are to be used to prevent separation and spills.
4. Proper aseptic technique must be used in the preparation and administration of antineoplastic drugs in order to protect the patient, the family, and the nurse.
5. All equipment used in drug preparation and administration and any unused drug(s) should be treated as cytotoxic waste and disposed of according to individual agency's policies as well as local, state, and federal regulations.
6. Use at least two patient identifiers prior to administering medications.
7. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.
8. DO NOT eat or drink in areas where antineoplastic agents are prepared or administered.
9. The National Institute for Occupational Safety and Health (NIOSH) recommends the use of two pairs of gloves when handling antineoplastic agents.

EQUIPMENT:
Disposable, surgical, latex, unpowdered gloves that cover the gown cuff (unless the manufacturer of the antineoplastic agent specifies a particular glove material)
Disposable gown (lint-free, low-permeability fabric with a closed front, long sleeves, and elastic or knit closed cuffs)
Plastic face shield or splash goggles – use whenever splashes, sprays or aerosols are generated
Disposable, absorbent pads
Alcohol wipes
Puncture-proof container
Labeled, impervious trash bags
4x4 gauze pads
Soap
Paper towels

PROCEDURE:
1. Administration Safety:
   a. Adhere to Standard Precautions.
   b. Identify patient and explain procedure.
   c. Avoid skin contact. Don protective garments, disposable gown, gloves, goggles etc.
   d. Place drugs and supplies on a surface lined with a disposable, absorbent pad.
   e. Prime IV sets by holding tubing end with 4x4 gauze pad and clearing tube with antineoplastic agent onto disposable pad. Wipe syringes, IV bottles/bags and IV tubing clean with an alcohol wipe, if any drug contamination occurs. Discard 4x4 gauge pad, alcohol wipe, and disposable pad in appropriate container.
   f. Use luer-lok fittings and/or tape connections securely to prevent disconnection or drug leakage.
   g. If unable to remain with the patient during the entire infusion, a control device must be used for patient safety.
   h. Administer chemotherapy as ordered. (See Administration of Intravenous Chemotherapeutic Agents.)
   i. When infusion is complete, remove piggyback setup (if used) with gauze wrapped around the site to prevent leakage.
2. Disposal:
   a. Follow local, state and Environmental Protection Agency (EPA) recommendations for disposal of hazardous waste, and chemotherapeutic medications and supplies.
   b. DO NOT dispose of unused drugs or contaminated solutions in drains or toilets. Use the original vial, IV bag/bottle, or other closed container for liquid waste. Unused drugs should be picked up by or returned to the dispensing vendor.
   c. DO NOT clip needles, crush, or disassemble syringes, or IV tubing. Dispose of all contaminated equipment intact to prevent aerosolization, leaks and spills.
   d. Place used needles/syringes in a puncture-proof container.
   e. DO NOT use protective clothing that has been contaminated. Discard gloves and other contaminated equipment in an impervious plastic bag that has been labeled with a distinctive warning label. Dispose of bags according to individual agency's policy and local, state and federal regulations.
   f. Wash hands thoroughly after handling drugs and equipment.
3. Accidental Exposures:
   a. Remove contaminated gloves or gown immediately and discard properly.
b. Wash skin contaminated with an antineoplastic agent with soap (not a germicidal agent) and water.

c. Flood an eye that is accidentally exposed to an antineoplastic agent with water for at least 5 minutes. Seek medical attention immediately.

d. Teach the patient and caregiver what to do if an accidental exposure to chemotherapy occurs.

e. Document any exposure according to individual agency's policy.

4. Spills:

   a. A commercially prepared spill kit should be in the home with instructions on its use in the event of a spill.

   b. If a spill occurs, it should be cleaned up immediately. Follow spill kit instructions. The patient and caregiver should be instructed to call the nurse immediately to report a spill.

   c. Use a disposable, absorbent pad beneath the IV tubing, syringe, or other likely site of a spill.

   d. If a spill occurs on the patient/caregiver's clothing or sheets, wash these articles in hot water separate from other articles.

   e. If a spill occurs on an unprotected piece of furniture, i.e., sofa or mattress, scrub the area with detergent solution and water, rinse with clean water and dispose of contaminated materials. This procedure should be performed wearing double, unpowdered, gloves.

   f. If a patient is receiving a continuous infusion via a pump, a plastic mattress pad should be used to protect the bed in case of a spill.

   g. Document any spill according to individual agency's policy.

5. Handling of patient excreta:

   a. Instruct the patient, family and other caregivers that handling of patient excreta requires special handling for the first 48 hours after chemotherapy. [Note: If patient is receiving Thiotepa, this period is extended to 72 hours.]

   b. Wear disposable, surgical, unpowdered gloves and a disposable gown when handling body secretions such as blood, vomitus or excreta from patients who received chemotherapy within the previous 48 hours (72 hours with Thiotepa).

   c. Instruct the patient and the family to use care when handling the vomitus or excreta of the patient for 72 hours after treatment and to use good hand washing techniques.

**AFTERCARE:**

1. Document in patient’s record:

   a. Procedure and observations.

   b. Instructions given to patient/caregiver.

   c. Response to procedure.

   d. Communication with physician.