PURPOSE:
To provide safe administration of IV chemotherapy in the home.

CONSIDERATIONS:
1. All chemotherapy solutions should be premixed in a controlled setting under a laminar flow hood (done in a pharmacy setting).
2. Syringes and IV sets with Luer-Lok™ type fittings are to be used to prevent separation and spills.
3. Medications should not be mixed. Separate syringes are to be used for each medication.
4. Nurses performing this procedure should have successfully completed an agency-approved chemotherapy course prior to the administration of IV chemotherapeutic agents.
5. Chemotherapy protocols are individualized.
6. Specific orders for each chemotherapeutic dose to be given must be obtained from the physician prior to administration. Verbal or telephone orders for chemotherapy should be discouraged. Follow agency policy regarding use of consent forms.
7. Blood levels must be drawn, reported to physician, and approved for hematopoietic safety 24 to 48 hours prior to the time of chemotherapy administration.
8. Prior to administration of each new antineoplastic drug, instruct patient about the drug, type, method of administration and possible side effects.
9. Some medications are potent vesicants that may cause severe tissue damage if extravasation occurs. Be prepared to administer prompt treatment. (See Medications - Nursing Management of Extravasation.)
10. Investigative research continues on the necessary precautions to be taken for safe handling of antineoplastic agents. Follow precautions. (See Medications- Safe Handling of Antineoplastic Agents) as well as individual agency policy.
11. Use at least 2 patient identifiers prior to administering medications.
12. 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.

EQUIPMENT:
Disposable, surgical, unpowdered gloves
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
Supplies specific to each type of drug, route of administration, and type of venous access (See Infusion Therapy.)
Impervious trash bag, labeled cytotoxic or hazardous waste
Puncture-proof container
Alcohol wipes
Antimicrobial wipes
Commercially prepared spill kit
Extravasation kit, if indicated
Self-adhesive bandage

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Don protective garments, disposable gown, gloves, etc.
4. Assemble supplies and equipment.
5. IV push administration of chemotherapeutic agent through peripheral venous access:
   a. Cleanse skin with antimicrobial wipe and allow to air dry completely. If antimicrobial is contraindicated, cleanse skin with 70 percent Isopropyl alcohol, rubbing vigorously for a minimum of 30 seconds or until the final applicator is visibly clean.
   b. Perform venipuncture. (See Intravenous Therapy Administration.)
   c. Check IV site for patency.
   d. Administer IV push as ordered, checking for blood return after each 1-2 mL of agent infused to validate placement of needle. If infiltration of drug occurs, (See Medications - Nursing Management of Extravasation.) For multiple medications, flush between each drug with 3-10 mL normal saline.
   e. After complete dosage is given, flush line with 3-10 mL normal saline.
   f. Remove needle and cover site with small dressing or self-adhesive bandage.
6. IV infusion of a chemotherapeutic agent through peripheral venous access:
   a. Prepare IV administration set, attach to solution container with medication as ordered by physician. Prime IV tubing by holding tubing end with 4x4 gauze pad and clearing tube with antineoplastic solution onto disposable pad. Maintain sterility of tubing end. Discard 4x4 gauze pad and disposable pad in appropriate container.
   b. Cleanse skin and perform venipuncture as above in Steps 5a and 5b.
   c. Check IV site for patency and adequate blood return.
   d. Attach primed tubing to IV needle hub; administer at rate prescribed. When unable to
stay with patient during entire infusion, a control device must be used for patient safety.
e. Instruct patient/caregiver to observe for signs and symptoms of infiltration, infection, phlebitis and when to notify the visiting nurse. (See Intravenous Therapy Administration.)

[Note: For long-term, continuous IV therapy, central venous access should be considered.]

7. IV administration of a chemotherapeutic agent through a central venous catheter:
   a. Cleanse injection port with antimicrobial wipe.
   b. Attach syringe and open tubing clamp, if used.
   c. Flush catheter tubing with 5 mL normal saline.
   d. Infuse chemotherapeutic agents either IV push or IV infusion, as prescribed. Flush tubing with 3-10 mL normal saline after administration of each drug.
   e. After all chemotherapy has been given, flush central venous catheter with 3-10 mL normal saline and heparinize catheter as ordered by physician.

8. IV administration of a chemotherapeutic agent through an implanted vascular access device (IVAD):
   a. If non-coring needle and extension tubing are not in place, access IVAD according to procedure. (See Infusion Therapy.)
   b. Cleanse injection port of extension tubing with antimicrobial wipe.
   c. Attach syringe and open tubing clamp.
   d. Confirm non-coring needle placement by obtaining a blood return. Flush tubing with 3-10 mL normal saline.
   e. Infuse chemotherapeutic agents either IV push or IV infusion, as prescribed. Flush with 3-10 mL normal saline after each drug administration.
   f. After all chemotherapy has been given, flush with 5 mL normal saline and heparinize IVAD, as ordered by physician.

9. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Medication administered, dose, time, rate and route.
   b. Type and appearance of venous access site.
   c. Type of blood return and frequency of assessing blood return.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
2. Report of blood values is to be placed in patient's chart.