PURPOSE:
To reduce the incidence of contamination of intravenous (IV) solution or tubing.

CONSIDERATIONS:
1. IV tubing should be changed according to national guidelines. (See Infusion Therapy - Intravenous Therapy Administration.)
2. All intravenous solution containers should be checked for expiration date, presence of cracks, discoloration or sediment. Defective solutions or related supplies should be returned to pharmacy supplier with a written report of findings.
3. (See Safe Handling of Antineoplastic Agents for disposal of antineoplastic medications.)
4. 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:
- Gloves
- IV administration set
- 0.22 micron filter
- IV solution container
- Alcohol applicator (wipe/swab/disk/ampule)
- Needle or needle less adaptor
- Tape
- Catheter clamp (optional)
- IV pole (optional)
- IV pump (optional)
- Puncture-proof container
- Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure and purpose to patient/caregiver.
3. Assemble equipment on a clean surface close to the patient.
4. Place patient in comfortable position, ensuring that site is accessible.
5. Ensure adequate lighting.
6. Remove administration set from package and close roller clamp.
7. Attach filter to end of tubing opposite of the spike, if appropriate.
8. Invert solution container, remove protective cover and insert administration set spike.
9. Attach sterile needle or needle less adaptor to end of administration set.
10. Suspend solution container on IV pole, squeeze drip chamber half full and prime tubing.
11. Open clamp to allow fluid to prime tubing. Close roller clamp after priming tubing.
12. If using pump: Close clamp on used administration set and remove from pump. Insert new set according to manufacturer's guidelines.
13. Infusion by gravity: Close clamp on used administration set.
14. Disconnect old administration set from venous line access device and discard.
15. Clean injection port with alcohol applicator using friction. Allow to air dry. DO NOT blot.
16. Aseptically connect new administration set into injection port.
17. Unclamp line.
18. Adjust flow to prescribed rate.
19. Secure the junction of catheter extension and new administration set using tape with a tab for ease of removal if luer lock connector is not used.
20. Assess IV site and perform dressing change, if needed.
21. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's records:
   a. Amount of solution/medication infused from previous container.
   b. Existing solution, type, volume, rate and time started.
   c. Type and appearance of venous access site.
   d. Patient's response to procedure, side effects and management.
   e. Instructions given to patient/caregiver.
   f. Communication with physician.