

**PROTOCOL/  
PROCEDURE FOR: IV Push Medications**

- POLICY:**
1. A written order must be obtained by a physician/licensed independent practitioner (LIP) before administration of an IV push medication, except during a Code Blue.
  2. Each unit's list of approved medications that may be administered via IV push is listed in each unit's protocol for IV Push Medication: Approved List of.
  3. The Micromedex Drug Information System, Lexicomp System, and Physician Drug Reference (PDR) provide reference information for methods (e.g. dilution), dosages, and time frames in which medications are to be administered. Unit pharmacists should be consulted for assistance as needed.

**SUPPORTIVE DATA:** Some indications for IV push medications are:

- Emergency administration during cardiopulmonary resuscitation
- When quicker response to the medication is required (e.g. Furosemide)
- Administration of a "loading" dose of a medication to rapidly achieve a desired medication level
- To avoid incompatibility problems when multiple medications are being administered

**DESIRED PATIENT**

**OUTCOMES:** Patients will experience the desired effect of IV push medications without adverse effects or events.

**CLINICAL  
ASSESSMENT AND**

- CARE:**
1. Before administration of the medication:
    - a. Dilute the medication as recommended by pharmacy references to minimize potential irritation to the veins.
    - b. Determine the recommended and safest rate of administration. Most medications are given slowly (rarely over less than one minute; longer infusion times may be needed). Too rapid administration may result in serious adverse effects.
    - c. Check for possible incompatibility with existing infusions or medications. Do not administer IV push medications into an infusion containing vasoactive agents, Heparin infusions, or other continuously-infusing medications because you will change their rate of administration.
    - d. Assess the patient's condition and ability to tolerate the medication.
    - e. Confirm the patency of the IV.

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- f. Ascertain how long the IV has been in place. For some medications, such as vesicants, a catheter placement of  $\leq 24$  hours is desirable.
2. During administration:
  - a. Watch the patient's reaction to the medication:
    - 1) Assess for major side effects such as anaphylaxis, respiratory distress, tachycardia, bradycardia, or seizures. If present, stop the medication and implement emergency measures as needed.
    - 2) Assess for minor side effects such as nausea, flushing, skin rash, or confusion. If present, stop the medication and report to MD/LIP.
3. After administration, assess the patient for desired effects of the medication.

**PROCEDURE FOR: IV Push Medication Administration**

**EQUIPMENT:** Antiseptic swabs  
Desired medication  
Normal saline flush  
10 or 12 ml syringe; 3 ml syringe for newborns  
Gloves - sterile or non-sterile, depending on type of access device

**PROCEDURE:**

**ACTION**

**POINTS OF EMPHASIS**

1. Wash hands.
2. Explain the procedure to the patient.
3. Don gloves.
4. Using friction, cleanse the port to be accessed with antiseptic swab.
5. Insert the normal-saline filled syringe into the access port and aspirate slightly to determine patency as needed.
6. Using a 10 or 12 ml syringe, flush with 3 ml of normal saline - assess whether the patient experiences pain with flushing and evaluate the site for signs of infiltration.
7. Remove flush syringe and connect medication syringe to the access device.
8. Administer medication at the desired rate following the recommended administration guidelines. Assess for adverse effects of the medication.
6. A smaller syringe and flush volume are used for neonatal patients.
7. Ensure that no air enters the system.

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9. After completion of medication infusion, attach flush syringe and flush the line with a minimum of 3 ml saline. Remove the syringe while still pushing on the plunger to achieve positive pressure and to prevent blood back-up into the line.
9. Be sure to flush slowly to avoid rapid infusion of medication that remains in the catheter or tubing.
  - a. Smaller flush volumes are needed in newborns and infants.

**APPROVAL:** Nursing Standards Committee

**EFFECTIVE DATE:** 2/07

**REVISION DATES:** 7/07, 7/09