



Medication Administration

OBJECTIVE

- Demonstrate the proper procedure for medication administration via the intravenous (IV) or intraosseous (IO) route.

REFERENCE

- *Pediatric Education for Prehospital Professionals*, 4th Edition

EVALUATION

- The instructor will verify the accuracy of the student's ability to properly administer medications via the intravenous (IV) or intraosseous (IO) route.

EQUIPMENT

- Prefilled syringe or vial filled with expired medication or water
- IV fluid (normal saline or lactated ringer)
- IV administration set (Buretrol or 60 drops per milliliter set)
- Labeling marker (Sharpie or preferred device)
- Alcohol pads
- Sharps container
- Personal protective equipment

INSTRUCTOR GUIDELINES

1. Ensure that each student has all required equipment/materials.
2. Read the objective and the evaluation statement to students.

PERFORMANCE STEPS

1. The student verbalizes that body substance isolation (BSI) precautions were considered.
2. The student enquires about allergies and previous medication reactions.
3. The student explains the medication they are giving and why.

4. The student prepares the equipment:
 - a) Check patency of the established IV.
 - b) Check and recheck the medication.
 - Medication solution clarity and expiration date
 - Right patient
 - Right medication
 - Right dose
 - Right route
 - Right time
 - Right documentation and reporting
 - Right assessment
 - Right to refuse
 - Right evaluation
 - Right patient education
5. The student looks up the drug dosage and drip rate using an electronic dosing tool or a formulary.
6. The student verbally crosschecks with other provider(s) to ensure the correct medication on vial, expiration date, dose, and route.
7. The student assembles the prefilled syringe or draws up the medication into syringe.
 - a) The student immediately disposes of any used sharps in a proper container.
8. The student expels air, if needed.
9. The student selects the appropriate IV/IO fluid.
 - a) The student verbalizes the proper solution, clarity, and expiration date.
10. The student cleanses the medication port of the infusion bag with an alcohol pad.
11. The student adds the medication to the IV/IO solution or spikes a premixed solution bag.
12. The student marks the solution properly with a medication label.
 - a) Label is marked with date, time, medication, concentration, and preparer's initials.
13. The student selects the appropriate administration set (Buretrol or 60 drops per milliliter set).

- 14.** The student attaches the administration set to infusion bag.
 - a)** Connects the bag to the tubing.
 - b)** Fills the drip chamber.
 - c)** Flushes the tubing.
 - d)** Maintains sterility of tubing end.
- 15.** The student cleans the medication port of the main IV/IO line with an alcohol pad.
- 16.** The student connects the infusion set to the main IV/IO and stops flow of the main IV/IO.
- 17.** The student sets the drip rate to deliver the correct dose of medication.
- 18.** The student secures the infusion line with tape or a commercial device.
- 19.** The student documents the dose and time of administration.
- 20.** The student continues to monitor the injection site for signs of swelling or reactions.
- 21.** The student monitors the patient for adverse and desired effects.

CRITICAL CRITERIA

- The student fails to use appropriate PPE precautions.
- The student fails to assess for patient allergies and medication reactions.
- The student fails to ensure that the 10 rights of medication administration have been followed.
- The student fails to clean the medication port prior to medication administration.
- The student does not dispose of the sharp immediately after use.
- The student fails to ensure that the correct medication and amount is administered.
- The student fails to monitor the patient for adverse and desired effects.
- The student performed the procedure in a manner that was dangerous to the patient.