

South Metro Fire Department
Clinical Policies and Procedures

Title: Medication Administration and Safety
Effective Date: December 15, 2015
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Standard: Patient Care and Transport
Policy: All medications must be administered in a safe and effective manner that ensures patient safety and avoids error.

I. **Purpose**

- To reduce the risk of medication errors and improve patient safety.
- Provide a standard approach and decision-making tool which assures delivery of the correct dose of the correct medication by the correct route at the correct rate to every patient with every administration.
- Establish a culture of team based shared responsibility to achieve error free and harm free medication administration.
- To describe procedures for communicating and documenting medication administration errors and adverse reactions.

II. **Definitions**

- A. **Medication Error** – Administration of a medication that is one or more of the following;
- Wrong Patient
 - Wrong Drug
 - Wrong Dose
 - Wrong Route
 - Wrong Time
- B. **Adverse Reaction** - any unexpected or dangerous reaction to a drug. An unwanted effect caused by the administration of a drug.

III. **Procedure**

Medication Preparation and Solution Labeling

- A. Only administer medications and solutions labeled in accordance with this policy.
- B. Label a medication anytime it is removed from its original container (e.g. aspirated from a vial into a syringe).
- C. Labeling is not necessary when the clinician prepares and administers the medication immediately (i.e., the very next action).
- D. Prepare the label and medication concurrently. Do not pre-label containers.

- E. Verify the label verbally and visually if the person preparing the medication is not administering the medication.
- F. Do not administer a medication without a label..
- G. As an alternative to attaching a label when a medication is drawn from a vial into a syringe, the vial can be left attached to the syringe that holds the vial contents.
- H. Do not prepare medications or transfer them from their original containers prior to patient contact..

Medication Administration and Documentation

- A. Clinicians may only prepare and administer medications within their scopes of practice (e.g., An EMT may hand a syringe with medication to a Paramedic. An EMT may not prepare or administer a medication outside their scope of practice).
- B. Learn and know information about medications including:
 - Indications for the medication, as well precautions and contraindications.
 - Expected action and outcome from the use of the medication.
 - Appropriate route and normal dose ranges.
 - Potential side effects, adverse reactions, or interactions with other medications.
 - Actions to take when adverse reactions or interactions occur.
- C. Except in emergency situations, the person preparing the medication for administration administers it. If you need to hand the prepared medication to another person who will administer it, the vial should be handed off as well as pertinent information (medication, concentration, amount to be given) should be shared between patient care providers.
- D. Medication should not be prepared prior to patient contact and assessment. Any medications prepared for a patient will only be given to that patient or discarded.
- E. Medications should only be administered if there is a clear indication for its need and that indication must be documented in the patient care report. Consult guidelines, dose charts and reference materials as needed in advance of any administration.
- F. No medications shall be added to or infused through the same tubing with blood products.
- G. Prior to and after administration, assure that the following “6 Rights” are addressed:
 - Right Patient
 - Right Drug
 - Right Dose
 - Right Route
 - Right Time
 - Right Documentation, including legible orders
- H. Before administration, visually examine medication solutions for particulates, discoloration, container damage or tampering, and that the medication has not

expired.

- I. Assess appropriate vital signs, physiologic measures, or lab values prior to administration.
- J. For IV or IO route, assure site is patent prior to administration.
- K. Before administration, pause to verbally verify with another crew member or qualified care provider the following:
 - the name of the medication
 - the appropriateness for this patient
 - the intended dose and concentration
 - that the correct dose or volume was prepared
- L. A second verification that the correct medication container was selected is especially important when the container had previously been removed from and was not stored in its original packaging.
- M. Identify if the patient has had any past allergies or reactions to this or similar medications.
- N. After administration, observe and assess the patient for response to the medication, side effects, or adverse reactions. Take appropriate actions if needed.
- O. Accurately document all details of the medication administered in the patient care report. Include any changes in the patient's condition observed or that the patient reports that are attributable to this administration and any adverse or untoward reactions or outcomes.
- P. Unused portions of any controlled substance must be wasted or otherwise disposed of witnessed by two care providers and documented according to procedures described in the controlled substance policy.

Medication Administration Safety Check

- A. The Medication Administration Safety Check procedure must be completed with another HEMT/SMFD provider before all medication administrations. It can be adapted for specific circumstances and situations as noted in the following.
- B. If a second HEMT/SMFD provider is not present, another health care provider may be utilized to accomplish the verification procedure. Using direct Medical Control is an option and encouraged when time allows and there is any uncertainty or risk associated with any medication administration.
- C. It is essential that all patient care providers be actively engaged in the procedure.
- D. If administration is based on a direct Medical Control verbal order, confirm by repeating the order, including the medication name, dosing units, route and rate of administration.
- E. If a discrepancy, disagreement, or a need for clarification is encountered at any point in the procedure, it must be resolved prior to continuing. When the patient care providers resolve any conflict and make corrections as necessary, the procedure will need to begin again.

- F. If there is only one provider with the patient, as when the second provider is driving, visual verification with the other provider of the supply container, the milliliters to administer, or the programming of a device is not mandated so as to avoid creating a driving distraction.
- G. If the medication is to be administered by a device such as an IV pump, the verification process includes the second provider confirming the parameters and values programmed into the device whenever the situation allows.
- H. If the patient's condition changes or an interruption occurs before administration, the Medication Administration Safety Check procedure must be initiated again.
- I. During verification between patient care providers, avoid ambiguous confirmations and use the specific and detailed language described in the eight-step Medication Administration Safety Check procedure.

Medication Administration Safety Check Procedure

1. The person preparing or giving the medication is designated as Provider One who initiates and requests the procedure by stating the phrase "Medication Check."
2. Provider Two, who verifies, responds that they are "Ready." It is important to avoid using ambiguous responses such as "okay" since another response may be interpreted many different ways and may not effectively reflect the provider's condition to participate.
3. Provider One states "I am going to give..." and then provides the following information:
 - Drug name
 - Dose in drug weight
 - Volume in milliliters
 - Route of administration
 - Rate of administration
 - Reason / Indication
4. Only if Provider Two is in concurrence that all of the five items above are correct and appropriate, respond with the question "Are there contraindications?" If there is a question regarding the indication or appropriateness of the medication the administration process stops until any challenged item is corrected or agreed upon.
5. Provider One must check the expiration date if not done so already, verify that the patient's vital signs are appropriate, and acknowledges if there are any known drug allergies. Only then should Provider One respond by saying either "No contraindications".
6. Provider One should then:
 - State the drug concentration
 - State the milliliter (mL) volume they intend to deliver (or number of units if not a liquid)
 - Show the vial or original container to Provider Two, if safe to do so.
7. Only if Provider Two agrees and makes a positive visual verification of milliliters,

respond with the phrase “**I agree; give it.**” Essentially, both providers need to be in agreement on all aspects or resolve any discrepancies before the administration proceeds.

Reporting Medication Events or Adverse Reactions

- A. If any medication administration or omission error occurs, or a suspected adverse reaction event is discovered, immediately contact Medical Control to determine if any additional treatments are necessary to reduce potential adverse outcomes. Communicate by phone or face-to-face rather than radio.
- B. At the time of patient hand-off, verbally inform the next care provider of any known or suspected incorrect administrations or possible adverse reaction related to a medication or solution administration.
- C. Save and label all medication containers, packaging and supplies that were involved in any type of adverse medication event. Do not waste any remaining medication or solution.
- D. As soon as possible, notify a Supervisor about any medication error or adverse reaction and report the actions taken.
- E. Factually document the event in the patient care report. Include your assessments of the patient after administration and record any changes in the patient’s clinical condition. Do not document any speculation about the cause of any patient changes, cause of the error, or the potential outcomes.
- F. As soon as possible, and before the end of your shift, complete and submit appropriate SMFD clinical incident report.
- G. Do not attempt to inform the patient, their family, or significant others of a discovered or suspected treatment error unless instructed to do so by a Supervisor, Chief Officer or HEMT Medical Director.

IV. Documentation

- For every medication administration, document the indications to support its use as well as pertinent patient assessment findings before and after administration.
- For any suspected medication adverse reaction, document in the patient care report actions taken and the name of the receiving provider advised of the event.
- Complete a detailed clinical incident report separate from the patient care report for any deviations to this guideline, patient adverse reaction, or any medication administration error which is actual, suspected, or near-miss in nature. Provide suspected cause of the error or adverse reaction including steps that should be taken in the future to avoid such an event.

Previous Versions: