

# **COMBAT MEDIC/CORPSMAN** TACTICAL COMBAT CASUALTY CARE

# MODULE 15: PAIN MEDICATION (ANALGESIA) SKILL INSTRUCTIONS

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Committee on Tactical Combat Casualty Care (CoTCCC)



# **SKILL INSTRUCTIONS**



# ORAL MEDICATION ADMINISTRATION INSTRUCTION

TASK:	Administer a medication orally
CONDITION:	Given a scenario in Tactical Field Care where the casualty can swallow and oral medication(s) are indicated
STANDARD:	Administer a medication orally following all steps and meeting all performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate oral medication, water

# PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather necessary medication(s) and water.
- **03** Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- 04 If the medication(s) are in a blister pack, peel back the foil to remove the appropriate dose of the medication; if the medication(s) are loose in a package or bottle, take out the appropriate dose.
  NOTE: Do not push the tablet through the foil to avoid damage to the medication, if possible.
- **05** If the casualty is conscious and can swallow, have the casualty swallow the appropriate pill(s) with water.

**NOTE:** It may be necessary to assist the casualty by placing the medication(s) in their mouth and/or positioning them or propping them up to avoid aspiration.

- **06** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **07** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.





### SUBLINGUAL/TRANSLINGUAL MEDICATION ADMINISTRATION INSTRUCTION

TASK:	Administer a medication sublingually or translingually
CONDITION:	Given a scenario in Tactical Field Care where a casualty requires the administration of a sublingual or translingual medication
STANDARD:	Administer a medication sublingually or translingually, performing all steps and performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate sublingual or translingual medication

### **PERFORMANCE MEASURES:** step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather necessary medication(s).
- 03 Verify the five rights of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- 04 If the medication(s) are in a blister pack, peel back the foil to remove the appropriate dose of the medication; if the medication(s) are loose in a package or bottle, take out the appropriate dose.
  NOTE: Do not push the tablet through the foil to avoid damage to the medication, if possible.
- **05** Immediately after removing the tablet, if the casualty is conscious, place it under (sublingual) or on (translingual) the casualty's tongue.
- 06 Allow the medication to dissolve completely and then instruct the casualty to swallow it with saliva. NOTE: Do not administer with water, allow the medication to dissolve using the casualty's own saliva.
- **07** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **08** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.



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# SKILL INSTRUCTIONS



# TRANSMUCOSAL BUCCAL MEDICATION ADMINISTRATION INSTRUCTION

TASK: Administer medication(s) through the transmucosal buccal route

- **CONDITION:** Given a scenario in Tactical Field Care where a trauma casualty requires the administration of a transmucosal buccal medication
- **STANDARD:** Administer a medication(s) through the transmucosal buccal route, performing all steps and performance measures without causing further injury to the casualty
- **EQUIPMENT:** Appropriate transmucosal buccal medication

### PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather necessary medication(s).
- **03** Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- **04** Open or unwrap the medication.

**NOTE:** Some packaging requires scissors to cut the wrapping and expose the medication.

**05** If the medication uses a lozenge-on-a-stick delivery system (lollipop), tape the handle to an uninjured hand (preferably the casualty's nondominant hand).

**NOTE:** Alternate method is to tape a rubber band to the handle of delivery system and attach it to the casualty's uniform.

- **06** Direct the casualty to place the medication between their cheek and gum and actively suck on the medication.
  - (a) Have the casualty move the medication around in their mouth, maintaining it along their cheeks.
  - (b) If a handle is present, have the casualty twirl it often, if able.
- **07** Dispose the unused portion of medication appropriately (medications should last approximately 15 minutes on average).

**NOTE:** Do not bite or chew the medication.

- **08** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **09** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.



COMBAT MEDIC/CORPSMAN TACTICAL COMBAT CASUALTY CARE

# **SKILL INSTRUCTIONS**



# INTRANASAL MEDICATION ADMINISTRATION INSTRUCTION

TASK: CONDITION:	Administer medication(s) intranasally Given a trauma casualty in Tactical Field Care requiring the administration of medication through an intranasal route
STANDARD: EQUIPMENT:	Administer a medication(s) intranasally, performing all steps and performance measures without causing further injury to the casualty Appropriate medication(s) in a nasal atomizer

# **PERFORMANCE MEASURES:** step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather necessary medication(s).
- **03** Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- 04 Confirm the nasal airway is clear of obstruction(s) and no blood or clear fluid is coming from the nose. *NOTE:* If one nasal passage appears to be partially (or completely) obstructed, use the other side. If both appear partially obstructed, use the side that seems to have less obstruction.
- **05** Check and prepare the nasal atomizer device.
- 06 Remove the cap.
- 07 Gently have the casualty blow their nose to clear the nostrils before the first use of the device only.
- 08 Hold the device upright between your thumb and first two fingers.
- **09** Insert the atomizer firmly into the nose and aim it at to the top of the ear on the same side of the nostril being used.
- **10** Press the plunger firmly and as fast as possible to ensure that the medication is delivered in a mist, rather than drips.

*NOTE:* The number of times the plunger is pushed will be determined by the medication and desired dose.

- **11** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **12** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.



### INTRAMUSCULAR (IM) MEDICATION ADMINISTRATION INSTRUCTION

TASK:	Administer medication(s) through the IM route
CONDITION:	Given a trauma casualty in Tactical Field Care requiring the IM administration of a medication
STANDARD:	Administer approved medication(s) intramuscularly, performing all steps and performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate medication(s), syringes, needles, saline, alcohol or povidone-iodine pads

# PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation.

NOTE: If a Combat Lifesaver (CLS) is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather all needed supplies and necessary medication(s).
- **03** Direct the CLS or another first responder to assist, if available (to clear and expose possible IM injection site, when appropriate).
- **04** Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- **05** Select the injection site for IM injection:

(a) Upper arm deltoid muscle

**NOTE:** The landmark for the deltoid site is the center of the muscle.

(b) Buttock/gluteus maximus

**NOTE:** The landmark for the buttocks - you should divide the buttocks on the side of the injection into four quadrants and inject the center of the upper, outer quadrant. (c) Outer thigh

**NOTE:** The landmark for the thigh is the meaty part of the anterior thigh, halfway between the knee and the hip, on the lateral side of midline.

- 06 Select an appropriate needle length and gauge.
  (a) 22-gauge, 1-inch for deltoid
  (b) 22 gauge, 116 inches for glutous maximus or the
  - (b) 22-gauge,  $1^{1}\!\!\!/_2$  -inches for gluteus maximus or thigh
- **07** Select an appropriate syringe.
- **08** Connect the needle and syringe.

**NOTE:** Inspect the needle and syringe for any defects.

**09** Select and prepare the IM medication.

**NOTE:** Vials that contain a powdered medication must be reconstituted according to the manufacturer's guidance by injecting the proper solution into the vial, instead of air, and then gently shaking or swirling the solution to ensure complete dissolution of the medication before drawing it into the syringe.

**10** Pop off the plastic cap on the top of the medication vial.



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- 11 Wipe the top of the vial with an alcohol or povidone-iodine pad.
- **12** Remove the cap from the needle and pull back on the plunger to draw air into the syringe equivalent to the recommended amount of medication to be administered.
- **13** With your nondominant hand, hold the medication vial and insert the needle into the soft rubber portion of the reconstituted medication vial.
  - (a) Start at a 45-degree angle with the needle bevel up.
  - (b) Change the angle to a 90-degree angle as the needle pushes through the rubber.
- 14 While holding the vial and the syringe together, invert them and bring them to eye level. *NOTE:* Take special care not to contaminate the syringe tip and the needle.
- **15** Inject the air into the medication vial.
- **16** Draw medication from the vial. Adjust the needle tip to remain below the level of the fluid and withdraw the fluid until the desired volume is reached.
  - **NOTE:** Make sure to keep the needle tip submerged or you will withdraw air into the syringe.
- **17** Check the syringe for air bubbles.
  - (a) If air bubbles are present, tap/flick the syringe with your finger to release the air bubbles and then eject the air.
  - (b) Adjust needle tip to below the level of the fluid and withdraw more fluid until the desired volume is reached.
- **18** Withdraw the needle from the vial, taking care not to contaminate the needle tip.
- **19** Clean the injection site with an alcohol or povidone-iodine pad, or if unavailable, clean water.
- 20 Prepare the skin for the injection. Firm up the tissue at the injection site by pinching the skin gently between the thumb and index finger of the nondominant hand.

CAUTION: Do not retract or move the skin laterally.

- **21** Insert the needle with your dominant hand.
  - (a) Position the needle, bevel up, at a 90-degree angle to the skin surface.

(b) Plunge the needle firmly and quickly into the muscle to the depth of the needle.

- 22 Release the hold on the skin.
- **23** Aspirate the syringe.

**NOTE:** If blood appears in the syringe, withdraw the needle and insert in a nearby previously cleaned area.

**CAUTION:** Failure to aspirate could cause the medication to be injected into the bloodstream.

- 24 If no blood appears in the syringe, inject the medication by pushing the plunger into the syringe barrel with a slow, continuous movement as far as the plunger will go.
- **25** Withdraw the needle quickly and apply direct pressure to the injection site.
- **26** Cover the injection site with an adhesive bandage or gauze and tape.
- **27** Dispose of the expended needle and syringe appropriately (in a sharps container).
- **28** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **29** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.





# AUTO-INJECTOR INTRAMUSCULAR (IM) MEDICATION INSTRUCTIONS

TASK: CONDITION:	Administer medication(s) through the IM route via auto-injector Given a trauma casualty in Tactical Field Care requiring the IM administration of a medication via an auto-injector
STANDARD:	Administer approved medication(s) by IM auto-injector, performing all steps and performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate medication in an auto-injector, alcohol or povidone-iodine pads

# PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation.

NOTE: If a Combat Lifesaver (CLS) is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather all needed supplies and necessary medication(s).
- **03** Direct the CLS or other first responder to assist, to clear and expose possible IM injection site.
- 04 Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route

**NOTE:** Make sure you always double-check the dosage on the auto-injectors.

**05** Select the injection site for IM injection:

(a) Buttock/gluteus maximus

**NOTE:** The landmark for the buttocks -you should divide the buttocks on the side of the injection into four quadrants and inject the center of the upper, outer quadrant.

(b) Outer thigh

**NOTE:** The landmark for the thigh is the meaty part of the anterior thigh, halfway between the knee and the hip, on the lateral side of midline.

**CAUTION:** It is important that auto-injector injections be given in a large muscle area (i.e., outer thigh muscle or upper outer quadrant of the buttocks).

- **06** Clean the injection site with the alcohol or povidone-iodine pad, or if unavailable, clean water.
- **07** Grasp the auto-injector with your dominant hand and remove safety cap.
- **08** Place the tip at the injection site.
- **09** Apply firm, even pressure until the auto-injector pushes the needle into the injection site and it begins firing.

**CAUTION:** Using a jabbing motion may result in improper injection or injury to the muscle.

- Hold the auto-injector firmly in place for at least 10 seconds.
   NOTE: The auto-injectors may be given through clothing if needed.
- 11 Carefully remove the auto-injector from the injection site and apply direct pressure to the injection site. *CAUTION:* Needle will be exposed.
- **12** Dispose of the expended auto-injector appropriately (in a sharps container).
- **13** Cover the injection site with an adhesive bandage or gauze and tape.
- **14** Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- **15** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.





### **INTRAVENOUS (IV) MEDICATION ADMINISTRATION INSTRUCTIONS**

TASK: CONDITION:	Administer a medication through an IV route Given a trauma casualty in Tactical Field Care with established IV access who requires the administration of IV medication(s)
STANDARD:	Administer medication(s) intravenously, performing all steps and performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate medication(s), syringes, needles, alcohol or povidone-iodine pads

# **PERFORMANCE MEASURES:** step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather all needed supplies and necessary medication(s).
- **03** Check the IV line or saline lock for patency.
- 04 Assess the IV insertion site for redness, swelling, increased or decreased temperature, or bleeding. *NOTE:* If any of these conditions are present, do not use this IV for administering medication(s) and establish a new IV access point before proceeding.
- 05 Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- 06 Select an appropriate needle length.
- 07 Select an appropriate syringe.
- 08 Connect the needle and syringe.

**NOTE:** Inspect both the needle and syringe for any defects.

**09** Select and prepare the medication for IV injection.

**NOTE:** Vials that contain a powdered medication must be reconstituted according to manufacturer's guidelines by injecting the proper solution into the vial, instead of air, and then gently shaking or swirling the solution to ensure complete dissolution of the medication before drawing it into the syringe.

- **10** Pop off the plastic cap on the top of the medication vial.
- 11 Wipe the top of the medication vial with an alcohol or povidone-iodine pad.
- 12 Remove the cap from the needle and pull back on the plunger to draw air into the syringe equivalent to the recommended amount of medication to be administered.
- **13** With your nondominant hand, hold the medication vial and insert the needle into the soft rubber portion of the medication vial.
  - (a) Start at a 45-degree angle with the needle bevel up.
  - (b) Change the angle to 90-degree angle as the needle pushes through the rubber.
- 14 While holding the vial and the syringe together, invert them and bring them to eye level. *NOTE:* Take special care not to contaminate the syringe tip and the needle.
- **15** Inject the air into the medication vial.
- **16** Withdraw the appropriate amount of fluid from the vial by drawing back slowly on the syringe plunger until the correct medication volume is obtained.





**NOTE:** Make sure to keep the needle tip submerged or you will withdraw air into the syringe.

- **17** Check the syringe for air bubbles.
  - (a) If air bubbles are present, tap/flick the syringe with your finger to release the air bubbles and then eject the air.
  - (b) Adjust needle tip to below the level of the fluid and withdraw more fluid until the desired volume is reached.
- 18 Withdraw the needle from the vial, taking care not to contaminate the needle tip.
- **19** Clean the IV injection port with an alcohol or povidone-iodine pad.
- **20** Pinch the IV line to stop the flow of IV fluid if fluids are being infused.
- 21 Insert the needle into the IV port.
- 22 Administer the medication.
- 23 Withdraw the needle.
- 24 Open the IV line to flush the line or flush with 10 ml of an appropriate fluid if infusing through an IV lock.
- **25** Dispose of the expended needle and syringe appropriately (in a sharps container).
- **26** Monitor the casualty for signs and/or symptoms of allergic/unusual reactions.
- 27 Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.





### **INTRAOSSEOUS (IO) MEDICATION ADMINISTRATION INSTRUCTIONS**

TASK: CONDITION:	Administer a medication through an IO route Given a trauma casualty in Tactical Field Care with established IO access who requires the administration of IV medication(s)
STANDARD:	Administer medication(s) intraosseously, performing all steps and performance measures without causing further injury to the casualty
EQUIPMENT:	Appropriate medication(s), syringes, needles, alcohol or povidone-iodine pads

# **PERFORMANCE MEASURES:** step-by-step instructions

**NOTE:** Consider body substance isolation. **NOTE:** If a Combat Lifesaver is available, direct them to assist.

- 01 Check to ensure that the casualty has no known drug allergies to the medication(s) being administered (ask the casualty or locate their red allergy dog tag or bracelet).
- **02** Gather all needed supplies and medication(s).
- 03 Check the IO line or saline lock for patency.
- 04 Assess the IO site for redness, swelling, increased or decreased temperature, or bleeding. NOTE: If any of these conditions are present, do not use this IO site for administering medication(s) and establish a new IO access point before proceeding.
- **05** Verify the **five rights** of medication administration:
  - 1. Right patient
  - 2. Right medication
  - 3. Right dose and concentration
  - 4. Right time
  - 5. Right route
- **06** Select an appropriate needle length.
- **07** Select an appropriate syringe.
- 08 Connect the needle and syringe. *NOTE:* Inspect the needle and syringe for any defects.
- 09 Select and prepare the medication for IO injection. NOTE: Vials that contain a powdered medication must be reconstituted according to manufacturer's guidelines by injecting the proper solution into the vial, instead of air, and then gently shaking or swirling the solution to ensure complete dissolution of the medication before drawing it into the syringe.
- **10** Pop off the plastic cap on the top of the medication vial.
- 11 Wipe the top of the medication vial with an alcohol or povidone-iodine pad.
- 12 Remove the cap from the needle and pull back on the plunger to draw air into the syringe equivalent to the recommended amount of medication to be administered.
- **13** With your nondominant hand, hold the medication vial and insert the needle into the soft rubber portion of the medication vial.
  - (a) Start at a 45-degree angle with the needle bevel up.
  - (b) Change the angle to 90-degree angle as the needle pushes through the rubber.
- 14 While holding the vial and the syringe together, invert them and bring them to eye level. *NOTE:* Take special care not to contaminate the syringe tip and the needle.
- **15** Inject the air into the medication vial.
- **16** Withdraw the appropriate amount of fluid from the vial by drawing back slowly on the syringe plunger until the correct medication volume is obtained.

NOTE: Make sure to keep the needle tip submerged or you will withdraw air into the syringe.



# **SKILL INSTRUCTIONS**



- **17** Check the syringe for air bubbles.
  - (a) If air bubbles are present, tap/flick the syringe with your finger to release the air bubbles and then eject the air.
  - (b) Adjust the needle tip to below the level of the fluid and withdraw more fluid until the desired volume is reached.
- **18** Withdraw the needle from the vial, taking care not to contaminate the needle tip.
- **19** If using an IO connector tube *without* fluids or if fluids are being infused through an IV tubing set that does not have an injection port, use the following steps:
  - (a) Remove the needle from the syringe and place in a sharps container (if available).
  - (b) Clamp the IO connector tube and IV fluid line, then remove the end cap or disconnect IV fluids if they are infusing.
  - (c) Attach the syringe with medication to the proximal end of the IO connector tube.
  - (d) Unclamp the IO connector tube clamp.
  - (e) Administer the medication according to manufacturer's guidelines.
  - (f) Reclamp the IO connector tube.
  - (g) Detach the syringe.
  - (h) Reattach IV tubing if being used, release the IO connector tube clamp and the IV tubing clamp, and bolus 20 ml to flush the site.

**NOTE:** If fluids were not being infused, draw up 20 ml of saline in a syringe, attach it to the IO connector tube, release the IO connector tube clamp, and flush the IO line. Then reclamp the IO connector tube clamp, remove the syringe, and recap the IO connector tube.

- 20 If using an IO connector tube with fluids being infused through an IV tubing set with an injection port, use the following steps:
  - (a) Keep the needle and syringe attached.
  - (b) Clean the IV injection port with alcohol or povidone-iodine pad.
  - (c) Pinch the IV line to stop the flow of IV fluids.
  - (d) Insert the needle into the IV port.
  - (e) Administer the medication according to manufacturer's guidelines.
  - (f) Withdraw the needle.
  - (g) Release the IV line and flush with 20 ml before returning to desired flow rate.
- 21 Dispose of the expended needle and syringe appropriately (in a sharps container).
- 22 Monitor the casualty for signs and/or symptoms of allergic reactions or other unusual reactions.
- 23 Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.

Developed by the **JOINT TRAUMA SYSTEM** 

A Combat Support Division of the



DEFENSE HEALTH AGENCY