



**Lesson Plan: Virtual Peds Med Admin**

- Topic:** Pediatric Medication Administration (Virtual-Lecture)
- Presenter:** West Michigan Regional Medical Consortium CE Sponsor Program
- Location:** West Michigan Regional Medical Consortium CE Sponsor Locations
- Credit Category:** Special Considerations – Pediatrics
- License Level:** AEMT, Paramedic
- Credits:** Paramedic: 1  
AEMT: 0.5
- Format:** 1-hour scenario-based virtual lecture
- Objectives:** At the conclusion of this CE session, the participants will be able to:



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## Special Considerations: Pediatric Medication Administration Virtual Lesson Plan

### Participant Requirements

- Must have length-based tape (Broselow™, for example)
- Must have MI-Medic Cards ([Link to MI-Medic Cards](#))
- Internet service with active webcam and microphone
- Pseudo-medication vials (Normal Saline, water, etc.)-may use glass of colored water for medication and glass of clear water for dilution material
- Syringes of various volumes (1 ml, 3 ml, 5 ml, 10 ml, 50 ml)

### Instructor Coordinator Requirements

- Virtual communication platform with webcam and microphone (e.g. Zoom, Microsoft Teams, Web Ex)
- Stop cock for demonstration of usage
- MI-Medic Cards ([Link to MI-Medic Cards](#))
- At least ten scenarios with various medication needs

### Scenarios

At least 10 scenarios that will identify the nature of illness, weight of the patient, and medical history of the patient. (You may not use all 10 scenarios during the session, but must have them ready)

- Each scenario will require a different medication or dose due to condition.
- Each scenario will require utilization of the length-based tape, MI-Medic cards, and pseudo-medication draw up. The IC will ensure that the participant was accurate with the utilization of each of these steps and must include remediation for any recognized errors.

### Time Frame

Each scenario should take 5-10 minutes to discuss the history, gather the equipment, ensure the right dose is drawn up to administer, and to remediate.

This course will last 50-60 minutes.

### Objectives

By the end of the session, the student will:

- 1: Have a thorough understanding of the necessity of use of the MI-Medic cards.
- 2: Be able to accurately measure a child utilizing a length-based tape.
- 3: Accurately draw-up the appropriate medication for the weight of the child.
- 4: Have a thorough understanding of the need to identify the 5 rights of medication administration.

### Attendance Roster

An attendance roster will be completed by the IC and maintained for a period of 4 years. If this lesson plan is utilized by an approved CE program sponsor, the records must be maintained for a period of 7 years.

### Certificate of Attendance

A certificate of attendance will be signed by the IC, and include the approval number, date of CE, and signature of the IC.

## Pediatric Medication Scenarios

**The attendee can print off labels from Google (or other search engine) to get the correct medications carried in their medication bags.**

**Scenario:** 2-month-old in cardiac arrest, unknown reason, CPR in progress.

**History:** None

**Weight (if known from caretaker):** 10 pounds at most recent visit (unknown date)

**Color on length-based tape/Mi-Medic Card:** Gray

**Medication needed:** Epinephrine 1:10,000 (1 mg/10 ml)

**Appropriate dose for patient:** .01 mg/kg (.05 mg/0.5 ml)

**Dilution requirements:** N/A

**Scenario:** 10-month-old in tonic/clonic seizure. IV is established and does not appear to be febrile.

**History:** None

**Weight (if known from caretaker):** Unknown

**Color on length-based tape/Mi-Medic Card:** Red (11 kg)

**Medication needed:** Midazolam IV (5 mg/ml)

**Appropriate dose for patient:** .05 mg

**Dilution requirements:** Dilute with 4 ml of saline=0.5 ml

**Scenario:** Three-year-old fall with obvious fracture to radius/ulna and in a lot of pain.

**History:** None

**Weight (if known from caretaker):** Approximately 35 pounds, per Mom on scene

**Color on length-based tape/Mi-Medic Card:** White

**Medication needed:** Fentanyl IV (100 mcg/2 ml) or Morphine (10 mg/ml)

**Appropriate dose for patient:** Fentanyl: 15 mcg (1.5 ml diluted)

Morphine: 1.5 mg (1.5 ml diluted)

**Dilution requirements:** Fentanyl: 1 mcg/kg=dilution with 8 ml Saline

Morphine: .1 mg/kg=dilution with 9 ml Saline

**Scenario:** 16-month-old unresponsive.

**History:** None

**Weight (if known from caretaker):** 25 pounds, per Dad

**Color on length-based tape/Mi-Medic Card:** Purple

**Medication needed:** D25 (12.5g/50ml)

**Appropriate dose for patient:** 5g

**Dilution requirements:**

**Scenario:** 8-Year-old in respiratory distress after bee sting

**History:** No medical history

**Weight (if known from caretaker):** Unknown

**Color on length-based tape:** Orange (52-65 pounds/24-29 kg)

**Medication needed:** Epinephrine, Diphenhydramine

**Appropriate dose for patient:** Epi IM: .01 mg/kg=0.15 mg

Diphenhydramine IM (50 mg/ml) Dose: 30 mg (0.6 ml/IM)

Diphenhydramine IV (50 mg/ml) Dilute with 4 ml Dose: 30 mg (3 ml/diluted)

**Dilution requirements:** Diphenhydramine: 4 ml saline/1 ml medication

**Scenario:** 16-month-old cyanotic, respiratory rate of 4, pupils pinpoint

**History:** No medical history

**Weight (if known from caretaker):** 22 pound at last Dr. visit

**Color on length-based tape:** Purple

**Medication needed:** Narcan

**Appropriate dose for patient:** 1 mg IV, IM, or IN

**Dilution requirements:** N/A

**Scenario:** 2-month-old male. Mother fell asleep while lying next to baby in bed. Unresponsive, apneic, pulseless. CPR has been initiated prior to arrival.

**History:** No medical history. No complication with birth, and Mother did have pre-natal care.

**Weight (if known from caretaker):** 10 lbs.

**Color on length-based tape:** Gray

**Medication needed:** Epinephrine 1:10

**Appropriate dose for patient:** .05 mg, volume: 0.5 ml

**Dilution requirements:** 1 mg is already diluted in 10 ml syringe.

**Scenario:** 14-year-old male, cardiac arrest, Persistent VFib

**History:** Unknown

**Weight (if known from caretaker):** 76 lbs.

**Color on length-based tape:** Green

**Medication needed:** Epinephrine, Amiodarone

**Appropriate dose for patient:** Epi: 0.3 mg (1:10,000), 3 ml  
Amiodarone: 150 mg (150 ml/3 ml), 3 ml

**Dilution requirements:** No dilution required

**Scenario:** 6-year-old, chest fluttering, in persistent SVT at a rate of 210

**History:** No medical history

**Weight (if known from caretaker):** 50 lbs.

**Color on length-based tape:** Blue

**Medication needed:** Adenosine (with MCA order)

**Appropriate dose for patient:** 2.5 mg/0.8 ml, followed immediately with 10 ml NS flush

**Dilution requirements:** No dilution required

**Scenario:** 33-month-old, dehydrated, semi-responsive

**History:** Has been sick for 3 days, fever off-and-on, today has been less responsive

**Weight (if known from caretaker):** 30 lbs.

**Color on length-based tape:** Yellow

**Medication needed:** Normal Saline 0.9%

**Appropriate dose for patient:** 250 ml IV/IO

**Dilution requirements:** No dilution required