

**UEMSA Field Protocols**

**September 2017**

**Medical Oversight Provided by**

*Stephen Poff*

Stephen Poff M.D. – Medical Director

09/23/2017

Date

# Table of Contents

|                           |     |
|---------------------------|-----|
| Diabetic Problems.....    | 3-4 |
| Difficulty Breathing..... | 4-5 |

# Diabetic Emergencies

Date of Origin: 6/3/2017

## **UEMSA must call 9-1-1 (Advance Life Support - ALS) if:**

- The mental status of the patient is not baseline (**Alert and Oriented X4**) (**A&O X4**)
- The patient has a diminished level of consciousness
- The patient has a blood glucose of less than 40
- The patient's blood glucose is high and symptomatic (or presents with other priority ALS symptoms)
- The patient is having slow, rapid, or irregular breathing
- The patient has abnormal **vitals and/or Airway, Breathing or Circulation (ABC's)**

## **Indications for use of Glucometer:**

- The patient is **NOT** alert and oriented to baseline.
- The patient is symptomatic of hypoglycemia or hyperglycemia
  - There are indications of alcohol or drug use

## **Procedure for Administration of Glucose Check:**

- \*UEMSA personnel must be a licensed EMT-B or higher to perform a blood glucose check.
1. Universal **Body Substance Isolation (BSI)** precautions will be observed at all times.
  2. Materials to be used:
    - Tru Metrix glucometer
    - Tru Metrix test strips
    - Sterile lancet
    - Alcohol wipe
  3. Check date on test strip to ensure that all materials are not expired
  4. Insert test strip into the port located on the Tru Metrix glucometer
  5. Sterilize skin site with an alcohol prep wipe and lance the fingertip or similarly appropriate capillary blood site to allow a drop to form.
  6. Touch the edge of the test strip to the blood droplet.
  7. Allow the blood to be drawn into the test strip until you hear an audible beep.
    - \*If this does not occur discard the test strip into a biohazard container and repeat with a new testing strip.
  8. The result should appear on the glucometer and should be recorded with the current time by UEMSA personnel.
    - \*Values of low ("LO") and High ("HI") require a repeat test to confirm.
  9. **Discard all used test strips into a biohazard bag, and lancets into sharps container.**
    - \*UEMSA will only use approved glucometers and lancets for blood glucose checks.
    - \*All uses of a glucometer necessitate the creation of a full patient care report.

## **Safety Precautions:**

- \*Do not use test strips after date of expiration.
- \*All blood specimens should be considered hazardous and handled with appropriate BSI and precautions.
- \*All materials that contact blood samples must be discarded in an appropriate biohazard container.
- \*UEMSA personnel must wear appropriate BSI equipment at all times.
- \* **Do not dispose of lancets in gloves, or any other place which would conceal its presence**

## **Symptoms of Diabetic Problems:**

- A change in the patient's baseline mental status
- A decrease in the patient's baseline level of consciousness
- Exhibiting abnormal behavior
- The patient presents with cool, diaphoretic skin (hypoglycemia)
- The patient presents with warm, dry skin; fruity acetone breath; rapid respirations (hyperglycemia)
- -Patients exhibiting any symptoms of diabetic problems should receive a cognitive and physical exam including but not limited to:
  - ABC's, vital signs, mental status (**A&O**) questions, Fast exam, and a rapid physical exam.

## **If indicated, UEMSA will administer oral glucose to a patient if the following conditions are met:**

- The patient has a blood glucose level <40 mg/dl

- The patient is capable of following verbal commands
- The patient can secure their own airway

## Difficulty Breathing

Date of Origin: 6/3/2017

### UEMSA must call 9-1-1 Advanced Life Support (ALS) if:

- The mental status of the patient is not baseline (**Alert and Oriented X4**) (**A&O X4**)
- The patient has a diminished level of consciousness
- The patient is having slow, rapid or irregular breathing
- The patient has abnormal **vitals and/or Airway, Breathing or Circulation (ABC's)**

### Indications for Oxygen:

- Airway, Breathing or Circulation abnormalities
- Poor general impression
- Symptomatic hyper/hypoglycemia
- The patient was/is unconscious or had near syncope
- The patient experienced heat stroke/exhaustion, or hypothermia
- Hypoxia or anticipated hypoxia,
- Cardiac Arrest
- Chest pain
- Shock or anticipated shock
- Dyspnea/acute shortness of breath
- Anaphylaxis

### Caution:

- In patients with **COPD** (known history of emphysema or chronic bronchitis) use high-flow oxygen with caution and monitor for suppression of hypoxic drive or sleepiness with patient's on O2 flow rates greater than 2 liters/min with nasal cannula, or 4 liters/min. with Venturi mask. However, if patient is in distress do not withhold oxygen treatment.

### Procedure for Administration of Oxygen:

#### I. \*UEMSA personnel must be a licensed EMR or higher to administer oxygen

1. Universal BSI precautions will be observed at all times
2. Materials to be used:
  - Oxygen Cylinder
  - Oxygen Regulator (with O-ring)
  - Oxygen Wrench
  - Appropriate delivery system
3. Turn the cylinder valve off and on quickly with the cylinder wrench to clear or "crack" the valve on the oxygen tank
4. Assembles the regulator to the oxygen tank and close the needle valve.
5. Open the oxygen tank valve **slowly** with the cylinder wrench until pressure maximizes.
6. Check pressure; and check tank for leaks
7. Attach appropriate delivery system to port and open the needle valve to the desired flow.

#### II. For Nasal Cannula: (2-6 LPM)

1. Hold **nasal cannula** in proper position with prongs curving downward
2. Place cannula prongs into nares
3. Wrap tubing over and behind ears
4. Adjust plastic slide under chin until cannula fits snugly
5. Turn oxygen regulator to appropriate rate

#### III. For Non-Rebreather (NRB) (10-15 LPM)

1. Turn oxygen regulator to appropriate rate
2. Pre-fill reservoir bag by occluding the on one-way valve between the mask and the oxygen reservoir bag
3. Allow bag to fill 3/4<sup>th</sup>'s or 2/3's of the way
4. Attach mask to patients face by pulling on rubber band, placing it behind the patients head

5. Ensure mask fits snugly by adjusting nose clips, and rubber band

#### **IV. For Bag-Valve-Mask (BVM) (15-25 LPM)**

1. Turn oxygen regulator to appropriate rate
2. Allow reservoir bag to fill
3. Open airway using appropriate maneuver (Head-tilt, or Jaw-thrust)
4. Check for any obstructions (fluids, foreign bodies)
5. **ADD suction and NPA/ OPA procedures when they become protocol**
6. Place BVM on face, and create seal using C-E grip

#### **Safety Precautions:**

- UEMSA personnel must wear appropriate BSI equipment at all times (safety glasses while bagging)
- **Don't** use expired equipment
- All material which come into contact with the patient's bodily fluids, must be discarded in **biohazard container or bag.**

#### **Symptoms of Difficulty Breathing:**

- Adventitial breath sounds such as wheezing or rhonchi or rales
- A change in the patient's baseline mental status or decreased level of consciousness.
- Exhibiting abnormal behavior
- Dyspnea/acute shortness of breath
- Patient speaks in 1-2 word sentences
- Low SPO<sub>2</sub> (used in conjunction with other signs and symptoms. DO NOT administer oxygen if the only evidence is low SPO<sub>2</sub>).

#### **UEMSA personal will be required to administer oxygen to a patient in any of the following circumstances:**

- Hypoxia or anticipated hypoxia
- Cardiac Arrest
- Chest pain
- Dyspnea/Acute shortness of breath
- Shock or anticipated shock.