



Charlottesville-Albemarle Rescue Squad, Inc.

Blood Glucose Monitoring Guidelines

Purpose:

The purpose of this guideline is to establish a procedure on using a blood glucose monitor (BGM) by the members of the Charlottesville-Albemarle Rescue Squad

Device Info:

Bayer Ascensia Contour Blood Glucose Monitoring System (BGMS)



Definitions:

Authorized Personnel – Active BLS and ALS personnel that have been recognized by the Operational Medical Director of Charlottesville-Albemarle Rescue Squad

Glucometer – Used to provide information to manage blood sugar levels.

Lancing device – Used for finger puncture.

Test strip – Used for blood or control testing.

Testing sites- Sites on the human body used to obtain blood samples

Control solution- Synthetic solution used to run a check to make sure the meter and the test strips are working properly.

Policy and Procedures:

Clinical Laboratory Improvement Amendments (CLIA) Waiver

- The Charlottesville-Albemarle Rescue Squad shall be FDA compliant by maintaining a current CLIA waiver.
- The CLIA waiver will be renewed every 2 years.
- There shall be a copy of the CLIA waiver posted in each ambulance/zone car with a BGMS.

Calibration

Per manufacturer, **not required**.

The Bayer Ascensia Contour Blood Glucose Monitoring System performs calibration automatically.

Control Test

Per manufacturer, **not required**, but recommended to perform weekly to make sure the BGM and the test strips are working properly.

Procedure:

1. A control test should be performed **every Monday** on each meter.
2. Confirm that the control solution and test strips are within date.
3. Slowly agitate the control solution back and forth between your hands.
4. Open the test container and remove a test strip.
5. Holding the round end of the test strip, insert the strip (silver side up) into the test slot until it stops and a beep sounds and the “apply sample” icon appears.
6. Squeeze a small drop of control solution onto a non-porous surface, such as the fingertip of a gloved hand.
7. Touch and hold the test end of the test strip to the drop until the glucometer beeps. The timer will count down 5 seconds and the test result will appear in the display.
 - Compare the results to the range printed on the side of the test strip container. Record the CARS meter number, the date, the control lot number, the control range, and the test results in the CARS BGMS log.
 - If the results are inconsistent or are not within the specific range, make sure the control solution and test strips are within date, the batteries are working, and the test solution is at room temperature. Repeat the control test. If the results are once again out of range, place the unit out of service and notify the on-duty supervisor.
8. Remove the test strip and dispose in an appropriate area.

Blood Glucose Testing

If the patient has a chief complaint of Altered Level of Consciousness or Seizures, consider obtaining a blood sample:

Procedure:

1. Select the most appropriate site:
 - Fingertips
 - Ear lobe
 - Palm
 - Forearm (last suggested site)
 - Heel stick in infants
2. Cleanse the site with alcohol prep.
3. Remove the test strip.
4. With the BGM off, insert the test strip into the monitor (silver side up) until a beep sounds and the “apply sample” icon appears.
5. Press the lancing device firmly against the puncture site and push button to release. Form a small round drop of blood.
6. Touch and hold the test end of test strip to the drop of blood until the meter beeps. After 5 seconds, the test result will be displayed.
7. Carefully dispose of the test strip and the lancing device in an appropriate area to prevent injuries and contamination.

Patient Care:

If the blood glucose results are **80 mg/dl or less**, administer Dextrose (oral and/or IV) or Glucagon. Even if the results are greater than 80 mg/dl and the patient continues to exhibit signs of hypo-glycemia, it should be treated with Dextrose or Glucagon

EMT-B:

- If the patient has an altered mental status or has a BGL of 80 mg/dl or less, request an ALS support unit or rapidly transport to the nearest appropriate hospital.
- Follow the 2014 TJEMS Regional Patient Care Guidelines
- Reassess BGL after each therapeutic intervention

EMT-J, Enhanced, Intermediate/Paramedic

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