

Glucose

Point-of-Care Testing (POCT)
Staff Training

Glucose Meter

- At this time Abbott Precision PCx glucose meter is being used.



Limitations

- Results may be falsely decreased in patients with excessive water loss or dehydration, shock, or hyperglycemic-hyperosmolar state.
- **Never** test body fluids, serum or plasma.
- High hematocrits (above 70%) can cause erroneously lower results and low hematocrits (below 20%) can cause falsely elevated results.
- Testing in an environment with a temperature between 15°C (59°F) and 40°C (104°F) and a relative humidity between 10% and 90%.

Always Identify the patient

Per Hospital policy all patients must be identified with two identifiers:

- *“ All inpatients must be positively identified from the time the Hospital assumes responsibility for their care until discharge..... The identification band must remain physically attached to the patient at all times” .*
- *“All inpatients must be identified by an approved armband containing the patient’s name, account number, birthdate and medical record number.”*
- *“patients in outpatient settings will be identified with two identifiers, the patient name and date of birth”.*

What is an Operator ID?

Your Mad River Hospital Unique ID is your Operator ID and is used to identify you as the person performing a glucose test.

Scan the barcode on the back of your badge.

If your ID comes up “Invalid Operator” call the POCT coordinator at 3204.

Would you let someone borrow your credit card or Social Security number?

This is why **you never allow anyone to use your badge.**

- If a co-worker's badge does not work, there is a valid reason and they should address this with the POCT coordinator.
- Remember you are legally responsible for all tests performed using your ID.
- Your name is tied to every glucose test performed using your ID.
- It is a work rule violation (can be grounds for dismissal).

Procedure:

- Scan barcode on the back of your badge.
- Select either “Control Test” or “Patient Test”.



Check the expiration of Quality Control (QC).

- Expires 90 days from date opened or manufacturers outdate, whichever comes first.
- If expired discard, open and date new set.
- Scan barcode on bottle.
- QC must be performed every 24 hours.
- Meters have QC lockout.



Scan the barcode on the test strip.



Patient testing

- Press “Patient Testing” and follow the prompts,
- Remember to SCAN patients armband.



Attached Armbands should always be used!

Per hospital policy: *“No hospital employee is to perform any test or procedure or transport any patient when an armband is missing or defaced”* .

NEVER USE ARMBANDS NOT ATTACHED TO PATIENT....

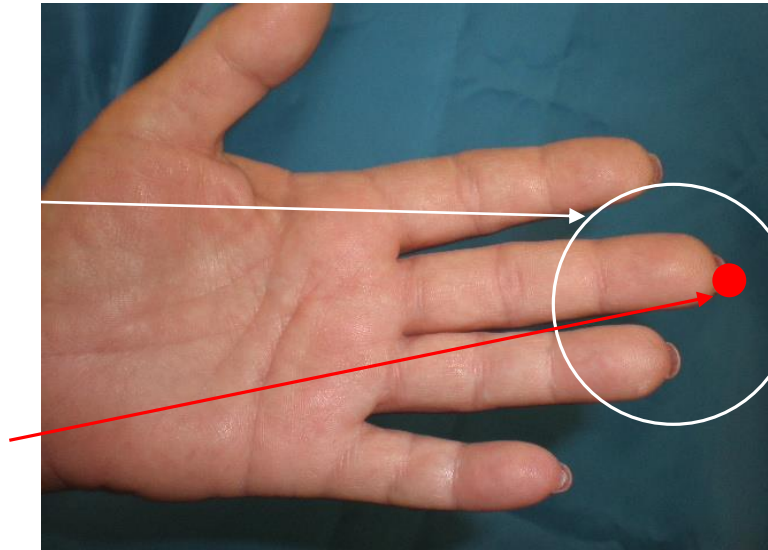
- Found laying in the patient’s room,
- Taped to the bed,
- Found in chart
- Or at the nursing station
- Barcoded labels laying around



Who does the armband belong to?

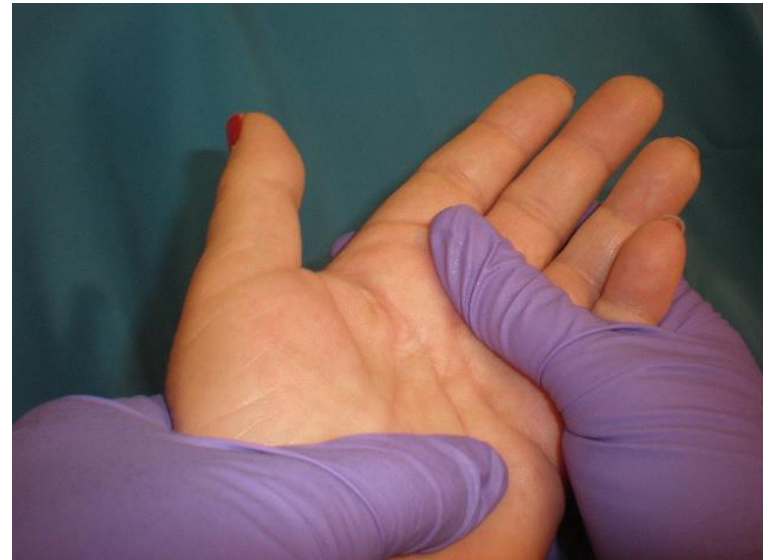
Choose the finger carefully

- Best locations for a finger stick is the 3rd and 4th fingers of the non-dominant hand.
- Avoid the 2nd and 5th fingers if possible.
- Perform the stick off to side of the center of the finger.
- NEVER use the tip or center of the finger.



Massage or Warm the site

- Avoid fingers that are cold, cyanotic, swollen, scarred or covered with a rash.
- Massage to warm the finger and increase blood flow by gently squeezing from hand to fingertip 5-6 times.



Clean and DRY the site

- Cleanse fingertip with 70% isopropyl alcohol scrub vigorously.
- Allow alcohol to dry thoroughly before testing. Do not fan, blow on or wipe off.
- **Caution:** *Alcohol can falsely elevate or lower blood glucose results.*



Finger Stick location

- Using a sterile lancet, make a skin puncture just off the center of the finger pad.
- Wipe away the first drop of blood (which tends to contain excess tissue fluid).



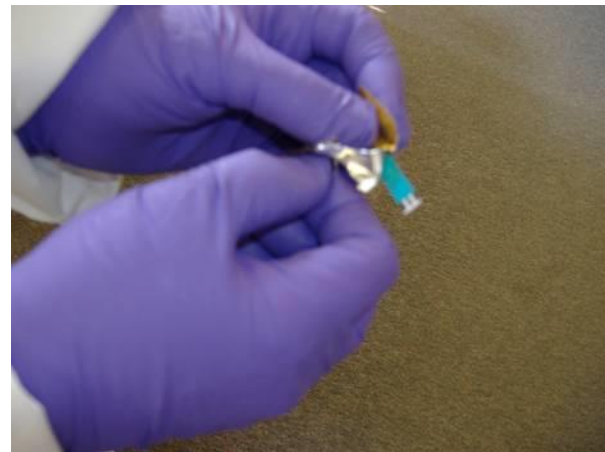
Do not milk finger

- **If necessary, apply light pressure** to the surrounding tissue until another drop of blood appears.
- Avoid "milking". The drop of blood must be big enough to fill the strip completely.
- **NOTE:** Do NOT squeeze or apply strong repetitive pressure to the site. This may result in hemolysis or increase tissue fluid in the blood causing incorrect glucose results.
- **Caution:** *Free flowing blood is necessary to obtain reliable results. Increased pressure beyond that necessary to hold the finger can result in inaccurate results.*



Opening the strip

- At the notch in the strip,
- Hold the strip on each side of the notch,
- Hold the top half still, while pulling the bottom half toward you.
- While pulling the bottom foil away,
- Hold the strip with the electrodes out,



- Place strip into meter.
- Apply sample to the target area of the strip.



Error Messages

- **“Laser On Time Exceeds”**: This means the laser has overheated. Clean the laser cover with a soft, dry cloth and allow meter to cool for 15 minutes.
- **Code 113 or 115**: send a sample to the lab, something is causing an interference.

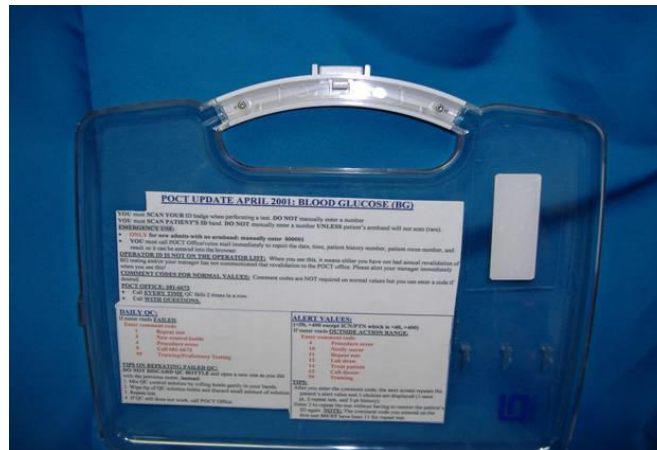
Alert Values

Alert Values: <40 or >400 mg/dL

- Alert Values must be confirmed by repeating the test.
- Any values <40 or >400 **MUST** be confirmed by laboratory testing.

Where to find information

- Information can be found in the lid of the carrying case.
- Glucometer user manual can be found on the Intranet



Testing yourself or Co-Workers

- It is a work rule violation to test yourself or co-workers.
- Exception to this is an emergency, the person will need to go to Employee Health or the Emergency Room.

Remember:

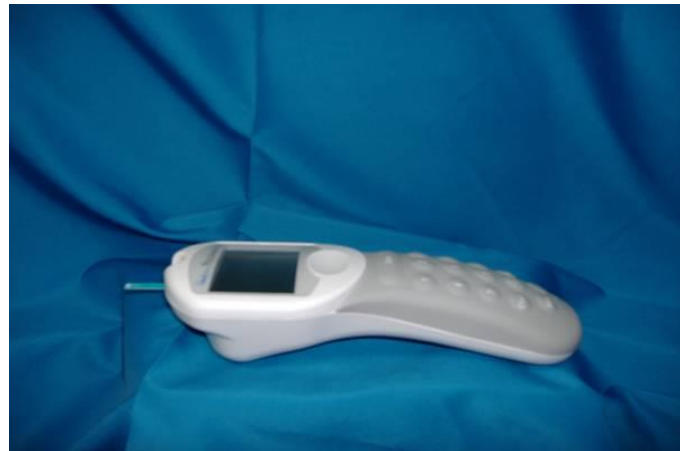
Scanning is everything

- Scanning prevents manual entry errors and results going to the wrong patient chart.
- If you must manually enter a number, double check it before you press the enter button. This should be a rare issue unless you work in the outpatient areas. Use the patient's Account number as the identification.

5150

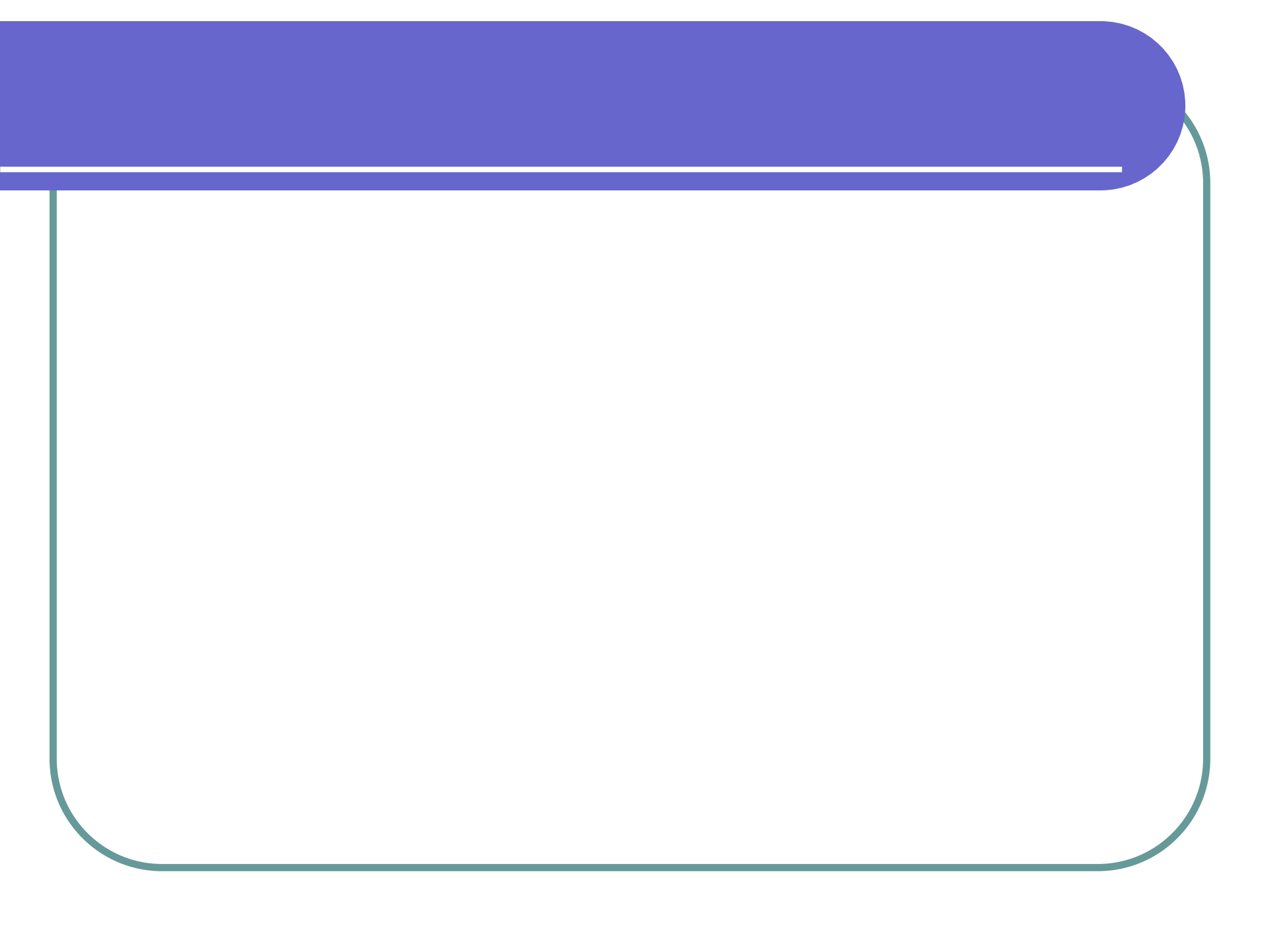
- This number is used exclusively in OB and ER for trauma or emergency cases where an armband is not available.
- Patient identification must be documented on the 5150 log located in these departments.

Always keep the meter flat when running a test
This prevents solutions from running into the port
and damaging the meter.



If you have problems with your meter call the POCT coordinator at 3204.





Cleaning the Glucometer

- The glucometer must be cleaned before each patient test, after each patient test and every 24 hours they have not been used for patient testing.
- Glucometers must be cleaned with PDI germicidal Super Sani Cloth disposable wipe. Pay special attention to the end of the glucometer with the test strip port and any areas of obvious blood contamination