

## 2. Working with Blood Glucose Meters

Regularly checking blood sugar is critical to good diabetes management. It is really an additional vital sign for people with diabetes. The clinician often uses these results to assess the resident's current diabetes treatment and assists in making changes when necessary. Blood sugar is tested daily using a glucose meter or monitor that reads a drop of blood placed on a special strip.

It is recommended that the long-term care facility have a policy and procedure manual for blood sugar monitoring covering four areas:

1. Training, education and proficiency testing of staff
2. Cleaning and infection control
3. Quality control procedures
4. Regular scheduled maintenance of equipment

Quality control on blood sugar meters should be done on a regular basis. According to the manufacturers, testing with a control solution should be done:

1. Once a week
2. When you suspect that the test strips or meter are not accurate
3. When opening a new box of test strips
4. When the cap is left off the test strip vial
5. The test results are not consistent with the resident's symptoms
6. If the monitor is dropped

Common errors when using blood sugar meters:

1. Expired test strips
2. Expired control solution
3. Improper coding of monitor
4. Test strips not stored correctly (store strips at room temperature with the cap tightly closed)
5. Inadequate amount of blood applied to test strip
6. Puncture site not clean and dry

### References

The National Committee for Clinical Laboratory Standards: Ancillary (Bedside) Blood Glucose Testing in Acute and Chronic Care Facilities: Approved Guideline (C30-A). Villanova, PA, National Committee for Clinical Laboratory Standards, 1994.