

Blood Glucose Testing

Blood glucose testing determines the glucose (sugar) level in the bloodstream. The results are measured in milligrams per deciliter (mg/dl).

I. Personnel Involved

- A. School nurse
- B. Designated school personnel under direct or indirect supervision
- C. School nurse as procedural supervisor

II. General Information

- A. Information about diabetes appears in “Diabetes: Hypoglycemia.”
- B. Regular monitoring of blood glucose levels contributes toward proper management of diabetes.
- C. Blood glucose testing should be an automatic part of treatment for hypoglycemia or hyperglycemia.
- D. This procedure requires a physician’s authorization. The service must be reauthorized yearly by the prescribing physician and parent.

III. Guidelines


- A. Purpose
 - To determine the level of blood sugar at designated testing times or when

symptoms of hypoglycemia or hyperglycemia occur (Refer to the procedures under “Diabetes: Hypoglycemia” and “Diabetes: Hyperglycemia.”)


B. Equipment

1. Alcohol prep pad (optional)
2. Device to prick finger (Lancet,TM Autolet,TM Autolancet,TM Penlet,TM and so forth)
3. Blood testing strip (Chemstrips,TM Glucostix,TM Glucoscan strips,TM and so forth)
4. Kleenex, cotton ball, or specific blotting material to wipe or absorb blood from the testing strip and to stop bleeding of the finger
5. Latex gloves
6. Log system (school SPHCS log and student logbook if requested)
7. Watch or clock with a second hand
8. Blood testing meter (optional), such as Accucheck,TM Glucometer,TM Glucoscan,TM and so forth

Blood Glucose Testing—Procedure

<i>Essential steps</i>	<i>Key points and precautions</i>	<i>Child specific</i>
<ol style="list-style-type: none"> 1. Wash your hands with soap and water and put on gloves. 2. Make sure that pupils' hands are washed with soap and water as well. Washing with soap and water is sufficient for prepping the site; however, alcohol may be used for further prepping. (The site selected <i>must be dry</i> before it is pricked.) 3. Select a site on the top sides of any fingertip. Hang the arm below the level of the heart for 30 seconds to increase the blood flow; then gently squeeze the fingertip in a milking fashion to increase further the supply of blood to the site. 4. Puncture the site with the pricking device. Gently squeeze the finger in a downward motion to obtain a large enough drop of blood to cover the test pad on the test strip (1/8 to 1/4 inch [.32 to .64 cm] in diameter). Too much squeezing of the finger gives inaccurate results. 	<p>Alcohol may cause toughening of the skin or a burning sensation. If moisture (water or alcohol) remains on the skin, test results may be altered.</p> <p>The tops of the fingertips may be sensitive. The <i>sides</i> of the fingers have less blood (refer to the picture below).</p> <div style="text-align: center;">  </div> <p>If the pad is not covered or if blood is smeared, the results may be inaccurate.</p>	

Blood Glucose Testing—Procedure (Continued)

<i>Essential steps</i>	<i>Key points and precautions</i>	<i>Child specific</i>
<p>5. Touch the drop of blood to the test pad portion of the strip, while holding the strip in a level position. Make certain that the blood covers the test pad portion of the strip without smearing.</p>		
<p>6. Begin the timing sequence recommended by the manufacturer as soon as blood is placed on the test pad. The next step is to wipe gently or blot the blood off the test strip. Most test strips require 60 seconds before the blood can be wiped or blotted. Again, follow the manufacturer's instructions.</p>	<p>Too much pressure on the pad can lift some of the color.</p> <p>If a meter is used, follow the instructions in the operating manual that comes with the test meter.</p>	
<p>7. Place the pad along the color blocks provided on the container when the timing is complete. The color block that closely matches the color of the pad is the blood glucose value.</p>		
<p>8. Record the results on the blood glucose log.</p>		
<p>9. Refer to “Algorithms for Blood Sugar Results” on the next page and to the physician's orders to determine which parts of the algorithm are to be followed for management of specific blood sugar levels.</p>		