

POLICY ON DIABETIC CARE MANAGEMENT AND GLUCAGON ADMINISTRATION

RATIONALE

Taking care of diabetes is important. If not treated appropriately, diabetes can lead to serious health problems. The disease can affect the blood vessels, eyes, kidneys, nerves, gums, and teeth, and it is the leading cause of adult blindness, lower limb amputations, and kidney failure. People with diabetes also have a higher risk of heart disease and stroke. Some of these problems can occur in teens and young adults who develop diabetes during childhood.

AIMS

The main aim is to maintain and control a good blood glucose level of student and staff with diabetes.

In addition we aim to support families with the day-to-day management of diabetes including eating nutritious food in appropriate quantities, getting regular physical activity, monitoring blood glucose levels, and taking medications when necessary.

SCOPE

The policy applies to all staff, students and whole school community.

POLICY STATEMENT

Blood glucose monitoring is critical to diabetes management. Blood glucose levels fluctuate throughout the day. Regular blood glucose monitoring provides information for management decisions. It is also critical for the identification, treatment, and prevention of high and low blood glucose levels. The frequency and timing of regular blood glucose tests should be outlined in the physician's written orders for the student. Additional blood glucose testing may be required when there is a change in physical activity level, food intake, and medication or when the student is not feeling well. Many students are able to perform blood glucose monitoring themselves in nonemergency situations. Other students, because of their age, maturity level, or other factors, may require an adult to check their blood glucose or assist them with this task. All students may need an adult's assistance to check blood glucose when experiencing severe hypoglycemia. In order to check blood glucose the following tools are needed (parent/guardian will provide):

- Blood glucose meter
- Testing strip (specific to each meter)
- Lancet (a sharp, pin-like tool)
- Sharps container (to dispose of lancets)

PREPARATION

Begin by having the student wash and dry hands thoroughly (if possible). If assisting or performing the blood glucose check for the student, put on disposable gloves and when finished, wash hands thoroughly after removing gloves. Dispose of the lancet in a sharps container. Test strips may be discarded in a regular trash can. Record the blood glucose result and as needed, take action according to the physician's written orders for the student.

Caring for the Student with Mild to Moderate Hypoglycemia

When a student with diabetes has symptoms of hypoglycemia, it's important to treat it right away. Begin by checking the student's blood glucose level, and if appropriate treat for hypoglycemia. If a meter is not accessible, and the student has symptoms, go ahead and treat for hypoglycemia.

Step 1: Have the student eat or drink something with 15 grams of carbohydrate. Suggestions include:

- Glucose tablets equaling 15 grams of carbohydrate
- ½ can regular (non-diet) soda

- 6-7 lifesavers
- 1 c. non-fat milk
- 1 tbs. sugar, honey, or corn syrup
- 2 tbs. raisins

The physician's written orders for the student may provide more specific direction on what carbohydrate source should be used.

Step 2: Wait 15 minutes, check the blood glucose level. If the blood glucose is still below his or her target range give the student another 15 grams of carbohydrate and check again after 15 minutes. If the student's blood glucose remains too low even after treatment, contact the the parent/guardian. The student may need to be seen by his or her health care provider.

Steps for Administering Glucagon

- Never attempt to give a student suffering from severe hypoglycemia food or a drink or to put anything in the mouth because it could cause choking.
- Position the student safely on their side for comfort, protection from injury and to prevent choking in the event of vomiting, a possible reaction to glucagon administration.
- Have another school staff member call for emergency medical assistance (911) and the student's parent/guardian while glucagon is being administered. Do not delay administering glucagon while these calls are made.
- Remove the cap from the glass vial containing dry powder.
- Remove cap from syringe and insert the needle into the vial through the rubber stopper.
- Inject all the fluid in syringe into the bottle containing the dry powder.
- Shake gently or roll to mix until all powder is dissolved and solution is clear.
- Inspect the vial. The solution should be clear and colorless. Do not administer if discolored or does not dissolve well.
- Hold the vial upside down in one hand.
- Insert the syringe into the vial.
- Draw the prescribed amount of solution into the syringe (refer to physician's written orders for the student).
- Clean the site, if possible. The best sites for injection are buttocks, thighs, and upper arms.
- Inject the glucagon at 90° angle into the tissue under cleansed area.
- Push syringe plunger all the way down.
- Count to five.
- Remove needle from skin and dispose of syringe safely into a sharps container.
- Dispose of any unused portion of the mixed glucagon
- Confirm that 998 has been called
- Stay with the student, keeping him/her on their side until they regain consciousness or emergency personnel have arrived. It may take 15-20 minutes for the student to regain consciousness. It is likely that emergency personnel will have arrived on the scene and will have taken responsibility for treatment. If they have not:
- Check blood glucose
- Give sips of fruit juice or regular soda once the student is awake and able to eat or drink
- Follow the physician's written orders for the student
- Record the glucagon administration in the student's health record and on the medication log
- Do not be surprised if:
 - The student does not remember being unconscious is incoherent or has a headache
 - Blood glucose becomes very high (over 200)
 - Nausea or vomiting occur

- Remain in contact with the family to ensure any follow-up / preventative treatment by the school is necessary

GENERAL GUIDELINES FOR THE CARE OF THE CHILD IN THE SCHOOL

Diabetes Medical Management Plan

An individualized Diabetes Medical Management Plan (DMMP) should be developed by the student's personal diabetes health care team with input from the parent/guardian.

1. Blood glucose monitoring, including the frequency and circumstances requiring blood glucose checks, and use of continuous glucose monitoring if utilized.
2. Insulin administration (if necessary), including doses/injection times prescribed for specific blood glucose values and for carbohydrate intake, the storage of insulin, and, when appropriate, physician authorization of parent/guardian adjustments to insulin dosage.
3. Meals and snacks, including food content, amounts, and timing.
4. Symptoms and treatment of hypoglycemia (low blood glucose), including the administration of glucagon if recommended by the student's treating physician.
5. Symptoms and treatment of hyperglycemia (high blood glucose).
6. Checking for ketones and appropriate actions to take for abnormal ketone levels, if requested by the student's health care provider.
7. Participation in physical activity.
8. Emergency evacuation/school lock-down instructions.

Responsibilities of the various care providers

1. The parent/guardian should provide the school with the following: All materials, equipment, insulin, and other medication necessary for diabetes care tasks, including blood glucose monitoring, insulin administration (if needed), and urine or blood ketone monitoring. The parent/guardian is responsible for the maintenance of the blood glucose monitoring equipment (i.e., cleaning and performing controlled testing per the manufacturer's instructions) and must provide materials necessary to ensure proper disposal of materials. A separate logbook should be kept at school with the diabetes supplies for the staff or student to record blood glucose and ketone results; blood glucose values should be transmitted to the parent/guardian for review as often as requested. Some students maintain a record of blood glucose results in meter memory rather than recording in a logbook, especially if the same meter is used at home and at school.
2. The DMMP completed and signed by the student's personal diabetes health care team.
3. Supplies to treat hypoglycemia, including a source of glucose and a glucagon emergency kit, if indicated in the DMMP.
4. Emergency phone numbers for the parent/guardian and the diabetes health care team so that the school can contact these individuals with diabetes-related questions and/or during emergencies.
5. Information about the student's meal/snack schedule. The parent should work with the school during the teacher preparation period before the beginning of the school year or before the student returns to school after diagnosis to coordinate this schedule with that of the other students as closely as possible. For young children, instructions should be given for when food is provided during school parties and other activities.
6. A signed release of confidentiality from the legal guardian will be required so that the health care team can communicate with the school. Copies should be retained both at the school and in the health care professionals' offices.

The school should provide the following:

1. Opportunities for the appropriate level of ongoing training and diabetes education for the school nurse.
2. Training for school personnel where appropriate.
3. Immediate accessibility to the treatment of hypoglycemia by a knowledgeable adult. The student should remain supervised until appropriate treatment has been administered, and the treatment should be available as close to where the student is as possible.
4. Accessibility to scheduled insulin at times set out in the student's DMMP as well as immediate accessibility to treatment for hyperglycemia including insulin administration as set out by the student's DMMP.
5. School nurse can check blood glucose and ketones and administer insulin, glucagon, and other medications as indicated by the student's DMMP.
6. School nurse is responsible for the student who will know the schedule of the student's meals and snacks and work with the parent/guardian to coordinate this schedule with that of the other students as closely as possible. This individual will also notify the parent/guardian in advance of any expected changes in the school schedule that affect the student's meal times or exercise routine and will remind young children of snack times.
7. Permission for self-sufficient and capable students to carry equipment, supplies, medication, and snacks; to perform diabetes management tasks; and to have cell phone access to reach parent/guardian and health care provider.

The school nurse should be the key coordinator and provider of care and should coordinate the training of an adequate number of school personnel as specified above and ensure that if the school nurse is not present at least one adult is present who is trained to perform these procedures in a timely manner while the student is at school, on field trips, participating in school-sponsored extracurricular activities, and on transportation provided by the school or day care facility. This is needed in order to enable full participation in school activity.

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