

## DIABETES POLICY

*This circular will remain in effect unless rescinded or superseded by a subsequent version*

### BACKGROUND

Diabetes is a chronic disease in which the body does not make or properly use insulin. Insulin is a hormone produced by the pancreas that is needed to convert sugar and starches into energy for the body. People with diabetes have increased blood glucose (sugar) levels because they lack or have insufficient insulin or are resistant to insulin's effects. High levels of glucose build up in the blood and spill into the urine; as a result the body loses its main source of fuel.

There are many types of diabetes that affect children. The most common types seen in school settings include:

- **Type 1** (formerly called “Insulin-Dependent” or “Juvenile-Onset”) Diabetes Mellitus: This type of diabetes is considered a disease of the immune system because the immune system destroys the cells in the pancreas that produce the hormone insulin. People with type 1 diabetes must inject insulin every day because their bodies cannot produce insulin. It needs to be injected under the skin to be absorbed; it cannot be taken by mouth because it would not be effective.
- **Type 2** (formerly called “Non-Insulin Dependent” or “Adult-

Onset”) Diabetes Mellitus: People with type 2 diabetes produce insulin, but the cells of the body do not respond normally to the insulin. This is referred to as insulin resistance. Type 2 diabetes can often be managed with diet and exercise, but some students also need medications taken by mouth (oral hypoglycemic agents), insulin injections, or both to help glucose enter their cells.

- **Pre-Diabetes:** Pre-diabetes is a condition in which blood glucose levels are higher than normal, but not yet high enough to be classified as diabetes. Before people develop type 2 diabetes, they almost always have pre-diabetes.
- **Gestational Diabetes** (may affect teens who are pregnant): Gestational diabetes results from pregnancy hormones that cause the body to become resistant to its own insulin.

Diabetes is the third most common chronic health disease affecting an estimated 2.22/1,000 children and adolescents according to The Search for Diabetes in Youth (SEARCH) Study (Pettitt et al., 2014). Children and adolescents are defined as youth under the age of 20 years. In 2009, approximately 191,986 or one in 433 youth with diabetes lived in the U.S. From these, 87% have type 1 diabetes and 11% have type 2 diabetes (Pettitt et al., 2014). In the years 2008 to 2009, 18,436 youth were newly diagnosed with type 1 diabetes and 5,089 youth were newly diagnosed with type 2 diabetes (Centers for Disease Control and Prevention [CDC], 2014). As the sixth leading cause of death by disease in the United States, long-term complications of diabetes include heart disease, stroke, blindness, kidney failure, nerve disease, gum disease, and amputation of the foot or leg. Although there is no cure, diabetes can be managed, and complications can be delayed or prevented.

Advances in diabetes technology continue to enhance students' ability to manage diabetes at school, thus improving their quality of life. Children and adolescents monitor blood glucose levels several times a day via blood glucose meters and continuous glucose monitors, conduct carbohydrate calculations, and inject insulin via syringe, pen, and pump to attain blood glucose control (Brown, 2016). Intensive resources and consistent evidenced-based interventions will achieve the long-term health benefits of optimal diabetes control, according to the landmark study from the Diabetes Control and Complications Trial Research Group (DCCT, 1993).

Coordination and collaboration among members of the school health team and the student's personal diabetes health care team are essential for helping students manage their diabetes in the school setting. Members of the school health team include the student with diabetes, parents/guardians, school nurse, teacher(s), school leader, COSES, social worker, coach, physical education teacher, food service staff, and other school staff members. In addition, it is essential for team members to understand the federal and state laws that may apply to students with diabetes, including Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, and the Individuals with Disabilities Education Act.

**The purpose of these Administrative Procedures and Guidelines is to:**

- Provide a safe and healthy learning environment for all students
- Protect the rights of students with diabetes to participate in all school activities

- Ensure proper medical management and safety of the student, minimizing the possibility that diabetes related emergencies might disrupt their educational and classroom activities
- Facilitate self-management so that the student may gradually assume responsibility for their care
- Reduce the likelihood of severe or potentially life-threatening diabetic emergencies during school
- Ensure a rapid and effective response in the case of a severe or potentially life threatening diabetic emergency

## EDUCATION AND TRAINING

Staff to be trained includes, but are not limited to, teachers, paraprofessionals, food service staff, school leaders, support staff, and student interns/teachers. Coordination and collaboration among members of the school health team and the student's personal diabetes health care team are essential for helping students manage their diabetes in the school setting.

Education and training for key personnel by the school nurse will include:

- an overview of diabetes
- signs and symptoms of diabetes, including hyper/hypoglycemia
- role and responsibilities in prevention and reducing risks
- recognizing and responding to a diabetic emergency
- review of the student's Individual Health Plan (IHP) and Diabetes Emergency Action plan

## **ROLES AND RESPONSIBILITIES**

### **Role of the Parent/Guardian**

- At the time of registration, inform the Welcome Center staff of any health concerns of their child, including Type 1 Diabetes. The Health Services Department remains available to support any student or parent/guardian wishing to discuss this information privately.
- Provide the school nurse with a current diabetes medical management plan and emergency management plan from the student's endocrinologist. It is recommended that the parent/guardian meet with the school nurse in person to discuss their child's plan.
- Actively participate with the school nurse in creating an individualized healthcare plan for school that supports the student's medical, educational, and developmental needs
- Provide the school nurse with the necessary supplies needed to care for the student during the school day: insulin, glucometer, glucagon, syringes, etc. In the case of an insulin pump: extra insulin delivery catheter, insulin, insulin receptacle.
- Provide the school nurse with the carbohydrate count for each item when lunch or snack is brought from home.
- Provide current contact information including cell phone numbers (if available), emergency numbers, and at least two back up numbers to call if parents/guardians are not reachable.
- Educate after-school activities personnel about the diabetic management plan and provide a plan as necessary.

## **Role of the School Administrator**

- Facilitate diabetes management training for school personnel.
- Support faculty, staff, and parents in implementing all aspects of the Diabetes Management Plan.
- Identify all staff members who have responsibility for the student with diabetes throughout the school day and during school-sponsored extracurricular activities and field trips.
- Ensure there is a contingency plan in the case of a substitute nurse, teacher, or food service personnel.
- Ensure that the classroom staff have been trained in an overview of diabetes, how to recognize and respond to hypoglycemia and hyperglycemia and the steps to take in the event of an emergency.
- Make certain that emergency communication devices (e.g., walkie-talkie, intercom, cell phone, etc.) are always present and functional.
- Promote a supportive learning environment for students with diabetes to manage their diabetes safely and effectively at school.
- Inform the school nurse 4-6 weeks in advance of field trips to thoroughly support a student's participation in a field trip and ensure adequate planning time (e.g. necessity for nursing support during the field trip).
- Understand the federal and state laws that may apply to students with diabetes, including Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities

Act, and the Individuals with Disabilities Education Act.

**Role of the School Nurse:**

- Obtain and review the student's current Diabetes Medical Management Plan (DMMP) along with other pertinent information from the student's parents/guardians and health care providers.
- Obtain releases for nurse/health care provider communication and physician authorization for medication.
- Develop an Individualized Health Care Plan (IHP). Promote and encourage independence and self-care consistent with the student's ability, skill, maturity, and development as indicated in the DMMP. After reviewing the IHP with the parents/guardians and student, implement, review, and update the plan throughout the school year as needed.
- Develop a plan for student management in the classroom, lunchroom, playground, athletics, and field trips that provides for routine and emergency care. These would include blood glucose monitoring; urine/blood ketone testing; insulin administration; glucagon administration; and assistance with carbohydrate counting.
- Perform or assist the student with routine and emergency diabetes care tasks, including blood glucose monitoring, urine or blood ketone testing, insulin and other medication administration, carbohydrate counting, and glucagon administration.
- Maintain accurate documentation in the electronic health record of all diabetes care provided at school. Document communications with the student, the parents/guardians,

and the student's personal diabetes health care team, and document communications related to the training and supervision of trained diabetes personnel.

- Ensure that all other staff members who have contact with students with diabetes are familiar with their Individual Health Care Plans (IHPs) on a need-to-know basis.
- Provide a list of students with diabetes (if consent given by parent) to all staff on a need-to-know basis, including bus drivers.
- Conduct in-service training and education for appropriate staff regarding a student's symptoms; risk reduction procedures; emergency procedures; and appropriate responses to symptoms of diabetic emergencies. This includes PE instructors and coaches. This training should be repeated annually or when a student transfers classrooms or schools.
- Ensure that there is a contingency plan in place for all school-related venues where substitutes are utilized.
- Encourage the students to eat all meals and snacks fully and on time. Be flexible with time requirements for eating and provide the parent or guardian with the carbohydrate menu.
- Make certain that emergency communication devices (e.g., walkie-talkie, intercom, cell phone, etc.) are always present and functional.
- Participate in the teams that develop and implement the student's Section 504 Plan, other education plan, or individualized education program. Contribute to IEP, and 504 implementation of diabetes related issues, where



appropriate.

- Communicate with the student's parents/guardians and—with their permission—communicate with the student's personal diabetes health care team about progress as well as any concerns about the student's diabetes management or health status, such as hypoglycemia episodes, hyperglycemia, general attitude, emotional issues, and self-management.

### **Role of the Coordinator of Special Education (COSE):**

- If a student is referred for consideration for a 504 accommodation plan and/or special education, the COSE will process as appropriate. The parent/guardian, school nurse and other school staff must be involved in the plan development and implementation.
- If a student is eligible for a 504 accommodation plan (or is being evaluated for a 504 accommodation plan), the team will discuss eligibility for transportation.
- If a student already has an IEP (or is being evaluated) and transportation may be necessary for the medical condition (but not necessarily the area of educational disability), the team will consider transportation needs (team will include school nurse). If special transportation is found to be necessary, it can be added to the IEP.

### **Role of the Teacher**

- Have a list of all students in the classroom with chronic diseases, including diabetes.

- Participate in team meetings for students with diabetes and participate in in-service training provided by the school nurse.
- Be prepared to respond immediately to the signs and symptoms of hypoglycemia (low blood glucose) and hyperglycemia (high blood glucose), in accordance with the student's Emergency Care Plans for Hypoglycemia and Hyperglycemia.
- Keep accessible the student's emergency plan with a photo (where possible) in the classroom (with parent's permission) or keep with the lesson plan.
- Inform volunteers, student teachers, aides, specialists, and substitute teachers about the student's condition both through verbal communication and in an organized, prominent, and accessible written format.
- Recognize that eating meals and snacks on time is a critical component of diabetes management.
- Coordinate with parent/guardian to provide lesson plans to accommodate any learning needs.
- Support the student in participating in all school-sponsored activities.
- Inform the school nurse 4-6 weeks in advance of field trips to ensure adequate planning time for supports.
- Notify the school nurse and parents/guardians in advance of changes in the school schedule, such as class parties, field trips, and other special events.

## **Role of Physical Education Teacher and Coaches**

- Have a list of all students in their charge who have diabetes.
- Coaches will be told of any students on their teams who have diabetes through review in ASPEN/Sports Clearance, and will be trained in identification of symptoms of diabetes emergencies.
- Participate in in-service training about diabetes as needed.
- Keep accessible the student's emergency plan with a photo (where possible) in the specific venue (with parent's permission).
- Allow students with diabetes to wear their insulin pump and/or sensor and medical ID during physical activity.
- Designate a safe place for students to keep their diabetes supplies, including their insulin pump, if they remove it during physical activity.
- Make sure blood glucose monitoring equipment and a quick-acting form of glucose are available at all activity sites.
- Include the student's Emergency Care Plans for Hypoglycemia and Hyperglycemia and diabetes supplies in the first aid pack that goes out to physical education activities, practices, and games.
- Allow the student to monitor blood glucose levels and/or administer insulin, as outlined in the student's health care plans and education plans.
- Recognize that a change in the student's behavior could be a symptom of blood glucose changes.
- Understand and be aware that hypoglycemia (low blood glucose) can occur during and after physical activity.

- Inform substitutes about the student's diagnosis and the signs and symptoms of hyper or hypoglycemia.

### **Role of Food Services**

- Work with health services to provide access to carbohydrate menus to parents and school nurses and assist in carbohydrate counting activities.
- Make available and maintain current food labels for all meal plans. Provide nutrition information on all menu items and a la carte items to the school staff and parents/guardians.

### **Role of the Office of Transportation**

- Provide training for all bus monitors for medical emergencies, including but not limited to Heartsaver CPR/AED, Heartsaver First Aid.
- Know local EMS (Emergency Medical Services) procedures.
- Have functioning communication equipment to access EMS
- Understand that a student with diabetes may need to have a snack to regulate their blood sugar, despite the policy of no food eating allowed on the bus.
- Encourage 1:1 communication between bus monitors and school-based staff as well as between bus monitors and parents/guardians.

### **Role of the School Bus Company**

- Provide training for all bus drivers for medical emergencies, including but not limited to Heartsaver CPR/AED and Heartsaver First Aid.

- Know local EMS (Emergency Medical Services) procedures.
- Have functioning communication equipment to access EMS.
- Understand that a student with diabetes may need to have a snack to regulate their blood sugar, despite the policy of no food eating allowed on the bus.

## REFERENCES

- [Massachusetts | ADA](#)
- [Diabetes Management in the School Setting](#)
- [Diabetes | Healthy Schools | CDC](#)
- [Diabetes Care Tasks at School | ADA](#)

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