



Dr. Eric Johnson is a family practice doctor in Grand Forks with a special interest in diabetes -- and a special knack for writing. As a member of the Dakota Diabetes Coalition, he has generously made himself available to answer questions through our listserv.

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<http://www.health.state.nd.us/diabetescoalition/>

## Diabetes in school and day care settings

### **Q. What do families and school staff members need to know about diabetes as a new school year begins?**

A new school year for families concerned about diabetes means there are new staff to educate and new treatment plans to explain. After all, people who work in schools need to know about effective diabetes management so that children remain safe and happy in school or child care.

For the most part, many school districts handle this very appropriately, and have made great strides since the implementation of the Americans with Disabilities Act 15 years ago. Other federal laws that protect children in the school setting are Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act of 1991. Just as people with diabetes in the workplace are protected against discrimination, so are children in the school setting. See this link: [www.diabetes.org/schooldiscrimination](http://www.diabetes.org/schooldiscrimination) for more complete information.

Who does this potentially affect? Approximately 176,000 American children and teenagers have diabetes. A great majority of these children and youth spend a majority of their day outside of parents' care. They are in either day care or school, which means staff must be educated about diabetes. What's at stake: nothing less than safety and a successful school experience in both academics and extra-curricular activities.

**Each child, each diabetes plan, is different**

It is well-established (Diabetes Complications and Control Trial of 1993) that diabetes control is important for the long-term well-being of persons with the disease. The ability to effectively manage diabetes in either school or day care settings is paramount. An individualized diabetes plan for each affected child should be developed as part of an Individual Education Plan, sometimes referred to as an “IEP” or a “504,” because of the statute citation that established the requirement. An example from the American Diabetes Association is shown below:

Date of Plan \_\_\_\_\_ **Diabetes Medical Management Plan** Effective Dates \_\_\_\_\_

This plan should be completed by the student's personal health care team and parent/guardian. It should be reviewed with relevant school staff and copies should be kept in a place that is easily accessed by the school nurse, trained diabetes personnel, and other authorized personnel.

Student's Name \_\_\_\_\_ DOB \_\_\_\_\_ Date of Diabetes Diagnosis \_\_\_\_\_  
 Grade \_\_\_\_\_ Homeroom Teacher \_\_\_\_\_ Physical Condition: Diabetes Type 1 Diabetes Type 2 \_\_\_\_\_

**Contact Information**  
 Parent/Guardian #1 \_\_\_\_\_ Address \_\_\_\_\_  
 Phone: Work \_\_\_\_\_ Home \_\_\_\_\_ Cell \_\_\_\_\_  
 Parent/Guardian #2 \_\_\_\_\_ Address \_\_\_\_\_  
 Work \_\_\_\_\_ Home \_\_\_\_\_ Cell \_\_\_\_\_

**Student's Doctor/Health Care Provider:**  
 Name \_\_\_\_\_ Address \_\_\_\_\_  
 Phone: \_\_\_\_\_ Emergency Number: \_\_\_\_\_

**Other Emergency Contacts:**  
 Name \_\_\_\_\_ Relationship \_\_\_\_\_  
 Phone: Work \_\_\_\_\_ Home \_\_\_\_\_ Cell \_\_\_\_\_

Notify parents/guardian or emergency contact in the following situations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Blood Glucose Monitoring**  
 Target range for blood glucose is 70-150 70-180 Other \_\_\_\_\_  
 Usual times to check blood glucose: \_\_\_\_\_  
 Times to do extra blood glucose checks (circle all that apply):  
 Before exercise \_\_\_\_\_ After exercise \_\_\_\_\_  
 Student exhibits symptoms of hyperglycemia \_\_\_\_\_ Student exhibits symptoms of hypoglycemia \_\_\_\_\_  
 Other (explain) \_\_\_\_\_

Can student perform own blood glucose? Yes No  
 Exceptions: \_\_\_\_\_  
 \_\_\_\_\_

Type of blood glucose meter student uses: \_\_\_\_\_

**Insulin**  
 Usual lunchtime dose: \_\_\_\_\_  
 Base dose of Humalog/Novolog/Regular insulin at lunch (circle type of rapid-acting insulin used) is \_\_\_\_\_ units or doses flexible dosing using \_\_\_\_\_ units/ \_\_\_\_\_ grams carbohydrate.  
 Use of other insulin at lunch (circle type of insulin used): Intermediate/NPH/Lente \_\_\_\_\_ units or basal/Lantus/Ultralente \_\_\_\_\_ units.

**Insulin Correction Doses**  
 Parental authorization should be obtained before administering a correction dose for high blood glucose levels: Yes No  
 \_\_\_\_\_ units if blood glucose is \_\_\_\_\_ to \_\_\_\_\_ mg/dl \_\_\_\_\_ units if blood glucose is \_\_\_\_\_ to \_\_\_\_\_ mg/dl  
 \_\_\_\_\_ units if blood glucose is \_\_\_\_\_ to \_\_\_\_\_ mg/dl \_\_\_\_\_ units if blood glucose is \_\_\_\_\_ to \_\_\_\_\_ mg/dl  
 \_\_\_\_\_ units if blood glucose is \_\_\_\_\_ to \_\_\_\_\_ mg/dl

**Think beyond the classroom**

Any school staff who regularly interacts with a child with diabetes needs education on what is regular and appropriate diabetes care -- and what constitutes an emergency. A child’s safety may be at stake. That’s why students need to be able to perform blood glucose checks frequently and have appropriate snacks or other glucose sources readily available for the treatment of hypoglycemia. And they need access to a bathroom, in case they are dealing with frequent urination due to hyperglycemia.

Other topics to cover include:

- Signs and symptoms of both hypo- and hyper-glycemia, as well as ready access to Glucagon for severe hypoglycemic episodes.
- Meal planning includes the usual cafeteria workers, of course, but also classroom teachers, coaches or others who oversee children in a setting where they are likely to eat anything.

- Testing blood sugar in the classroom will minimize missed class time and allows students the immediate information they need to gauge appropriate treatment.
- The child (or a designee) should be able to administer insulin when appropriate without restriction.

Schools are required to provide an appropriate plan for children with medical needs in their care and diabetes is no exception. Dealing with diabetes in athletic competitions is a more complex topic, and will be addressed in a future column. Most often, providing diabetes information to the appropriate school staff in a non-confrontational way will go a long way toward gaining people's understanding -- and ultimately their cooperation.

For a complete review on diabetes in schools and day care settings, see the following link: [http://care.diabetesjournals.org/cgi/content/full/30/suppl\\_1/S66](http://care.diabetesjournals.org/cgi/content/full/30/suppl_1/S66)

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*If you have comments about the column, or questions for Dr. Johnson's future columns, please contact [gailhand@qwest.net](mailto:gailhand@qwest.net)*

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