

## Sliding Scale Insulin in Schools

### I. Policy

The Nurse Practice Act defines the professional practice of nursing to include “The administration of medications and treatments as prescribed or authorized by a duly licensed practitioner authorized by the laws of this state to prescribe such medications and treatments.” Section 464.003(3)(a)2., Florida Statutes. The practice of practical nursing is defined to include “the performance of selected acts, including the administration of treatments and medications, . . . under the direction of a registered nurse, a licensed physician, a licensed osteopathic physician, a licensed podiatric physician, or a licensed dentist.” Section 464.003(3)(b), Florida Statutes. Based upon these requirements it is the policy of the Department of Health that School Nurses take insulin orders only from duly licensed practitioners. These orders may be in the form of standard protocols for sliding scale adjustment based upon blood glucose testing.

### II. Authority

Chapter 464, F.S., Section 464.003, defines from whom a professional nurse may accept prescribed medication and treatment orders.

### III. Supportive Data/References

Florida Department of Health. (2003). *Nursing Guidelines for the Delegation of Care for Students with Diabetes in Florida Schools 2003*. Tallahassee, Florida: Author.

Nurse Practice Act, Chapter 464 Florida Statutes (2003). Retrieved December 15, 2003, from [http://www.flsenate.gov/statutes/index.cfm?App\\_mode=Display\\_Statute&URL=Ch0464/p art01.htm&StatuteYear=2003&Title=%2D%3E2003%2D%3EChapter%20464%2D%3EPart%201](http://www.flsenate.gov/statutes/index.cfm?App_mode=Display_Statute&URL=Ch0464/p art01.htm&StatuteYear=2003&Title=%2D%3E2003%2D%3EChapter%20464%2D%3EPart%201)

Schwab, N. & Gelfman, M. (Eds.). (2001). *Legal issues in school health services: A resource for school administrators, school attorneys, school nurses*. North Branch, MN: Sunrise River Press.

### IV. Signature Block with Effective Date

Signature on file at the School Health Services Program Office.

John O. Agwunobi, M.D., M.B.A., M.P.H.  
Secretary, Department of Health

Date

### V. Definitions

Diabetic Ketoacidosis (DKA): Severe, out-of-control high blood glucose levels that need emergency treatment. DKA happens when there is insufficient insulin to convert blood glucose into useable energy. The body responds by using stored fat for energy, which

causes ketone bodies and acids to build up in the blood. Ketoacidosis may be related to illness, stress or taking too little insulin. The signs and symptoms include nausea and vomiting, stomach pain, deep, rapid breathing, flushed face, rapid weak pulse, dry skin and a fruity breath odor. Fluids and insulin must be given quickly since ketoacidosis can lead to coma and even death.

Duly Licensed Practitioner: A practitioner authorized by the state of Florida to prescribe medicines and treatments in accordance with s. 456 F.S.

Hyperglycemia: A condition in which blood glucose levels are elevated, generally 240 mg/dl or higher. The signs and symptoms may include the following:

Mild Hyperglycemia - blood glucose usually over 240, thirst, frequent urination, fatigue/sleepiness, increased hunger, loss of concentration, blurred vision, urine ketones (none-small).

Moderate Hyperglycemia - blood glucose usually over 240, sweet breath, dry mouth, nausea, stomach cramps, vomiting, urine ketones, (moderate-large).

Severe Hyperglycemia - blood glucose usually over 240, labored breathing, very weak, confused, unconscious, urine ketones, (moderate-large)

Individualized Health Care Plan (IHCP): A nursing care plan developed by the school nurse in conjunction with the parents, family, student and others as necessary, describing how health related services will be provided to specific students in the school setting.

Insulin: A hormone secreted by the islet cells in the pancreas that allows the body's cells to absorb glucose for energy. It is used as a medication when the body does not make enough insulin to maintain proper blood glucose levels.

School Nurse: A professional nurse registered and licensed to practice in Florida who is employed by the county health department, local school district or contracted by the county health department or local school district from a community based agency. The school nurse may be assigned to one or more schools and provides leadership and services consistent with the Nurse Practice Act (Chapter 464 F.S.) and the School Health Services Program (s. 381.0056. F.S.).

Sliding Scale Insulin Order: A medical order for adjusting the insulin dose on the basis of blood glucose monitoring and/or carbohydrate consumption. It is sometimes referred to as supplemental insulin or a bolus dose.

## **VI. Protocol**

Each employee of the Department of Health, School Health Services Program shall be given a reasonable opportunity to review this policy through appropriate posting and distribution. Each employee shall also be given the opportunity to discuss this policy with a supervisor, trainer, School Health Services Program liaison or other representative, and to ask questions regarding school health medication orders in general.

## **VII. Procedure**

### **A. Prevention**

Effective communication is essential for collaboration and cooperation. Explain to the physician and parents why the school nurse requires an insulin sliding scale order. The order must be in writing, signed by the physician and placed in the child's school health medication file. The practitioner may fax the orders to the school nurse. For the student's safety and effective care, an Individual Health Care Plan (IHCP) must be developed that delineates the role of parents, school nurse, student, classroom teachers, school staff and auxiliary school personnel. The *Nursing Guidelines for the Delegation of Care for Students with Diabetes in Florida Schools 2003* is a recommended tool to use in this process.

### **B. Intervention**

- a. If a child requiring insulin administration during the school day presents with inappropriate orders, notify the parent of the need for written physician sliding scale insulin orders and that neither school nurses nor their delegates can give any insulin to a student without the required written and signed order. Parents will need to make alternative arrangements in the interim.
- b. Until the nurse receives the written sliding scale orders, the parent or their representative may come to the school to administer the insulin.
- c. The school nurse must notify the school health services program supervisor and principal or their designee immediately if unable to obtain an acceptable, legal insulin order. If the supervisor is unable to resolve this problem, the supervisor will notify the nursing administrator. If the nursing administrator is unable to resolve this problem, the nursing administrator will notify the health department director or medical director to intervene. If the health department medical director is unable to resolve this problem, the director or medical director will notify the Deputy State Health Officer to intervene.
- d. In the event that a child without appropriate orders displays signs and symptoms of hyperglycemia, follow emergency care protocol according to the *Nursing Guidelines for the Delegation of Care for Students with Diabetes in Florida Schools 2003*. Because paraprofessionals cannot make a nursing assessment, notification of the parent, principal and school nurse is important.
- e. If a student's condition requires emergency intervention, contact 911 in accordance with the school's emergency procedure.

### **C. Documentation**

- a. Document the student's health status, nursing interventions, services, contact with parents, providers and supervisor, referrals, medical or medicine orders, and education, in the student's individual health record.
- b. If necessary, file an incident report as a medication error, if the insulin is not given or is not given within the permitted time allowance, with the school's safety committee.

**D. Follow up**

- a) Update the IHCP as necessary.

**V. Distribution List**

County Health Department School Health Services Program Coordinators  
County Health Department Nursing Directors  
County Health Department Directors  
Department of Education Nurse Liaison  
Local School District School Health Coordinators  
School Health Services Program Library, hard copy  
Web Manager, electronic copy