DIABETES CARE TASKS AT SCHOOL: What Key Personnel Need to Know

INSULIN BY PUMP
Goal: Optimal Student Health and Learning

Accurate and timely insulin dosing is a vital piece of a comprehensive plan.
Learning Objectives

Participants will be able to understand:

- *Basic types and features of insulin pumps*
- *What pumps do*
- *Essential information and skills for key school personnel who might perform or assist in entering data or delivering insulin with a pump*
What Is an Insulin Pump?

- Battery operated device about the size of a pager
- Reservoir filled with insulin
- Computer chip with user control of insulin delivery
- Worn 24 hours per day
- Delivers only rapid-acting insulin
Dosing with an Insulin Pump

Dosage instructions are entered into the pump’s small computer and the appropriate amount of insulin is then injected into the body in a calculated, controlled manner.

Insulin pump
Insulin Pump Therapy

- Based on what body does naturally
  - Small amounts of insulin all the time (basal insulin)
  - Extra doses to cover each meal or snack (bolus insulin)

- Precision, micro-drop insulin delivery

- Flexibility

- Ease of correction for high blood glucose levels
What Pumps Do

“Bells and Whistles”

- Many pumps will calculate bolus dosages
- Some pumps communicate with blood glucose meters, or continuous glucose monitors
- Tracking active insulin
- Temporary basal rates

Limitations:

- Pumps rely on input from humans to calculate dosing; the user can override pump-calculated doses
What Key Personnel Need to Know About an Insulin Pump

- How to deliver routine boluses for carbs and high blood glucose
- Signs/symptoms that pump site may need to be changed
- When an injection by pen or syringe is indicated
- How to disconnect or “suspend” the pump
  - in event the student becomes unconscious or seizes or
  - if instructed by the parent/guardian or diabetes care provider, e.g. during P.E.
Sampling of Pumps
Pump Supplies at School

- Infusion set
- Reservoir
- Insulin
- Skin prep items
- Alcohol wipes
- Syringe (in case of malfunction)
- Pump batteries
- Inserter (if used)
- Manufacturers manual, alarm card

In cases where the pump is disconnected (for example in PE) it should be placed in a secure place as designated in the student’s written plan.