

## Insulin Pumps in School

A student in your care has diabetes and is on an insulin pump. An insulin pump is a device that continuously infuses a very small amount of fast-acting insulin through a small catheter under the skin. The student takes additional insulin for meals and snacks by pushing buttons on the pump.

The pump looks like a small pager that students often wear on their waistbands or in their pockets. You may be able to see some of the tubing that connects between the student's skin and the pump.



Problems and complications with insulin pumps are rare. For the most part, you will not be aware that the student is using the pump, although you may hear an occasional quiet beep or click when insulin is being dispensed by the pump. The pump does have alarms for various events including low insulin levels and low batteries. Students should have extra pump supplies in the clinic for use if needed.

Each student with diabetes has a Diabetes Medical Management Plan (DMMP) which is located in the clinic. The DMMP includes the student's orders for diabetes care, including pump management, while at school and must be followed.

### Blood Sugar Testing

When a student is on an insulin pump, blood sugar monitoring will still be necessary. Monitoring can be either done in the clinic or classroom, according to the Diabetes Medical Management Plan.

### Low Blood Sugar

If a student who is on an insulin pump experiences low blood sugar symptoms, he will need to check his blood sugar. If his blood sugar is below his target, he will need to eat or drink fast-acting carbohydrate foods to bring the blood sugar back up quickly. **If his plan calls for him to go to the clinic when checking his blood sugar, have another responsible child or an adult accompany him. Do not allow a student to be alone with low blood sugar.**

If the student experiences a severe low blood sugar where he is unconscious or has a seizure, 911 should be called, and Glucagon may be given by trained staff. The pump does not need to be removed.

### High Blood Sugar

High blood sugars over 300 may be an indication that the pump is not infusing the insulin as it should or that the student is ill. Ketones will need to be checked according to the DMMP. Occasionally the student may need to have extra insulin given through the pump, but the school nurse must have physician orders and be involved with this.

### Meals

Whenever the student eats he will need to push the buttons on his pump to give himself insulin to “cover” the carbohydrates he eats. Most students will do this in the clinic after they have checked their blood sugars, either immediately before or after eating.

### Exercise

During vigorous contact sports or swimming, the student may need to disconnect from the pump. The student needs to place the pump in a safe place where it will not be damaged. Insulin pumps and supplies are very expensive! During prolonged activity, some students reconnect the pump periodically and take insulin.

### Summary

Insulin pumps are not a cure for diabetes, but rather a device to deliver insulin. If you have any questions about insulin pumps or the diabetes management of a student with diabetes, please see your school nurse.