

HEALTH CARE PROVIDER (HCP) ORDERS FOR STUDENTS WEARING AN INSULIN PUMP IN WASHINGTON SCHOOLS

(must be renewed at beginning of each school year)

STUDENT'S NAME _____ Student's birthdate _____ School _____ Grade _____

Emergency numbers for parents (phone) _____ (cellular) _____ (pager) _____

Doctor's phone number 206-987-2640 Emergency Medical Pager 206-987-2000 Other contacts _____

**** Children's Hospital Division of Endocrinology FAX #: 206-987-2720. ****

INSULIN PUMP INFORMATION

Pump Brand/Model _____ Child Lock on? YES NO Type of insulin in pump: _____

How long has student been on insulin pump therapy? 0-6 months 6-12 months 1-2 years 2+ years

Blood Glucose Target Range: _____ Basal Rates and Boluses (Meals/Snacks/Corrections) programmed? Yes No

Student to receive carbohydrate bolus eating

Correction Factor: _____ unit for every _____ mg/dL above the **Target Blood Glucose** of: _____

Insulin – to – Carbohydrate Ratio: _____ per _____ grams.

These ratios are **NOT meant to be utilized to double check the math with the Insulin Pump. The pumps utilize "ACTIVE INSULIN TIME" to accurately calculate insulin dosing and prevent insulin "stacking."

→ Parent/guardian authorized to increase or decrease the prescribed Correction Factor by +/- _____ mg/dL per 1 unit of Humalog/Novolog

→ Parent/guardian authorized to increase or decrease the TARGET Blood Glucose by +/- _____ mg/dL.

→ Parent/guardian authorized to increase or decrease the Insulin – to – Carbohydrate Ratio within the following range: 1 unit per prescribed grams of carbohydrate +/- _____ grams of carbohydrate.

It is appropriate to request a new school form if changes fall outside these parameters.

Additional Pump Supplies that should be furnished by parent/guardian:

- Infusion Sets,
- Reservoirs
- Batteries
- Insulin
- Syringes/Insulin pen
- Other:

STUDENT'S PUMP SKILLS

Skill Set	<input type="checkbox"/> YES <input type="checkbox"/> NO	COMMENTS:
1. TOTALLY INDEPENDENT CARE	<input type="checkbox"/> YES <input type="checkbox"/> NO	
NEEDS HELP WITH:		
1. Counting carbs?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
2. Giving correct Boluses for carbs eaten?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
3. Using Correction Bolus Feature?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
4. Setting a temporary basal rate?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
5. Disconnect/Reconnecting pump if needed?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
6. Preparing reservoir and tubing?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
7. Inserting new infusion set?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
8. Giving injection with syringe/insulin pen if needed?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
9. Recognizing signs/symptoms of site infection?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
10. Recognizing alarm and malfunction?	<input type="checkbox"/> YES <input type="checkbox"/> NO	

P
A
R
E
N
T
S

←

T
O

C
O
M
P
L
E
T
E

←

A
L
L

S
E
C
T
I
O
N
S

←

Provider to sign after parent section is filled out.

BLOOD GLUCOSE MONITORING

Blood Glucose traditionally monitored before every meal, bedtime and AS NEEDED.

Skill Set	<input type="checkbox"/> YES <input type="checkbox"/> NO	COMMENTS:
1. Student tests independently or	<input type="checkbox"/> YES <input type="checkbox"/> NO	
2. Student needs verification of number by staff or	<input type="checkbox"/> YES <input type="checkbox"/> NO	
3. Assist/Testing to be done by school nurse	<input type="checkbox"/> YES <input type="checkbox"/> NO	

Blood sugar at which parent should be notified – low _____ high _____

EXERCISE

Children frequently need 15 grams of carbohydrate for every 30 – 60 minutes of physical exertion/activity. These carbohydrates DO NOT require an insulin injection.

HYPERGLYCEMIA (high blood sugar)

Insulin pumps use rapid acting insulin only. IF insulin delivery is interrupted, THEN hyperglycemia and ketosis can develop very quickly! Possible causes could be:

- Empty insulin cartridge
- Kink in the cannula or the tubing
- Insulin that has lost its potency or is expired
- The infusion set is inserted into scar tissue
- The infusion set is disconnected from the pump
- Insulin is not absorbing for unknown reason

Treatment for unexplained blood sugar > 300 mg/dL:

- Give correction bolus and retest in 1 hour.
- Test for ketones *immediately*
- Check the tubing for leaks, air bubbles, kinks *and* that it is connected/inserted properly.
- IF ketones are **MODERATE/LARGE** → Contact Parents immediately, so child can be sent home for treatment, following Seattle Children's Hospital "Sick Day Management" Guidelines. IF you are unable to reach the parent/guardian in a timely manner, THEN PAGE the diabetes nurse or doctor on call @ (206) 987-2000 or 1-866-987-2000.

IF blood sugar is not lower in 1 hour:

- THEN give another correction dose by injection (with a syringe or insulin pen), and change the infusion set.
- Change the infusion set

URINE KETONES

Test for ketones immediately any time there is an unexplained blood sugar greater than 300 mg/dL and/or any time there is illness.

IF urine ketones measure MODERATE or LARGE, parents need to be contacted and child needs to be sent home for treatment following Seattle Children's Hospital Sick Day Management Guidelines.

HYPOGLYCEMIA (fill in individualized instructions on line or use those in parenthesis)

Blood sugar	< 80 and symptomatic	_____ (juice, pop, candy)	e.g. 4-6 ounces juice/pop
Blood sugar	< 100 and symptomatic	_____ (crackers/cheese)	10-15 grams carb
Blood sugar	< 80 and asymptomatic	_____ (juice, pop, candy)	e.g. 4-6 ounces juice/pop
Blood sugar	> 100 and symptomatic	_____ (feed partial meal)	10-15 grams carb

Recheck Blood Glucose Levels after 15 minutes. If BG still < 80, then repeat treatment as above

IF low blood glucose recurs without explanation, notify parents for potential instructions to suspend insulin pump.

If Seizure or unconscious occurs:

1. Treat with ___ mg Glucagon IM injection AND/OR (phone 911) (Other orders) _____
2. STOP insulin pump by
 - Placing in suspend mode OR
 - Disconnecting tubing from Infusion site OR
 - Cut Tubing
3. NOTIFY PARENT
4. Send insulin pump with EMS to hospital.

PUMP MALFUNCTION

If an insulin pump should stop functioning, the child/young adult should utilize their *insulin – to – carbohydrate ratio(s)* AND Correction ratio(s) that were programmed in the pump to give bolus injections every 3-4 hours until a Lantus Basal injection can be given. The Lantus dose, once available, should be the total daily basal insulin delivered every 24 hours by the insulin pump. One should round DOWN to the nearest ½ unit. This Basal dose of Lantus can be repeated every 24 hours. The bolus insulin would be repeated at meals.

An insulin Dosage is only to be administered when confirmed by the school nurse, parent, PDA or healthcare provider! Please utilize dosing ratios listed above in "Insulin Pump Information" Section.

ADDITIONAL TIMES TO CONTACT PARENT

- Soreness or redness at infusion site
- Leakage of insulin from pump or infusion set

HCP _____ (print/type) _____ signature ____/____/2009 date

Parent _____ (print/type) _____ signature ____/____/____ date

School Nurse _____ (print/type) _____ signature ____/____/____ date

Start date: _____ mo _____ day, 2009 yr. **Termination** date _____ day _____ mo, _____ yr. **or** end of school year 2010

Edited 06-06-2009/ Children's Hospital and Regional Medical Center/WA State HCP Orders – Insulin Pump Form