

INSULIN DRIP PROTOCOL

NOTE: Orders do not apply to patients with Diabetic Ketoacidosis (DKA) or Hyperglycemic Hyperosmolar Nonketotic Coma (HHNK)

- Discontinue all previous orders for diabetic medications/sliding scales.
- Mix insulin drip 100 units Novolin R into 100 ml 0.9% saline for concentration of 1 unit/ml. Prime tubing with insulin solution, allow to set for five minutes, then flush with additional 5ml of insulin solution from infusion container to fully block insulin binding sites in tubing.
- Start insulin drip on pump at rate determined by this formula:
$$(BG - 60) \times 0.03 = \text{number of UNITS insulin/hour}$$

BG = Current blood glucose
0.03 = "multiplier"
- Check BG every hour by fingerstick, central line, or arterial line. Do not alternate sites without physician approval.
 - Whenever BG is **greater** than HIGH target – increase multiplier by 0.01
 - Whenever BG is **less** than LOW target – decrease multiplier by 0.01
 - Whenever BG is within target range – No change in multiplier
- If BG less than 80, recheck in 15 minutes. If BG less than 60 treat for hypoglycemia as follows:
 - Give D50W by IV push using the following formula:
$$(100 - BG) \times 0.3 = \text{milliliters of D50W to be given IV push.}$$
 - Decrease the Insulin Drip multiplier by 0.01 and continue insulin drip, recheck glucose in 15 minutes, and resume BG monitoring and Insulin Drip Protocol as above.
- Obtain Lab glucose level if BG is < 40 or > 450.
- Please note that you must recalculate the Insulin dose every hour with the latest BG even if the multiplier doesn't change.
- The targets refer to the Blood Glucose (BG), not the BG minus 60.
- Convert to Subcutaneous Levemir after 8 hours of stable multiplier rate with additional physician order.
- Average the last 8 hours to units per hour. Multiply this times 20. Administer this amount of Levemir subcutaneously 2 hours prior to discontinuing drip. Dose to be reassessed by physician every 24 hours.

Example: 3units/hour average for last 8 hours x 20 = 60 units subcutaneous dose

- If Levemir dose is greater than 60 units, the dose should be split in half and given BID. **One injection should not be more than 60 units.**
- Continue to check blood glucose levels every 4 hours.