

SAMPLE IV INSULIN CLINICAL ORDER SET

Addressograph

Adult Inpatient Acute

This IV insulin order set is for use on all acute adult inpatients unless there is an order set that is more appropriate (eg. critical care, obstetrics).

- Discontinue all previous insulin, non-insulin antihyperglycemic agents and Bedside Blood Glucose Monitoring (BBGM) orders.
- Hold insulin if IV dextrose/glucose, TPN or tube feed stopped for greater than 1 hour. Notify MD ordering insulin for further orders.

PATIENT POPULATION

- Patients who are NPO or unpredictable PO intake and receiving IV dextrose/glucose, TPN or continuous tube feeds.
- NOT for peripartum use, Diabetic Ketoacidosis (DKA) or hyperosmolar hyperglycemic state (HHS).

INVESTIGATIONS

Ongoing Capillary Blood Glucose Monitoring

Blood Glucose (mmol/L)

Less than 4

4.1 to 5

5.1 to 10

10.1 to 14

Greater than 14.1

Monitoring frequency

q 15 minutes

q 30 minutes

q 60 minutes,

THEN reduce to q 2 hours if no infusion rate change for
3 consecutive q 60 minute checks,

THEN reduce to q 4 hours if no infusion rate change for
3 consecutive q 2 hour checks

q 60 minutes

q 30 minutes

INSULIN

Starting insulin dose:

Mix 50 units regular human insulin in 100 mL 0.9% sodium chloride for 0.5 unit/mL OR

Mix 100 units of regular human insulin in 100 mL 0.9% sodium chloride for 1 unit/mL

(Please select one of the above insulin mixtures to preprint for your institution to avoid prescriber need to complete)

If previously on insulin: total daily insulin dose x 0.5 = _____ units/24 hours = _____ unit/h

If insulin-naive: weight _____ kg x 0.02 = _____ unit/h

Other: _____ unit/h

- Prime the IV line with insulin solution and let it stand for 15 minutes (if time permits). Then flush 20 mL of solution through the line prior to connecting to the patient

MAINTENANCE INSULIN IV INFUSION

Adjustment based on current and previous glucose values as follows:

Current value Bedside Blood Glucose (mmol/L)	INCREASE in glucose Current value higher than previous	SMALL DECREASE in glucose Current value lower than previous by less than 3 mmol/L	MODERATE to LARGE DECREASE in glucose Current value lower than previous by 3 mmol/L or greater
< 4	Stop infusion, treat per hospital hypoglycemia protocol. Repeat blood glucose monitoring in 15 minutes. Resume infusion at x 0.5 of previous rate when blood glucose greater than or equal to 5 mmol/L.		
4 – 5.9	Reduce rate by 1 unit/h	Reduce rate by 1 unit/h	Reduce rate by x 0.5
6 – 10 (target)	No change in rate	No change in rate	Reduce rate by x 0.5
10.0 – 12	Increase rate by 0.5 unit/h	Increase rate by 0.5 unit/h	Reduce rate by 1 unit/h
12.1 – 15	Increate rate by 1 unit/h	Increate rate by 1 unit/h	No change in rate
15.1 – 18	Increase rate by 2 unit/h	Increase rate by 2 unit/h	No change in rate
>18	Increase rate by 3 unit/h	Increase rate by 3 unit/h	No change in rate
	Notify physician ordering insulin.		
Signature, Designation:		College License#:	Date: