

### Critical Care Glycemic Control Protocol

1. BGs every 4 hours on all patients admitted to the ICU with ANY of the following:
  - a. Admission glucose >140
  - b. History or unknown history of diabetes
  - c. Stroke (ischemic or hemorrhagic)
  - d. Surgery in the last 24 hours
2. BGs may be discontinued on patients with BOTH:
  - a. No history of diabetes or stroke (AND)
  - b. All BGs < 140/no insulin required for at least 24 hours
3. Insulin drips will be initiated within 1 hour on ALL patients with
  - a. Any glucose >300
  - b. BG >200 twice in a row
4. A provider order is REQUIRED to hold an insulin drip that is otherwise indicated
5. Insulin drips will be titrated in the OR/procedural areas
6. Sliding scales (select 1):
  - a. Tier 1
  - b. Tier 2 (default)
  - c. Tier 3

Blood Glucose	Stroke Patient	Tier 1	Tier 2 (default)	Tier 3
<70	D50 25g/50ml IV	D50 25g/50ml IV	D50 25g/50ml IV	D50 25g/50ml IV
<140	0 units	0 units	0 units	0 units
141-180	0 units	2 units	4 units	6 units
181-220	2 units	4 units	6 units	8 units
221-260	4 units	6 units	8 units	10 units
261-300	6 units	8 units	10 units	12 units
>300	Insulin drip	Insulin drip	Insulin drip	Insulin drip
BG >200 twice	Insulin drip	Insulin drip	Insulin drip	Insulin drip

### ICU Insulin Drip Nursing Titration Protocol

- Indications: BG >200 twice or any BG >300 (provider order required to hold drip when indications met)
- Starting rate = (BG-60) x 0.02 (max starting rate = 10 units/hr)
- **Round** all insulin drip rates to the **nearest whole number**
- **Maximum insulin drip rate is 20 units/hr**; provider order required to increase about 20 units/hr
- Decrease rate by 50% anytime patient is made NPO, then titrate per protocol

Glucose	Nursing Assessment	Nursing Intervention/Infusion Titration
Less than 80	If BG < 80	<ol style="list-style-type: none"> <li>1. STOP insulin drip and administer D50W 25g/50 ml IV x1</li> <li>2. RECHECK BG in 30 minutes</li> <li>3. When BG &gt;120, restart drip at 50% of the previous rate or discuss readiness for SSI with provider</li> </ol>
80-99	If BG 80-99	<ol style="list-style-type: none"> <li>1. STOP insulin drip</li> <li>2. RECHECK BG in 30 minutes</li> <li>3. When BG &gt;120, restart drip at 50% of the previous rate or discuss readiness for SSI with provider</li> </ol>
100-119	BG decreased by more than 20	<ol style="list-style-type: none"> <li>1. Decrease rate by 50%</li> <li>2. Recheck BG in 1 hour</li> </ol>
	BG decreased by less than 20	<ol style="list-style-type: none"> <li>1. Decrease rate by 1 unit/hr or 20% if previous rate is &gt; 5 units/hr</li> <li>2. Recheck BG in 2 hours</li> </ol>
120-160	BG decreased by more than 20	<ol style="list-style-type: none"> <li>1. Decrease rate by 1 unit/hr or 20% if previous rate is &gt; 5 units/hr</li> <li>2. Recheck BG in 2 hours</li> </ol>
	BG decreased by less than 20	<ol style="list-style-type: none"> <li>1. No rate change</li> <li>2. Recheck BG in 2 hours</li> </ol>
	BG increased	<ol style="list-style-type: none"> <li>1. No rate change or transition to SSI (discuss with provider)</li> <li>2. Recheck BG in 2 hours</li> </ol>
161-200	BG decreased by more than 20	<ol style="list-style-type: none"> <li>1. Decrease drip by 1 unit/hr or 20% if rate &gt; 5 units/hr</li> <li>2. Recheck BG in 1 hour</li> </ol>
	BG decreased by less than 20	<ol style="list-style-type: none"> <li>1. No rate change</li> <li>2. Recheck BG in 1 hour</li> </ol>
	BG increased	<ol style="list-style-type: none"> <li>1. Increase rate by 1 unit/hr</li> <li>2. Recheck BG in 2 hours</li> </ol>
201-250	BG decreased by more than 30	<ol style="list-style-type: none"> <li>1. Decrease drip rate by 1 unit/hr or 20% if current rate is &gt;5 units/hr</li> </ol>
	BG decreased by less than 30	<ol style="list-style-type: none"> <li>1. No rate change</li> <li>2. Recheck BG in 1 hour</li> </ol>
	BG increased	<ol style="list-style-type: none"> <li>1. Increase rate by 2 units/hr</li> <li>2. Recheck BG in 1 hour</li> </ol>
>250	BG >250 & decreased by >50	<ol style="list-style-type: none"> <li>1. No rate change</li> <li>2. Recheck in 1 hour</li> </ol>
	BG >250 & decreased by <50	<ol style="list-style-type: none"> <li>1. Increase rate by 1 unit/hr</li> <li>2. Recheck BG in 2 hours</li> </ol>
	BG >250 & up-trending	<ol style="list-style-type: none"> <li>1. Increase rate by 2 ml/hr</li> <li>2. Recheck BG in 1 hour, notify provider if BG increases</li> </ol>