Diabetic Ketoacidosis (DKA) Two Bag System [3361]

Diabetic Ketoacidosis (DKA) may be present with blood glucose GREATER THAN 250 mg/dL, arterial or venous pH less than 7.3, serum bicarbonate (CO2) less than 18 mEq/L anion gap greater than 14 and ketonuria or ketonemia.

Euglycemic DKA may be present with normal to elevated blood glucose (typically LESS THAN 250mg/dL), arterial or venous pH less than 18 mEq/L, anion gap greater than 14, and ketonuria or ketonemia.

Discontinue all previous insulin orders and oral diabetes medications upon entering DKA protocol.

Nursing

Finger Stick Blood Glucose (FSBG) Monitoring (Single Response)

(X) Bedside glucose monitoring	Routine, Every hour For 999 Occurrences Unless otherwise specified
Notify	
[X] Notify Provider	 Routine, Until discontinued, Starting S, • HOLD Initiation of insulin doses if Potassium is LESS THAN 3.3 mEq/L. Treat potassium per DKA potassium replacement protocol and contact prescriber for instruction on insulin initiation. Notify prescriber if blood glucose is LESS THAN 200 mg/dL and anion gap is LESS THAN OR EQUAL to 12 (RESOLUTION OF DKA)* to consider transition to basal-bolus insulin and advance diet OR if unable to advance diet, change DKA insulin drip to ICU insulin Drip Order Set for Target Blood Glucose 140 - 180. Notify prescriber if glucose is LESS THAN 100 mg/dL for two consecutive times and anion gap is GREATER THAN 12 for further insulin AND/OR Dextrose containing IV fluid rate adjustment. Notify prescriber if glucose is LESS THAN 70 mg/dL. Notify prescriber if potassium is GREATER THAN 5.2 mEq for possible adjustments on potassium content in IVF
Diet	
[X] NPO-Except meds	Diet effective now, Starting S NPO: Except meds Pre-Operative fasting options:
DKA Potassium Replacement Protocol	
DKA Potassium Replacement Protocol	
[X] DKA orderset to be acted on by trained nurse only	Routine, Until discontinued, Starting S If the patient is no longer on the DKA 2 Bag Sytem, this order must be discontinued to stop the nursing BPA alert.
[X] DKA Potassium Replacement Protocol - RN will enter orders "Per Protocol"	Routine, Until discontinued, Starting S
IV Fluids	
Initial IV Fluids	
[X] Initial IV Fluids	"Followed by" Linked Panel
[X] sodium chloride 0.9 % infusion 1,000 m	hL, intravenous, for 60 Minutes, once, For 1 Doses
Subsequent IV Fluids - NOT HMTW (Single Response) (Se	lection Required)

(X) Subsequent IV Fluids (Single Response) (Selection Required)		
 (X) Choice # 1 with Dextrose 10 %: D10 + 1/2NS + 20 mEq/L potassium chloride and 1/2NS + 20 mEq/L potassium chloride 	"And" Linked Panel	
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D10 is the preferred dextrose containing fluid (u	ise D5W only if D10 is on backorder/unavailable)
[X] sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion (for DKA)	0-250 mL/hr, intravenous, titrated 1/2 NS + KCl 20 mEq/L Titration:
	For: Glucose greater than 299 mg/dL:100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 30% hourly fluid rate Glucose 100 - 149 mg/dL: 10% hourly fluid rate
	Glucose 70 - 99 mg/dL: 0% hourly fluid rate Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of:
 [X] dextrose 10 % and sodium chloride 0.45 % + potassium chloride 20 mEq/L infusion (for DKA) 	0-250 mL/hr, intravenous, titrated Titrate both fluids per protocol for a combined rate of:
 Choice # 2 with Dextrose 5 %: D5 + 1/2NS + 20 potassium chloride and 1/2NS + 20 mEq/L pota chloride 	
	ise D5W only if D10 is on backorder/unavailable)
[] sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion (for DKA)	0-250 mL/hr, intravenous, titrated 1/2 NS + KCI 20 mEq/L Titration:
	For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation.
[] dextrose 5 % and sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion	0-250 mL/hr, intravenous, titrated D5 + 1/2 NS + KCl 20 mEq/L Titration:
	For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate Glucose less than 70 mg/dL: 100% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of:
() Subsequent IV Fluids for DKA without Potassium Response)	
() Dextrose 10 + 1/2NS and 1/2NS D10 is the preferred dextrose containing fluid (u	"And" Linked Panel use D5W only if D10 is on backorder/unavailable)
[] sodium chloride 0.45 % infusion for DKA	0-250 mL/hr, intravenous, titrated 1/2 NS Titration:
	For: Glucose greater than 299 mg/dL:100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 30% hourly fluid rate Glucose 100 - 149 mg/dL: 10% hourly fluid rate Glucose 70 - 99 mg/dL: 0% hourly fluid rate Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of:

[] dextrose 10 %-0.45 % sodium chloride	0-250 mL/hr, intravenous, titrated
infusion (for DKA)	D10 + 1/2 NS Titration:
	For:
	Glucose greater than 299 mg/dL: 0% hourly fluid rate.
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 70% hourly fluid rate
	Glucose 100 - 149 mg/dL: 90% hourly fluid rate
	Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	Glucose less than 70 mg/dL: 100% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation
	Titrate both fluids per protocol for a combined rate of:
() Deutrope E + 1/2NC and 1/2NC	"And" Linked Panel
() Dextrose $5 + 1/2NS$ and $1/2NS$	
D10 is the preferred dextrose containing fluid	(use D5W only if D10 is on backorder/unavailable)
[] sodium chloride 0.45 % infusion for DKA	0-250 mL/hr, intravenous, titrated
	1/2 NS Titration:
	For:
	Glucose greater than 299 mg/dL: 100% hourly fluid rate
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate
	Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration
	Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration
	Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation.
	Titrate both fluids per protocol for a combined rate of:
[] dextrose 5 % and sodium chloride 0.45 %	0-250 mL/hr, intravenous, continuous
infusion (for DKA)	D5 + 1/2 NS Titration:
	For:
	Glucose greater than 299 mg/dL: 0% hourly fluid rate.
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 100% hourly fluid rate
	Glucose 100 - 149 mg/dL: 100% hourly fluid rate
	Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	Glucose less than 70 mg/dL: 100% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation.
() Kirby, Pearland, and Voss EDs only	"And" Linked Panel
[] sodium chloride 0.45 % with potassium	0-250 mL/hr, intravenous, titrated
chloride 20 mEq/L infusion (for DKA)	1/2 NS + KCI 20 mEq/L Titration:
	For:
	Glucose greater than 299 mg/dL: 100% hourly fluid rate
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 0% hourly fluid rate
	Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration
	Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration
	Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation.
[] dextrose 5 % and sodium chloride 0.45 %	0-250 mL/hr, intravenous, titrated
with potassium chloride 20 mEq/L infusion	D5 + 1/2 NS + KCI 20 mEq/L Titration:
	For:
	Glucose greater than 299 mg/dL: 0% hourly fluid rate.
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 100% hourly fluid rate
	Glucose 100 - 149 mg/dL: 100% hourly fluid rate
	Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	Glucose less than 70 mg/dL: 100% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation.
	Titrate both fluids per protocol for a combined rate of:
1	

Subsequent IV Fluids - HMTW Only (Single Response) (Selection Required) Printed on 3/7/2023 at 9:00 AM from TST Environment

 (X) Choice # 1 with Dextrose 10 %: D10 + 1/2N mEq/L potassium chloride and 1/2NS + 20 potassium chloride 	
	id (use D5W only if D10 is on backorder/unavailable)
[X] sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion (for DKA)	0-250 mL/hr, intravenous, titrated 1/2 NS + KCI 20 mEq/L Titration:
	For: Glucose greater than 299 mg/dL:100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 30% hourly fluid rate Glucose 100 - 149 mg/dL: 10% hourly fluid rate Glucose 70 - 99 mg/dL: 0% hourly fluid rate
	Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of:
[X] dextrose 10 % and sodium chloride 0.45 % + potassium chloride 20 mEq/L infusion (for DKA)	6 0-250 mL/hr, intravenous, titrated
 Choice # 2 with Dextrose 5 %: D5 + 1/2NS potassium chloride and 1/2NS + 20 mEq/L chloride D10 is the preferred dextrose containing flu 	
[] sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion (for DKA)	0-250 mL/hr, intravenous, titrated 1/2 NS + KCl 20 mEq/L Titration:
	 1/2 NS + KCl 20 mEq/L Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. 0-250 mL/hr, intravenous, titrated
 chloride 20 mEq/L infusion (for DKA) [] dextrose 5 % and sodium chloride 0.45 % with potassium chloride 20 mEq/L infusior 	 1/2 NS + KCl 20 mEq/L Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. 0-250 mL/hr, intravenous, titrated D5 + 1/2 NS + KCl 20 mEq/L Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 150 - 199 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose less than 70 mg/dL: 100% hourly fluid rate Glucose less than 70 mg/dL: 100% hourly fluid rate
chloride 20 mEq/L infusion (for DKA)	 1/2 NS + KCl 20 mEq/L Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. 0-250 mL/hr, intravenous, titrated D5 + 1/2 NS + KCl 20 mEq/L Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 150 - 199 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose less than 70 mg/dL: 100% hourly fluid rate Glucose less than 70 mg/dL: 100% hourly fluid rate

[] sodium chloride 0.45 % infusion for DKA	0-250 mL/hr, intravenous, titrated 1/2 NS Titration:
	For:
	Glucose greater than 299 mg/dL:100% hourly fluid rate
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 30% hourly fluid rate
	Glucose 100 - 149 mg/dL: 10% hourly fluid rate
	Glucose 70 - 99 mg/dL: 0% hourly fluid rate
	Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and
	send blood glucose to lab confirmation.
	Titrate both fluids per protocol for a combined rate of:
dextrose 10 %-0.45 % sodium chloride	0-250 mL/hr, intravenous, titrated
infusion (for DKA)	D10 + $1/2$ NS Titration:
	For:
	Glucose greater than 299 mg/dL: 0% hourly fluid rate.
	Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	Glucose 150 - 199 mg/dL: 70% hourly fluid rate
	Glucose 100 - 149 mg/dL: 90% hourly fluid rate
	Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	Glucose less than 70 mg/dL: 100% hourly fluid rate - HOLD Insulin an
	send blood glucose to lab confirmation
	Titrate both fluids per protocol for a combined rate of:
) Dextrose 5 + 1/2NS and 1/2NS	"And" Linked Panel
D10 is the preferred dextrose containing fluid	(use D5W only if D10 is on backorder/unavailable)
[] sodium chloride 0.45 % infusion for DKA	0-250 mL/hr, intravenous, titrated
	1/2 NS Titration:
	1/2 NS Titration:
	1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate
	1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate
	1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate
	1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and
 dextrose 5 % and sodium chloride 0.45 % 	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation.
 dextrose 5 % and sodium chloride 0.45 % infusion (for DKA) 	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of:
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration:
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate.
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 200 - 299 mg/dL: 50% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 150 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 150 - 199 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate Glucose 70 - 99 mg/dL: 100% hourly fluid rate
	 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 100% hourly fluid rate Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 0% hourly fluid rate Glucose 100 - 149 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose 70 - 99 mg/dL: 0% hourly fluid rate and follow insulin titration Glucose less than 70 mg/dL: 0% hourly fluid rate - HOLD Insulin and send blood glucose to lab confirmation. Titrate both fluids per protocol for a combined rate of: 0-250 mL/hr, intravenous, continuous D5 + 1/2 NS Titration: For: Glucose greater than 299 mg/dL: 0% hourly fluid rate. Glucose 200 - 299 mg/dL: 50% hourly fluid rate Glucose 150 - 199 mg/dL: 100% hourly fluid rate Glucose 100 - 149 mg/dL: 100% hourly fluid rate

Initial Electrolytes Replacement - For Patients with Potassium level LESS than 4 mEq/L (Selection Required)

[] Potassium Replacement (Single Response)	
() Potassium LESS than or EQUAL to 3.3 (Single	
Response)	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	60 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	60 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 60 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 6 Doses
	Recheck level 1 hour after the end of IV administration and reapply
	orders if needed.

() Central IV - potassium 60 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 3 Doses For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Potassium 3.4 - 4.0 (Single Response)	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	40 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	40 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 40 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 4 Doses Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Central IV - potassium 40 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Potassium 4.1 - 5.2 (Single Response)	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	20 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	20 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 20 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Central IV - potassium 20 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 1 Doses For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
 [] End Stage Renal Disease (ESRD) Potassium Replacement (Single Response) () Potassium LESS than or EQUAL to 3.3 (Single Response) 	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	60 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	60 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 60 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 6 Doses Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Central IV - potassium 60 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 3 Doses For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Potassium 3.4 - 4.0 (Single Response)	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	20 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	20 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 20 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses Recheck level 1 hour after the end of IV administration and reapply orders if needed.
() Central IV - potassium 20 mEq	20 mEq, intravenous, for 60 Minutes, once, For 1 Doses For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
 IV Replacement - Phosphorus level LESS than 2.5 mg/dL 	20 mmol, intravenous, for 3 Hours, once, For 1 Doses
Initial Electrolytes Replacement	
Potassium Replacement (Single Response)()Potassium LESS than or EQUAL to 3.3 (Single	
Response)	
() Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	60 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	60 mEq, oral, once, For 1 Doses
() Peripheral IV - potassium 60 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 6 Doses Recheck level 1 hour after the end of IV administration and reapply orders if needed.

-	
() Central IV - potassium 60 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 3 Doses
	For Central Line Only; Recheck level 1 hour after the end of IV
Determine 2.4.4.0 (Single Decremes)	administration and reapply orders if needed.
Potassium 3.4 - 4.0 (Single Response)	"Or" Linked Panel
 Oral replacement - Potassium potassium chloride (K-DUR) CR tablet 	
[] potassium chloride (KLOR-CON) packet	40 mEq, oral, once, For 1 Doses 40 mEq, oral, once, For 1 Doses
	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 4 Doses
) Peripheral IV - potassium 40 mEq	Recheck level 1 hour after the end of IV administration and reapply
	orders if needed.
) Central IV - potassium 40 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses
	For Central Line Only; Recheck level 1 hour after the end of IV
	administration and reapply orders if needed.
Potassium 4.1 - 5.2 (Single Response)	
) Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	20 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	20 mEq, oral, once, For 1 Doses
) Peripheral IV - potassium 20 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses
	Recheck level 1 hour after the end of IV administration and reapply
	orders if needed.
) Central IV - potassium 20 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 1 Doses
	For Central Line Only; Recheck level 1 hour after the end of IV
End Stage Renal Disease (ESRD) Potassium	administration and reapply orders if needed.
Replacement (Single Response)	
Potassium LESS than or EQUAL to 3.3 (Single	
Response)	
) Oral replacement - Potassium	"Or" Linked Panel
[] potassium chloride (K-DUR) CR tablet	60 mEq, oral, once, For 1 Doses
[] potassium chloride (KLOR-CON) packet	60 mEq, oral, once, For 1 Doses
) Peripheral IV - potassium 60 mEq	10 mEq, intravenous, for 60 Minutes, every 1 hour, For 6 Doses
	Recheck level 1 hour after the end of IV administration and reapply
	orders if needed.
) Central IV - potassium 60 mEq	20 mEq, intravenous, for 60 Minutes, every 1 hour, For 3 Doses
	For Central Line Only; Recheck level 1 hour after the end of IV
Potossium 2.4.4.0 (Single Possesse)	administration and reapply orders if needed.
Potassium 3.4 - 4.0 (Single Response)	"Or" Linked Panel
) Oral replacement - Potassium	
potassium chloride (K-DUR) CR tablet potassium chloride (KLOR-CON) packet	20 mEq, oral, once, For 1 Doses
 potassium chloride (KLOR-CON) packet Peripheral IV - potassium 20 mEq 	20 mEq, oral, once, For 1 Doses 10 mEq, intravenous, for 60 Minutes, every 1 hour, For 2 Doses
) Peripheral IV - potassium 20 mEq	Recheck level 1 hour after the end of IV administration and reapply
	orders if needed.
	20 mEq, intravenous, for 60 Minutes, once, For 1 Doses
) Central IV - potassium 20 mEg	
) Central IV - potassium 20 mEq	For Central Line Only: Recheck level 1 hour after the end of IV
) Central IV - potassium 20 mEq	For Central Line Only; Recheck level 1 hour after the end of IV administration and reapply orders if needed.
	administration and reapply orders if needed.
) Central IV - potassium 20 mEq V Replacement - Phosphorus level LESS than 2.5 ng/dL	

Insulin Infusion Management (Single Response) (Selection Required)

() No, patient is NOT ESRD	
[] insulin bolus from bag	0.1 Units/kg, intravenous, once, For 1 Doses
[] insulin bolus from bag	0.1 Units/kg, intravenous, once PRN, may repeat bolus one time after the first hour

[] insulin regular 1 unit/mL infusion for DKA	0.1 Units/kg/hr, intravenous, continuous Start Regular Human Insulin 100 units in Normal Saline 100 mL (1 unit/mL) via an intravenous pump and dedicated line at the rate indicated
	If: GLUCOSE level does not decrease by at least 50 mg/dL from the initial value after the first hour: - Administer bolus 0.1 unit/kg OR 0.05 units/kg (for ESRD). - Continue same infusion rate and follow IV fluids titration. - If blood glucose GREATER THAN 400 mg/dL by POC testing, send serum glucose to the lab for confirmation.
	GLUCOSE GREATER THAN OR EQUAL TO 300 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 200 - 299 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 150 - 199 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 100 - 149: - DECREASE insulin infusion rate by 50% ONLY ONCE and follow IV fluids titration Notify prescriber if continues to be LESS than 100 with the next POC for further adjustments
	GLUCOSE 70 - 99 mg/dL: - DECREASE insulin rate by 50 % ONLY ONCE if not already done, follow IV fluids titration. - Notify prescriber if continues to be LESS than 100 with the next POC for further adjustments.
	GLUCOSE LESS than 70 mg/dL: - HOLD insulin and send blood glucose to lab for confirmation - Give dextrose 50% 25 mL and notify prescriber. - Recheck blood glucose in 20 minutes; if GREATER than 70 mg/dL and anion gap greater than 12, restart insulin at 50% of prior infusion rate. - Discontinue insulin drip 2 hours after initiation of long acting insulin.
	GLUCOSE LESS than 200 mg/dL and anion gap is LESS THAN OR EQUAL to 12 (RESOLUTION OF DKA) - Notify prescriber to consider transition to basal-bolus insulin
[] dextrose 50% intravenous syringe	25 g, intravenous, every 20 min PRN, low blood sugar, as directed for glucose less than 70 mg/dL
) Yes, Patient is ESRD	
[] insulin bolus from bag	0.05 Units/kg, intravenous, once, For 1 Doses
[] insulin bolus from bag	0.05 Units/kg, intravenous, once PRN, may repeat bolus one time after the first hour

[] insulin regular 1 unit/mL infusion for DKA	0.05 Units/kg/hr, intravenous, continuous Start Regular Human Insulin 100 units in Normal Saline 100 mL (1 unit/mL) via an intravenous pump and dedicated line at the rate indicated.
	If: GLUCOSE level does not decrease by at least 50 mg/dL from the initial value after the first hour: - Administer bolus 0.1 unit/kg OR 0.05 units/kg (for ESRD). - Continue same infusion rate and follow IV fluids titration. - If blood glucose GREATER THAN 400 mg/dL by POC testing, send serum glucose to the lab for confirmation.
	GLUCOSE GREATER THAN OR EQUAL TO 300 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 200 - 299 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 150 - 199 mg/dL: - Continue same infusion rate and follow IV fluids titration.
	GLUCOSE 100 - 149: - DECREASE insulin infusion rate by 50% ONLY ONCE and follow IV fluids titration Notify prescriber if continues to be LESS than 100 with the next POC for further adjustments
	GLUCOSE 70 - 99 mg/dL: - DECREASE insulin rate by 50 % ONLY ONCE if not already done, follow IV fluids titration. - Notify prescriber if continues to be LESS than 100 with the next POC for further adjustments.
	 GLUCOSE LESS than 70 mg/dL: HOLD insulin and send blood glucose to lab for confirmation Give dextrose 50% 25 mL and notify prescriber. Recheck blood glucose in 20 minutes; if GREATER than 70 mg/dL and anion gap greater than 12, restart insulin at 50% of prior infusion rate. Discontinue insulin drip 2 hours after initiation of long acting insulin.
	GLUCOSE LESS than 200 mg/dL and anion gap is LESS THAN OR EQUAL to 12 (RESOLUTION OF DKA)
[] dextrose 50% intravenous syringe	 Notify prescriber to consider transition to basal-bolus insulin 25 g, intravenous, every 20 min PRN, low blood sugar, as directed for glucose less than 70 mg/dL

Labs

Laboratory STAT (if not previously done)

[X] Blood gas, venous	STAT For 1 Occurrences
[X] Serum ketones (Beta hydroxybutyrate)	STAT For 1 Occurrences
[X] Lactic acid level	STAT For 1 Occurrences
[X] Comprehensive metabolic panel	STAT For 1 Occurrences
[X] Basic metabolic panel	Every 4 hours, Starting H+4 Hours For 3 Occurrences
[X] Magnesium	STAT For 1 Occurrences
[X] Phosphorus	STAT For 1 Occurrences
[X] Potassium Level	
[Y] Potassium loval	Eveny bour For 7 Occurrences

[X] Potassium level

Every hour For 7 Occurrences

Obtain Potassium Level every 1 hour while titrating insulin and dextrose infusions. Check every 4 hours when insulin and dextrose infusions have remained at the same rate of GREATER THAN OR EQUAL to 1 hour and blood glucose is stable at 150-250 mg/dL. After HIET therapy is discontinued, obtain every 4 hours for 6 occurrences.

[X] Schedule potassium level for HIET	Routine, As needed
	Obtain Potassium Level every 1 hour while titrating insulin and dextrose
	infusions. Check every 4 hours when insulin and dextrose infusions have
	remained at the same rate of GREATER THAN OR EQUAL to 1 hour and
	blood glucose is stable at 150-250 mg/dL. After HIET therapy is
	discontinued, obtain every 4 hours for 6 occurrences.
[] Amylase	STAT For 1 Occurrences
[] Lipase	STAT For 1 Occurrences
[X] CBC with differential	STAT For 1 Occurrences
[X] Urinalysis screen and microscopy, with reflex to c	
	Specimen Source: Urine
	Specimen Site:
[] Sputum culture	STAT For 1 Occurrences, Sputum
[X] Blood culture x 2	"And" Linked Panel
[X] Blood Culture (Aerobic & Anaerobic)	Once, Blood
	Collect before antibiotics given. Blood cultures should be ordered x2, with
	each set drawn from a different peripheral site. If unable to draw both
	sets from a peripheral site, please call the lab for assistance; an IV line
	should NEVER be used.
[X] Blood Culture (Aerobic & Anaerobic)	Once, Blood
	Collect before antibiotics given. Blood cultures should be ordered x2, with
	each set drawn from a different peripheral site. If unable to draw both
	sets from a peripheral site, please call the lab for assistance; an IV line
	should NEVER be used.
[X] Hemoglobin A1c	STAT For 1 Occurrences
[] Creatine kinase, total (CPK)	STAT For 1 Occurrences
[] Troponin T	STAT For 1 Occurrences
Other Diagnostic Tests	
ECG	
[X] ECG 12 lead	STAT, Once
	Clinical Indications: Other:
	Other: DKA
	Interpreting Physician:
luc e cita a	
Imaging	
[] Chest 1 Vw Portable	Routine, 1 time imaging, Starting S at 1:00 AM For 1
Consults	
Pharmacy Consults	
[X] Consult to Pharmacy - Notification of DKA Patient	
	Specify reason: Notification of DKA patient