

## IREDELL HEALTH SYSTEM

<b>Potassium Chloride IV Policies</b>	
Approved by: Randi Raynor, PharmD, MBA, BCPS Laura Rollings, PharmD, BCPS, BCGP	Last Revised/Reviewed Date: 08/2020
P&T Committee	Date: 10/2020

**Policy:**

1. ***KCl Concentrate (2 mEq/ml) Vials:*** Potassium chloride concentrate (2 mEq/mL) vials will be stocked only in the pharmacy and will be compounded in IV fluids only by pharmacy personnel. Potassium chloride will not be added to an IV that is already being administered. A new bag with the appropriate concentration of potassium will be hung.
  
2. ***KCl Pre-Mixed Solutions:*** The pharmacy will purchase pre-mixed KCL solutions when available. These large volume solutions may be stocked on nursing units and are administered by nursing upon providers’ orders.
  
3. ***KCl Mini-Bags:*** Premixed KCl 10 mEq in 100 mL water for injection is stocked in designated approved nursing units and in the pharmacy. KCl 10 mEq in 100 mL water will be used on orders for KCl 10 mEq in 50 mL or 100 mL of D<sub>5</sub>W or Normal Saline unless the provider specifies “Do Not Substitute”.

Premixed bags of KCl 20 mEq/100 mL are to be only stocked in the ICU/CCU in the automated dispensing cabinet. These are stocked in the pharmacy and ordered patient specific for other patients/departments.

All concentrations of premixed KCl minibags shall be affixed with a warning label (“POTASSIUM – CONCENTRATED KCL IVPB”) upon receipt and prior to stocking in the pharmacy department. The differing premixed concentrations shall be stocked separately within the pharmacy department.

4. ***Administration of IV Potassium:*** The Pharmacy and Therapeutics Committee and the Medical Executive Committee have approved the following maximum concentrations and rates of administration of IV potassium:

**Adults (Age 18 and above):**

*Large Volumes (> 250 mL)*

**Peripheral**

Recommended Maximum Conc	40 mEq/liter
Absolute Maximum Concentration:	80 mEq/liter*
Maximum Rate:	10 mEq/hour

**Central Vein**

Recommended Maximum Conc	40 mEq/liter
Absolute Maximum Concentration	80 mEq/liter*
Maximum Rate:	10 mEq/hour
If on cardiac monitor	20 mEq/hour**

*Piggybacks (250 mL or less)*

**Peripheral**

Maximum concentration:	10 mEq/100 mL
Absolute Maximum Concentration	10 mEq/50 mL***
Maximum Rate:	10 mEq/hour

**Central Vein**

Maximum concentration:	20 mEq/100 mL
Absolute Maximum Concentration	20 mEq/50 mL***
Maximum Rate:	10 mEq/hour
If on cardiac monitor	20 mEq/hour**

\* Although large volume concentrations of 80 mEq/liter are allowed because large concentrations may be necessary in some patient conditions, concentrations greater than 40 mEq/liter are not recommended. When concentrations greater than 40 mEq/liter are given, there may be local irritation peripherally and there may be large concentrations of potassium in the heart when given centrally.

\*\* In those instances when the rate of administration exceeds 10 mEq/hour, the patient will be on a cardiac monitor.

\*\*\* The physician must specifically write “restricted fluid volume”, “Do Not Substitute”, etc. to indicate 100 mL bag is too much volume.

**Pediatric Patients:**

For children less than 18 years of age, the maximum concentration is 40 mEq/liter (*20 mEq/500 mL or 10 mEq/250 mL*). Maximum recommended rate is 1 mEq/kg/hour (*not to exceed 10 mEq/hour*).

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INITIAL EFFECTIVE DATE: 11/2003

DATES REVISIONS EFFECTIVE: 05/2005, 10/2009, 05/2011, 02/2013, 10/2017, 10/2020

DATES REVIEWED (no changes):