



## Nursing Service Guidelines Hemodialysis

**Title:** RECIRCULATION STUDIES FOR DIALYSIS ACCESS

**Responsibility:** Hemodialysis RN

**Equipment:**

1. 3 3ml Green Top blood tubes with labels
2. 3 3ml syringes
3. 2 nurses
4. 3 lab slips

<u>Procedure</u>	<u>Point of Emphasis</u>
1. Initiate Hemodialysis per protocol.	
2. After 15 min of treatment, turn off ultrafiltration rate, 2 nurses should draw samples from the arterial and venous ports of the blood lines at the same time.	
3. Immediately decrease blood pump speed to 50ml/min, set venous pressure upper limit to 400mm Hg, and clamp venous line.	
4. When venous pressure reaches 400mm Hg, or at 30 seconds, draw a “peripheral” sample from the ARTERIAL port.	
5. Label the 3 tubes and complete the lab slips (3), for venous, arterial, and peripheral sites. Mark for BUN and Cr and specify recirculation studies.	
6. When results are available, calculate results. Peripheral value subtract arterial value X 100 = the % of peripheral value subtract venous value rejection. A 15% recirculation value is an expected norm. Any percentage value greater than 15% warrants an access evaluation or change.	

Revised by:

Resource Person:

Approved: 3/96

Reviewed: 6/99, 7/02, 7/05, 4/08, 2/11, 9/11, 5/17, 4/21

Revised: 7/03, 5/27/2011, 5/2015, 7/2016

Reviewed by Policy & Standard Committee, 5/11, 4/21

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References: ANNA Core Curriculum for Nephrology Nursing, 6th Edition 2015, Caroline S. Counts, Editor