



## PROVINCIAL STANDARDS & GUIDELINES

# READINESS TO LEAVE THE HEMODIALYSIS UNIT, POST-TREATMENT

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Approved by the BCPRA Hemodialysis Committee

# Table of Contents

1.0 Scope.....	<a href="#">1</a>
2.0 Recommendations.....	<a href="#">1</a>
Table 1: Criteria to Asses Readiness of Hemodialysis Outpatients to Leave the Unit Post-Treatment.....	<a href="#">2</a>
3.0 References .....	<a href="#">5</a>
4.0 Sponsors .....	<a href="#">5</a>



## IMPORTANT INFORMATION




This BCPRA guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to [www.bcrenalagency.ca](http://www.bcrenalagency.ca) for the most recent version.

**For information about the use and referencing of BCPRA provincial guidelines/resources, refer to <http://bit.ly/28SFr4n>.**



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# Readiness to Leave the Hemodialysis Unit, Post-Treatment

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## 1.0 Scope

Applicability:

- In centre and community hemodialysis (HD) units
- Adults

This guideline provides criteria and a process for assessing the readiness of hemodialysis outpatients to leave the HD unit post-treatment.

## 2.0 Recommendations

### **Recommendation #1:**

- **RNs/LPNs perform post-dialysis patient assessments using established criteria (refer to Table 1) to determine if a patient is ready to leave the HD unit.**
- **If a patient does not meet the readiness criteria, the RN/LPN notifies the nurse in charge, nephrologist and/or nurse practitioner (NP). The nurse in charge, nephrologist and/or NP advised re: next steps.**

### **Recommendation #2:**

**If a patient decides to leave the unit against the advice of the care team, the RN/LPN:**

- **Reminds them of the risks (e.g., low BP which could result in a fall, bleeding from their access, potentially untreated illness such as a heart attack or infection); and**
- **Advises on what to do if their condition worsens (e.g., go to emergency department); and**
- **Notifies the nephrologist and/or NP; and**
- **Documents the discussion and actions in the health record.**

## Readiness to Leave the Hemodialysis Unit, Post-Treatment

**Table 1: Criteria to Assess Readiness of Hemodialysis Outpatients to Leave the Unit Post-Treatment**

Measure	Assessment	Readiness Criteria	Red Flags	
			Indicator	Follow-Up
<b>Vital Signs</b>				
Blood pressure (BP)	Lying/sitting & standing BP, as condition permits.  Consider taking sitting & standing BP prior to removing needles in case saline required for hypotension.	BP is within acceptable post-dialysis range for patient.	BP is: <ul style="list-style-type: none"> <li>• 180/110 or more or RN/LPN has cause for concern</li> <li>• Less than 90/60 and patient symptomatic or RN/LPN has cause for concern</li> </ul>	Contact MD/NP.
Temperature	Compare to pre-dialysis temperature	Temperature is within acceptable post-dialysis range.	Temperature is 38°C or more	Contact MD/NP.  STAT CBC, 2 sets of blood cultures & C&S swab(s) of suspected infected site(s).
Pulse	Rate, rhythm & quality	Pulse is within acceptable post-dialysis range.	Pulse is: <ul style="list-style-type: none"> <li>• 120 beats/min or more</li> <li>• Less than 50 beats/min and unusual for patient</li> </ul>	Contact MD/NP.
Respirations	Rate & quality	Respirations are within acceptable post-dialysis range.	Respiratory rate is: <ul style="list-style-type: none"> <li>• 30 or more</li> <li>• Less than 10</li> </ul> Signs or symptoms of respiratory distress (e.g., shortness of breath, dyspnea, pallor, cyanosis, tachycardia and/or chest pain).	Obtain oxygen saturation level on room air.  Contact MD/NP.

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## Readiness to Leave the Hemodialysis Unit, Post-Treatment

Measure	Assessment	Readiness Criteria	Red Flags	
			Indicator	Follow-Up
<b>Volume status</b>				
Weight BP Edema	Post dialysis weight compared to pre dialysis weight & goal weight  BP & respirations  Observe for edema	Post dialysis weight is within 1 kg of goal weight.  BP & respirations as above.  Absence of edema.	<p>Post dialysis weight is <u>above</u> goal weight by:</p> <ul style="list-style-type: none"> <li>0.5 kg - 1 kg, advise patient to restrict fluids &amp;/or salt until next HD treatment.</li> <li>1 kg or more, assess vital signs AND: <ul style="list-style-type: none"> <li>If O2 sats less than 92%, contact MD/NP.</li> <li>If O2 sats more than 92% &amp; patient stable, advise patient to restrict fluids &amp;/or salt until next HD treatment.</li> </ul> </li> </ul> <p>Post dialysis weight is <u>below</u> goal weight by:</p> <ul style="list-style-type: none"> <li>0.5 kg - 1 kg, BP is low &amp; patient is symptomatic, give oral fluids &amp; reassess.</li> <li>1 kg or more, BP is low &amp; patient is symptomatic, recommend giving up to 500 mL normal saline IV. If BP stabilizes within 10-15 min, patient may leave. If not, patient to remain on unit &amp; MD/NP contacted.</li> </ul>	<p>Contact MD/NP if:</p> <ul style="list-style-type: none"> <li>Post-dialysis weight is more than 1 kg above goal weight &amp; O2 sats are less than 92%; or</li> <li>Patient is unstable.</li> </ul>
<b>Vascular access</b>	Observation  Clotting time  Patency (bruit/thrill)	Absence of infection or other access complication.  If fistula/graft, hemostasis achieved.  If CVC, dressing dry & intact.	<ul style="list-style-type: none"> <li>Access red, warm, swollen, tender, draining &amp;/or painful.</li> <li>Fever &amp;/or chills.</li> <li>Access bruised &amp;/or bleeds excessively after removing needles.</li> <li>Absence of bruit or thrill.</li> <li>If CVC, evidence of migration.</li> </ul>	Contact MD/NP
<b>Well-being</b>		No change in level of orientation to person, place & time from pre-HD status.	<p>Feels unwell or is too weak to ambulate.</p> <p>Change from pre dialysis level of orientation to person, place &amp; time.</p>	Contact MD/NP

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## Readiness to Leave the Hemodialysis Unit, Post-Treatment

Measure	Assessment	Readiness Criteria	Red Flags	
			Indicator	Follow-Up
<b>Mental/cognitive status</b>		No change in mental/cognitive status from pre-HD status.	Change from pre dialysis mental status. e.g., new disorientation, ataxia or confusion, stroke symptoms.	Contact MD/NP. (if stroke protocol in place, activate protocol).
<b>Other dialysis complications</b>	Observe for other intra or post-dialytic problems	Intra or post-dialytic problems resolved.	<p>Symptomatic hypotension (e.g., headache, dizziness, nausea, vomiting, cramps, blurry vision, weakness, fainting or confusion).</p> <p>Angina/chest pain (e.g., pain or rightness in chest, back, arm or jaw, diaphoresis, tachycardia, shortness of breath, dyspnea, nausea, vomiting, etc)</p> <p>Anaphylactic reaction (e.g., warmth, tightness in chest, back pain, nausea, shortness of breath, coughing, urticaria, facial edema, etc).</p> <p>Dialysis disequilibrium syndrome (DDS)</p> <ul style="list-style-type: none"> <li>• Mild: nausea/vomiting, blurred vision, restlessness, headache, hypertension, muscle cramps, dizziness not related to BP, asterixis.</li> <li>• Severe: confusion, disorientation, muscle twitching/tremors, seizures, arrhythmias, coma.</li> </ul>	Contact MD/NP
<b>HD delivery system-related complications</b>	Observe for problems	Absence of hemolysis, air embolism & pyrogen reaction.	<p>Hemolysis: chest, back &amp;/ or abdominal pain, dyspnea, hypotension, translucent deep burgundy blood in bloodlines, localized burning &amp; pain in VA return site, dysrhythmia, hypoxemia, etc.</p> <p>Air embolism: feeling of air rushing into circulation, chest pain, coughing, cyanosis, dyspnea, visual disturbances, confusion, coma, hemiparesis, etc.</p>	Contact MD/NP

# Readiness to Leave the Hemodialysis Unit, Post-Treatment

## 3.0 References

HA guidelines/standards/policies used in the development of this provincial guideline:

1. Island Health: Discharge Criteria from HD Unit Following Treatment (2014).
2. Fraser Health Clinical Practice Guideline: Acute Care Standard: Hemodialysis (2015).
3. Providence Health Care: Nursing Practice Standard: Discharge Criteria Post HD (2011); Consent to Health Care (2012).

Canadian Medical Protective Association (CMPA) website:

- Informed discharge. [https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/communication/Informed\\_Discharge/informed\\_discharge-e.html](https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/communication/Informed_Discharge/informed_discharge-e.html)
- What to do when patients do not follow the doctor's advice; Dealing with non-adherence. <https://www.cmpa-acpm.ca/-/what-to-do-when-patients-do-not-follow-the-doctor-s-advice-dealing-with-non-adherence>

Burrows-Hudson, S., Prowant, B., (Ed.) (2005). *Nephrology Nursing Standards of Practice and Guidelines for Care*. Anthony J. Jannetti, Inc., Pitman, NJ. Canadian Association of Nephrology Nurses and Technologists.

Canadian Association of Nephrology Nurses and Technologists. (October 2006). *Standards of Nursing Practice*. Barrie, ON: Author.

Counts, C.S. (Eds.). (2008). *Core curriculum for nephrology nursing* (5<sup>th</sup> ed.). Pitman, NJ: Anthony J. Jannetti, Inc.

Daugirdas, J.T., Blake, P.G., Ing, T.S. (Eds.) & Bare, B. (2014). *Handbook of dialysis* (5<sup>th</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Day, R.A., Paul, P., Williams, B., Smeltzer, S.C., & Bare, B.G. (2009). *Textbook of medical-surgical nursing* (2<sup>nd</sup> Canadian ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Kallenbach, J. (2012). *Review of hemodialysis for nurses and dialysis personnel* (8th ed.). St. Louis, Missouri: Elsevier Mosby

Molzahn, A. & Butera, E. (Eds.). (2006). *Contemporary nephrology nursing: Principles and practice* (2<sup>nd</sup> ed.). Pitman, NJ: Anthony J. Jannetti, Inc.

Thomas, N. (Ed.) (2014). *Renal Nursing* (4th ed.). Oxford UK: John Wiley & Sons, Ltd.

## 4.0 Sponsors

This provincial guideline was developed to support improvements in the quality of hemodialysis care delivered to patients with chronic kidney disease in BC. Based on the best information available at the time it was published, the guideline relies on evidence and avoids opinion-based statements where possible. When used in conjunction with pertinent clinical data, it is a tool health authorities and health professionals can use to develop local guidelines.

Developed by a working group of multidisciplinary care providers from across BC, the guideline was approved by the BCPRA Hemodialysis Committee. It has been adopted by BCPRA as a provincial guideline.

This guideline is based on scientific evidence available at the time of the effective date; refer to [www.bcrenalagency.ca](http://www.bcrenalagency.ca) for most recent version.