

N6 — Blood Pressure at the Chair

FRONT

Home BP guides chronic treatment. Dialysis-unit BP tells you whether today's treatment is safe.

When: any high or low reading before, during, or after treatment.

Do this

1. **Measure it right:** seated, rested, correct cuff, non-access arm. Repeat a high reading after a few minutes' rest before acting on it.
2. **Record the lowest systolic BP (SBP) every treatment.** SBP below 90 — or below 100 if pre-dialysis SBP was 160 or higher — gets the hypotension response even if the patient feels fine; so do symptoms at any number (**N5: Intradialytic Hypotension: Chair-Side Response**) [3,5].
3. **Isolated high pre-dialysis reading, no symptoms:** recheck after rest, document, trend. No extra antihypertensive and no extra UF on the strength of that reading [1].
4. **Track the pattern:** an SBP rise of more than 10 mmHg from pre- to post-dialysis into the hypertensive range in 4 of 6 consecutive treatments is a flag for review [5].
5. **Home BP log:** validated upper-arm device, two readings morning and evening for about a week, including non-dialysis days. A home average of 135/85 or higher is hypertension [6].
6. **BP medicines on dialysis days: take them as prescribed** unless the nephrologist has ordered a specific drug held or moved to the evening [4,7].

Call the nephrologist when

- **Severe hypertension with chest pain, shortness of breath, new neurologic deficit, confusion, severe headache, or visual change** — an emergency per unit protocol. Symptoms matter more than the number.
- Hypotension that does not recover, or comes with chest pain, arrhythmia, or confusion.
- Nadir SBP below 90 in 30% or more of treatments over the past month [3,5].
- The target weight cannot be reached without a UF rate above 13 mL/kg/h (**N4: UF Rate and Treatment Time**).
- The intradialytic hypertension pattern (4 of 6 treatments), or pre-dialysis BP of 180/110 or higher on two consecutive treatments — the level DRIP used to trigger ambulatory monitoring [8].
- Home average 135/85 or higher, or new low home readings with dizziness or falls [6].

Don't

- Don't give a PRN antihypertensive for an asymptomatic high chair-side reading.
- Don't lower the target weight or raise UF because of one high pre-dialysis BP.
- Don't tell patients to hold BP medicines before dialysis unless ordered for that patient [4].

Why

1. Pre- and post-dialysis SBP did not predict death once home and ambulatory BP were measured ($P = 0.17$ and 0.997); home and ambulatory SBP did [1].
2. One week of home readings identified true hypertension better than two weeks of pre-dialysis readings (AUC 0.934 vs 0.778) [2].
3. A nadir SBP below 90 in 30% or more of treatments carried higher mortality (adjusted HR 1.22 – 1.38); requiring symptoms did not improve the signal [3].
4. In the one randomized test, taking BP medicines before dialysis could not be shown as good as holding them for asymptomatic hypotension (8% more; 95% CI -3% to 19%), but uncontrolled pre-dialysis hypertension was less frequent (difference 15%) [4]. UK guidance advises against routine omission [7].

Go deeper

- Mastery page: [Which blood pressure matters: measurement and prognosis](#)
- Mastery page: [Treating hypertension on dialysis: targets, trials, agents, dose timing](#)
- Mastery page: [Intradialytic hypertension and the stability trade-off](#)
- All dialysis nursing reference cards

References

1. Agarwal R. Blood pressure and mortality among hemodialysis patients. *Hypertension*. 2010;55:762-768. <https://pubmed.ncbi.nlm.nih.gov/20083728/>
2. Leonidou K, et al. Home versus routine dialysis-unit blood pressure recordings among patients on hemodialysis. *J Hum Hypertens*. 2025;39:355-361. <https://pubmed.ncbi.nlm.nih.gov/40097627/>
3. Flythe JE, et al. Association of mortality risk with various definitions of intradialytic hypotension. *J Am Soc Nephrol*. 2015;26:724-734. <https://pubmed.ncbi.nlm.nih.gov/25270068/>
4. Chang TI, et al. Timing of antihypertensive medications on key outcomes in hemodialysis (TAKE-HOLD). *Kidney360*. 2021;2:1752-1760. <https://pubmed.ncbi.nlm.nih.gov/35373003/>
5. Flythe JE, et al. Blood pressure and volume management in dialysis: conclusions from a KDIGO Controversies Conference. *Kidney Int*. 2020;97:861-876. <https://pubmed.ncbi.nlm.nih.gov/32278617/>
6. Sarafidis PA, et al. Hypertension in dialysis patients: a consensus document by EURECA-m and the ESH Hypertension and the Kidney working group. *Nephrol Dial Transplant*. 2017;32:620-640. <https://pubmed.ncbi.nlm.nih.gov/28340239/>
7. Doulton T, et al. Management of blood pressure in adults, children and young people on dialysis: UK Kidney Association guideline. *BMC Nephrol*. 2025;26:532. <https://pubmed.ncbi.nlm.nih.gov/41013409/>
8. Agarwal R, et al. Dry-weight reduction in hypertensive hemodialysis patients (DRIP). *Hypertension*. 2009;53:500-507. <https://pubmed.ncbi.nlm.nih.gov/19153263/>

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