



Certified Clinical Hemodialysis Technician Examination (CCHT™)

Test Specification (Blueprint)

Weights for Blueprint Categories

<u>Dialysis Practice Areas</u>	<u>% of Test</u>
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Clinical	48-52%
Technical	21-25%
Environment	13-17%
Role Responsibilities	10-14%

<u>Cognitive Level</u>	<u>% of Test</u>
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Knowledge	8-12%	Know specific facts, common terms, basic concepts, principles.
Comprehension	23-27%	Interpret, compare, contrast, explain, estimate, translate.
Application	63-67%	Apply previously learned facts and concepts to new situations. Solve problems.

CCHT ACTIVITIES BY BLUEPRINT AREAS

I. CLINICAL - 50%
1. Use aseptic technique for dialysis procedures.
2. Monitor patient during dialysis treatment, e.g., vital signs.
3. Set the dialysis machine according to the patient's prescription.
4. Monitor dialysis equipment during treatment.
5. Cannulate patient's access.
6. Follow protocol for administering heparin.
7. Evaluate patient's access pre-dialysis.
8. Identify potential access failure by listening & feeling.
9. Evaluate patient's pre-dialysis fluid status.
10. Discontinue patient's dialysis treatment with arteriovenous fistula or graft.
11. Perform post-dialysis fistula/graft access care.
12. Initiate hemodialysis treatment with arteriovenous graft/fistula.
13. Identify relationship of blood pressure changes to fluid volume status.
14. Evaluate patient's post-dialysis fluid status.
15. Follow protocol for treating hypotension.
16. Recognize and report signs and symptoms of volume depletion or overload.
17. Question patient regarding problems/events since last treatment.
18. Identify risks for patient exsanguination ("bleeding out").
19. Recognize intradialytic events that effect fluid removal or retention.
20. Identify and report changes in patient's general physical state.
21. Consider patient's response to last treatment to anticipate changes in care plan.
22. Recognize and report potential or actual adverse patient occurrences.
23. Recognize and report signs and symptoms of orthostatic hypotension.
24. Recognize and report signs and symptoms of infection.
25. Recognize and report changes in patient's cognitive/mental status.
26. Follow protocol for treating muscle cramps.
27. Recognize and report signs/symptoms of access failure (stenosis, clotting).
28. Obtain blood samples from patient's fistula or graft.
29. Recognize and report an emergency clinical situation.
30. Recognize and report patient at risk for falls.
31. Cannulate a mature buttonhole access.
32. Participate as directed in patient resuscitation activities.
33. Administer oral protein supplements.
34. Participate in patient rehabilitation activities (exercises).
II. TECHNICAL - 23%
1. Check conductivity and pH of dialysate solution with an independent device.
2. Ensure safe and proper use of equipment.
3. Adjust dialysate solution temperature according to protocol.
4. Participate in monitoring the water treatment system.
5. Mix concentrates from powder (bicarbonate, electrolyte solution).
6. Take corrective action when equipment malfunctions ("troubleshoot").

CCHT ACTIVITIES BY BLUEPRINT AREAS

7. Process patient's laboratory samples.
8. Identify risks/benefits associated with reprocessed dialyzers.
9. Perform quality control checks on equipment (test strips, glucose meter).
10. Identify/report/document an adverse event (equipment set-up problems).
11. Obtain environmental cultures (water, hemodialysis effluent).
III. ENVIRONMENT - 15%
1. Use dialysis/standard precautions.
2. Use chemicals to disinfect environmental surfaces.
3. Follow infection control precautions (isolation, vaccinations, supplies).
4. Use proper body mechanics.
5. Disinfect dialysis equipment.
6. Maintain an unobstructed emergency exit pathway.
7. Maintain an environment to reduce risk for falls (spills/clutter in walkway).
8. Assist with maintaining the Life Safety Code.
9. Maintain a therapeutic environment (noise reduction, temperature control).
10. Prepare for/respond to environmental emergencies during treatment.
11. Start-up or shut-down facility.
12. Identify and report escalating behavior of patient, visitor, staff.
13. Participate in patient emergency evacuation drills (fire, natural disasters).
IV. ROLE RESPONSIBILITIES - 12%
1. Maintain patient's confidentiality.
2. Maintain patient's privacy.
3. Maintain patient's dignity.
4. Maintain safety of environment.
5. Communicate patient's dialysis treatment outcomes to appropriate personnel.
6. Maintain appropriate caregiver/patient relationships.
7. Use appropriate communication techniques/skills with patients (verbal/nonverbal).
8. Encourage and support dialysis treatment prescription and adherence.
9. Document findings and interventions/activities performed.
10. Report to another staff member prior to breaks or shift change ("hand off").
11. Identify and report changes in patient's behavior.
12. Differentiate roles and responsibilities of care-team members.
13. Reinforce patient education according to patient teaching plan.
14. Recognize/report need for patient education.