### Duties

**A. Assemble and Setup Hemodialysis Machine**
- A-1 Start water purification system (RO)
- A-2 Test water system for chlorine/chloramine
- A-3 Prepare bath and connect to machine
- A-4 Turn on and test hemodialysis machine functions
- A-5 Verify patient and schedule
- A-6 Test dialyzer for disinfectant and verify
- A-7 Prime the dialyzer and blood lines
- A-8 Prepare medications for administration

**B. Perform Pre-evaluation of Patient**
- B-1 Visually evaluate the patient's condition
- B-2 Weight the patient
- B-3 Measure vital signs
- B-4 Review recent patient medical history
- B-5 Perform physical assessment
- B-6 Perform access assessment
- B-7 Perform peripheral sticks for blood dress if necessary
- B-8 Determine treatment duration and fluid removal
- B-9 Record pre-dialysis data

**C. Initiate Hemodialysis Treatment**
- C-1 Test extracorporeal system for residual disinfectant
- C-2 Verify/match patient and dialyzer
- C-3 Cross-check dialysis orders
- C-4 Test dialysate conductivity
- C-5 Test machine alarm signs
- C-6 Perform venipuncture on patient
- C-7 Draw blood samples for lab work
- C-8 Check blood sugar of diabetic patients
- C-9 Connect patient to machine
- C-10 Adjust hemodialysis machine settings
- C-11 Reassess patient's blood pressure
- C-12 Record initiation of treatment

**D. Monitor Hemodialysis Treatment**
- D-1 Follow patient's schedule
- D-2 Monitor patient's blood pressure
- D-3 Monitor and adjust machine settings during treatment
- D-4 Observe physical and mental status of patient
- D-5 Respond to machine alarm signals
- D-6 Respond to patient calls
- D-7 Record treatment data
- D-8 Report pertinent information to appropriate health care team members
- D-9 Receive report on pertinent information
<table>
<thead>
<tr>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
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</thead>
<tbody>
<tr>
<td>Respond to Emergencies</td>
<td>Discontinue Hemodialysis Treatment</td>
<td>Disassemble Hemodialysis Machine</td>
<td>Process Dialyzers</td>
<td>Perform Other Job Responsibilities</td>
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<tr>
<td>E-1 Respond to hypotensive emergencies</td>
<td>F-1 Gather post-treatment supplies</td>
<td>G-1 Remove and discard disposable bihazardous waste</td>
<td>H-1 Prepare disinfectant tanks</td>
<td>I-1 Clean and disinfect work area and re-usable supplies</td>
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<tr>
<td>E-2 Respond to air embolism emergency</td>
<td>F-2 Draw post-treatment blood samples</td>
<td>G-2 Remove, retrieve and prepare dialyzer for reuse</td>
<td>H-2 Rinse dialyzers for post-treatment</td>
<td>I-2 Stock supplies</td>
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<td>E-3 Respond to hemolysis emergency</td>
<td>F-3 Return blood to patient</td>
<td>G-3 Clean machine exterior and dialysate containers with disinfectant</td>
<td>H-3 Process dialyzers</td>
<td>I-3 Refer patients to other personnel/professionals</td>
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<tr>
<td>E-4 Respond to blood leak emergency</td>
<td>F-4 Monitor vital signs for stability</td>
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<td>H-4 Complete documentation</td>
<td>I-4 Call for patient transportation</td>
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<td>E-5 Respond to seizure emergency</td>
<td>F-5 Disconnect patient from machine</td>
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<td>I-5 Prepare on/off packs</td>
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<td>E-6 Respond to pyrogen reaction emergency</td>
<td>F-6 Perform post-evaluation on patient</td>
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<td>I-6 Maintain professional competencies</td>
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<td>E-7 Respond to water system failure</td>
<td>E-7 Perform post access care</td>
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<td>I-7 Precept less-experienced workers</td>
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<td>E-8 Resuscitate patient and administer pulmonary massage</td>
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<td>I-8 Teach patients</td>
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<td>E-9 Maintain open airway</td>
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<td>I-9 Input patient information to files</td>
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<td>E-10 Evacuate patients from facility in disaster situations</td>
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<td>I-10 Transfer patients from wheelchair to recliner</td>
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<td>E-11 Activate emergency medical system</td>
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<td>I-11 Prepare cleaning solutions</td>
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<td>E-12 Respond to machine failure</td>
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<td>I-12 Assist patient with activities of daily living</td>
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<td>E-13 Participate in continuous quality performance</td>
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Future Trends/Issues/Concerns
- Advanced technology and its associated changes
- Availability of patient transportation
- Bloodborne pathogens
- Continuing education requirements
- Government regulations
- Health care reform
- Increase in patient acuity
- Increasing responsibility for technicians
- Managed care in the future
- National standardization of competencies
- Ownership of facilities
- Quality of life
- Rationing of care provided
- Reimbursement
- Safety needle requirements
- Salary
- State mandated education requirements

Worker Characteristics
- Ability to deal with stress
- Adaptable
- Confidentiality
- Considerate of patient
- Cultural sensitivity
- Dedicated
- Dependable
- Efficient
- Good personal hygiene
- Helping attitude
- Honest
- Initiative
- Integrity
- Nurturing
- Organized
- Patient
- Pleasant
- Productive
- Professional behavior
- Punctual
- Remains calm
- Respectful
- Responsible
- Self-directed
- Stamina
- Tactful
- Team player
- Thorough
- Tolerant
- Trustworthy

Knowledge & Skills
- Age related bio-psychosocial issues
- Anticoagulation therapies
- Appropriate tubes for lab work
- Aseptic technique
- Available emergency equipment
- Basic computer skills
- Basic math skills
- Basic renal anatomy, physiology, pathophysiology
- Bio-hazardous waste/medical waste disposal
- Blood clotting mechanism
- Body mechanics
- Catheters
- Charting principles
- Chemical disinfectants
- Communication skills (basic spelling/abbreviations)
- CPR
- Decision-making skills
- Delegation skills
- Dialysate procedures
- Emergency evacuation plan
- EMS activations
- Fire extinguisher location & operation
- Grafts & fistulas
- Heimlich maneuver
- Identification of test strips
- Kilogram scale & conversion to pounds
- Machine alarms/corrections
- Machine operations
- Medical terminology
- Medication actions
- Medication administration
- Needle removal techniques
- Observation skills
- Patient warning signs
- Physical assessment
- Policy & procedures for assembly & setup of machine and dialyzer
- Priming procedures
- Principles of dialysis machine
- Principles of hemodialysis
- Problem-solving skills
- Procedures for unusual occurrences
- Re-processing procedure
- Sharps disposal
- Sterile technique
- Teaching skills
- Testing parameters
- Transfer techniques
- Venapuncture techniques
- Vital signs
- Water purification & delivery system

Tools, Equipment, Supplies And Materials
- Ambu bag
- Ampules
- Assessment equipment
- Biohazardous containers/bags
- Blood pressure cuff
- Blood sample tubes
- Chloride meter
- Citric acid and heat
- Clamps
- Computer
- Copy Machine
- Crash car
- Dialyzer
- Disinfecting reagents
- Disposable supplies
- Fax machine
- Fire extinguisher
- Formal dehyde
- Glucose monitoring equipment
- Gluteraldehyde
- Hemodialysis machine
- Ice Machine
- Needles
- Non-occluding forceps & clamps
- Oxygen tanks
- Peroxyacetic acid
- Policy & procedure manual
- Protective equipment (gown, gloves, mask)
- Rolodex
- Scissors
- Sphygmomanometer
- Stethoscope
- Suction
- Support belts for back
- Syringes & needles
- Telephone
- Telephone book