Candidate Examination Handbook

- Certified Hemodialysis Technologist/Technician (CHT)
- Certified Hemodialysis BioMedical Technician (CHBT)
- Certified Hemodialysis Nurse (CHN)
- Certified Peritoneal Dialysis Nurse (CPDN)

Choose from Over 275 Testing Locations Worldwide

Revised April, 2016
The Board of Nephrology Examiners Nursing Technology (BONENT) is a non-profit organization promoting excellence in the quality of care of nephrology patients in the United States and many countries around the world.

BONENT serves as a trusted representative voice to policy makers by urging legislative and regulatory movement toward meaningful training, certification and credentialing of nephrology practitioners. Recognized since 1974 as the leading, independent professional certification body, BONENT identifies safe and competent practitioners in nephrology by providing the most highly regarded comprehensive specialty examinations to achieve the following credentials:

- Certified Hemodialysis Technologist/Technician (CHT)
- Certified Hemodialysis BioMedical Technician (CHBT)
- Certified Hemodialysis Nurse (CHN)
- Certified Peritoneal Dialysis Nurse (CPDN)

Nephrology nurses may receive certification in either or both Hemo and Peritoneal dialysis. Technicians may receive certification in either or both Hemo and Biomed.

BONENT membership is comprised of nurses and technicians who have received a passing score on a BONENT exam and are thereby certified. Members must recertify every four years. Today, over 7,000 nurses and technicians have met our criteria and are BONENT-certified.

Despite its impressive growth in recent years, BONENT remains largely a “grassroots” organization that depends on the help of all of its members in order to sustain itself, thrive and grow.

**Many Benefits of a BONENT Certification**

- Increases your ability to provide the highest quality care to patients;
- Carries the distinction of the title CHT, CHBT, CHN, or CPDN;
- Provides personal satisfaction from your exam performance;
- Enhances your résumé, which may result in preferential consideration for promotion or salary increases;
- Presents opportunities for your continued professional growth through our recertification programs;
- Presents opportunities to participate in the creation and development of new BONENT programs;
- Includes complimentary subscription to the BONENT newsletter, which contains practical program information for nurses and technicians; and,
- Includes complimentary copies of various nephrology publications
- Gives access to discounts on your everyday purchases with our Member Benefits Program
Table of Contents

Section 1  Examinations
Exam Development .................................. 4
Exam Application .................................. 4
Exam Methods ........................................ 4
US & International .................................. 4
Exam Schedules ....................................... 4
Host Opportunities .................................. 4

Section 2  Eligibility and Fees
Eligibility ............................................. 5
Fees .................................................... 5
  • Exam Fees ...................................... 5
  • Incomplete Fee .................................. 5
  • Returned Check Fee ............................... 5
  • Annual Certification Fee ......................... 5
  • Recertification .................................. 5

Section 3  Exam Policies
Applications & Deadlines .......................... 5
Acceptance ........................................... 6
ADA Requests ......................................... 6
Refunds and Exam Transfers/Withdrawals ....... 6
Incomplete Process ................................... 6
Special Circumstances ................................ 6
Exam Results .......................................... 6
Manual Re-scoring .................................... 7
Re-examination ......................................... 7
Multiple Certifications .............................. 7
Duplicate Certificates ............................... 7
Duplicate Wallet Cards .............................. 7

Section 4  Recertification and Renewal
How Often Must You Renew? ....................... 7
Lapsed Certification .................................... 7
Expired Certification ................................... 7
How to Recertify ....................................... 7
Payment .................................................. 8

Section 5  Guidelines and Rules for Examinations
Bring to the Exam ...................................... 8
Guidelines for Day of Exam .......................... 8

Section 6  Preparing for Exams
Online Practice Examination ......................... 9
Study Guide ............................................. 9
• Certified Hemodialysis Technologist/Technician (CHT)
  • Examination Content ............................. 9
  • Eligibility ........................................... 9
  • Legislative Mandates for Certification ....... 9
  • Detail of Examination Content ................ 9
• Certified Hemodialysis BioMedical Technician (CHBT) .................. 12
  • Examination Content ............................. 12
  • Eligibility ........................................... 12
  • Detail of Examination Content ................ 12
• Certified Hemodialysis Nurse (CHN)
  • Examination Content ............................. 14
  • Eligibility ........................................... 14
  • Detail of Examination Content ................ 14
• Certified Peritoneal Dialysis Nurse (CPDN)
  • Examination Content ............................. 16
  • Eligibility ........................................... 16
  • Detail of Examination Content ................ 16

Section 7  Suggested Reading Materials
Reference Guide ........................................ 20

Exam Application ...................................... 23

NOTE:
The most detailed and up-to-date policies and handbook
may be found on the BONENT web site at:
www.BONENT.org
Examen Development

Examination committees conduct analyses of tasks, role delineation, skills, and knowledge in conjunction with a professional testing agency. Examination validity is maintained through expert statistical and scientific analysis.

Questions are then solicited from qualified nephrology nurses and technologists/technicians in different areas of the country. The submitted questions are categorized, edited grammatically and psychometrically, reviewed by experts and placed in an item pool. Questions are drawn from an item pool for placement in an examination.

There are four types of BONENT exams from which to choose:
- Certified Hemodialysis Technologist/Technician (CHT)
- Certified Hemodialysis BioMedical Technician (CHBT)
- Certified Hemodialysis Nurse (CHN)
- Certified Peritoneal Dialysis Nurse (CPDN)

All BONENT examinations are designed, constructed, and analyzed for reliability and validity. Each examination is comprised of multiple-choice questions and updated regularly. The examinations should be completed, and all questions answered, as scores are based on the number of questions answered correctly.

CHT Exam in Spanish

CHT candidates in the United States are able to take the exam in Spanish through the Paper & Pencil Exam (PPE) ONLY. The practice exam, all paperwork and communication (Application, Exam Proctor, Score Report, phone calls, etc.) will remain English-only.

Exam Application

To apply for a BONENT exam, you must submit a completed Application Form, fees, and all required documentation. (see pages 23-24 for application and instructions).

Exam Methods

Candidates can choose between two examination methods by which to become BONENT certified:

Paper & Pencil Exam (PPE)  Computer Based Testing (CBT)

The following points are the same for both examination methods:
- Use the same application (candidates must indicate PPE or CBT)
- Require the same amount of time
- Have the same questions
- Have a proctor on site
- You choose your own exam site

The differences between the two examination methods are:
- Each examination method has its own separate list of locations
- Candidates receive an unofficial printout of their scores as soon as the CBT exam is completed
- There is no application deadline for the CBT
- Confirmation letters will be sent after your application has been processed and approved. The approximate timeframe of when you receive your confirmation letter depends on the exam method you choose:
  - PPE – 2 weeks before the exam
  - CBT – 4 weeks after BONENT receives your application
- Taking the BONENT exam by Computer Based Testing (CBT) requires basic knowledge of how to use a computer. The exam covers the same material as the Paper & Pencil Exam (PPE).
- While taking the exam, candidates are able to skip questions, go back to a previous question and change answers.

US & International

Certification by BONENT reflects its global status as the leading certification group of nephrology nurses and technologists/technicians who have received a passing score on a BONENT examination. Examinations are conducted throughout the United States and as far away as Australia, New Zealand, Singapore, India, and a growing list of other international countries. Deadlines for international candidates differ from those of their American colleagues, such as:
- The application must be received 60 days prior to the examination at which they wish to appear (PPE Only)
- Host applications must be received a minimum of 120 days prior to the examination date
- Payment for all items must be in United States Currency (credit card or money order only)

Exam Schedules

For a detailed list of PPE exam locations and times, please visit the BONENT website (www.bonent.org) or contact the Executive Office at (202) 462-1252. This list is updated weekly.

The CBT list of locations is available at www.bonent.org. This list is updated often and is completely different from the Paper & Pencil Exam (PPE) schedule. Most CBT locations’ business hours are approximately 9am-5pm daily and some are open on Saturday. The availability of exam times depends on each location. Since the exam is only 3 hours, they are given once or twice daily. When your application is approved, you will be given a unique ID and password. Specific registration instructions will be itemized in the Confirmation Letter. Only during the process of scheduling your exam time will you be able to access the location and time availability.

Host Opportunities

BONENT Certification Examinations may be offered at various locations throughout the United States and worldwide, upon request. Examinations can be administered anywhere, any time there are five qualified candidates to take the exam.

The candidates may be a combination of Hemodialysis Technologists/Technicians, BioMedical Technicians, Hemodialysis Nurses and Peritoneal Dialysis Nurses.

BONENT encourages certification; therefore, proctors are required to be a BONENT-certified nurse or technologist/technician, a physician, a dietitian, or a renal social worker. These requirements are necessary to prevent any breach of security of the BONENT examination process.

To host an examination, the sponsor must submit a Host Form, along with other required paperwork to the BONENT Executive Office a minimum of 90 days (120 days international examinations) prior to the examination date chosen by the Host Facility.

Proctors and assistant proctors are required to submit their résumé or curriculum vitae, and a signed BONENT confidentiality statement. An assistant proctor is required for all exams. After verification of proctor...
Eligibility

In addition to requirements imposed by state licensing authorities, applicants must meet the following minimum criteria:

- **Nurses (CHN, CPDN)** – a valid RN license, one year of experience in nephrology and current active participation in an ESRD facility.
- **LPN or LVN** – a valid LVN or LPN license, current active participation in an ESRD facility and for the following exams:
  - CHN or CPDN: two years of experience in nephrology;
  - CHT: one year of experience in nephrology.
- **Technicians (CHT)** – a copy of your high school diploma or official transcript (with principal’s signature and/or school seal), a minimum of 12 months of experience in nephrology patient care and current active participation in an ESRD facility. If you have no experience as a patient care technician/technologist, you may apply to take the BONENT exam within 2 years of successful completion of a BONENT Approved Training Program.
- **Technicians (CHBT)** – copy of your high school diploma or official transcript (with principal’s signature and/or school seal), a minimum of 12 months of work experience in nephrology, of which includes a minimum of 6 months of dialysis BioMedical (BM) experience and any BM training certificates and current active participation in an ESRD facility.
- **Technicians (CHT & CHBT)**
  - **Currently Unemployed**: If you are currently unemployed but have a minimum of 12 months experience as noted for the exams above, you will be required to have your immediate past supervisor sign your application and write a reference letter. All other stated requirements apply.
  - **No High School Diploma**: If you have more than 4 years of work experience in dialysis as noted for the exams above, but cannot provide proof of graduating high school, BONENT will accept your work experience and waive the requirement for a high school diploma.

Note: If you have been convicted of a felony, you are not eligible to become BONENT certified.

All experience must be verified by two signed letters of reference:

- One from the applicant’s immediate supervisor (the same person who signs the application)
- The other from a professional (e.g., a peer or mentor) in the field of nephrology
- Both letters must include the applicant’s legal name and verify his/her length of experience, character and job duties.

Fees

Candidates will not receive a confirmation letter until receipt of all application requirements and fees. NO exceptions will be made.

Incomplete Fee

Applications submitted without signed letters of reference, scholastic documentation, license or any other information left blank on the application will be assessed a $40 incomplete application fee.

Returned Check Fee

A $75 Returned Check Fee is assessed for any returned checks.

Annual Certification Fee

To maintain a BONENT certification, nurses and technologists/technicians are required to pay an Annual Certification Fee of $60. There are two payment options – annually (@ $60), or four years in advance ($200). If fees are NOT received by the due date noted on your invoice, a $10/yr. late fee will apply in the first three years after certification and $20 in the fourth year.

Recertification

There is NO extra fee for the Recertification process and wallet card in the fourth year, but the Annual Certification Fee is still applicable.
Refunds, Exam Transfers & Withdrawals

Withdrawal Process
Mail or fax a completed, signed Withdrawal Request Form 20 days before the examination date. If you do not have access to a computer, you may submit a written request with a copy of your exam results. The written request must be signed and include your Social Security Number. A refund of the application fee, minus a $75 processing fee, will be issued. Faxed requests are accepted at the BONENT Executive Office (202) 463-1257. E-mail requests are not accepted.

Transfer Processes
PPE Applicants who wish to transfer to a future PPE date: Mail or fax a completed, signed Transfer Request Form 20 days before the original examination date with the $75 processing fee. If you do not have access to a computer, you may submit a signed, written request (indicate original examination date and desired transfer date). Faxed requests are accepted at the BONENT Executive Office (202) 463-1257. E-mail requests are not accepted.
PPE Applicants who wish to transfer to a CBT: Mail or fax a completed, signed Transfer Request Form 20 days before the original examination date with the $75 processing fee plus the $30 difference in examination fees ($105 total). If you do not have access to a computer, you may submit a signed, written request (indicate original PPE examination date). Faxed requests are accepted at the BONENT Executive Office (202) 463-1257. E-mail requests are not accepted.
CBT Applicants who wish to transfer to a PPE examination: Mail or fax a completed, signed Transfer Request Form 20 days before the requested examination date with a $45 payment ($75 processing fee minus the $30 difference in examination fees). If you do not have access to a computer, you may submit a signed, written request (indicate the specific PPE exam location and date). Faxed requests are accepted at the BONENT Executive Office (202) 463-1257. E-mail requests are not accepted.

Incomplete Processes
If your exam application is incomplete, you must complete it within the given timeframe, or do one of the following:
• Request to withdraw from the exam
• Request to transfer to another exam date
If you do not do any of the above within 1 year of the original exam for which you applied, you will forfeit the full exam fee and you will have to pay the full exam fee the next time you apply.

Special Circumstances
In the event that a candidate CANNOT sit for a scheduled examination due to the death of an immediate family member (mother, father, siblings), unexpected natural disaster, or the candidate’s hospitalization, the candidate will be able to sit for the next scheduled examination in his/her area. Documentation of the event must accompany the written transfer request. All requests for special circumstances or transfer must be submitted in writing (by mail or fax)
• PPE - no later than 30 days after the scheduled exam with the $75 processing fee
• CBT - submit Reschedule Form less than 7 days before scheduled exam with $75 processing fee

Exam Results
BONENT will not provide candidate scores over the telephone, via e-mail or via fax
Candidates can expect to receive their exam results approximately 3 to 4 weeks following the date of the
Recertification and Renewal

BONENT adheres to the premise that certification not only promotes excellence in the quality of care of the nephrology patient, it ensures safe, competent practitioners in nephrology nursing and technology. Initial certification is the result of having successfully passed the BONENT certification examination.

How Often Must You Renew?
Recertification is required every four years. Certification is valid from the date the candidate originally passed the examination. Documentation is due within 30-days of the recertification date to avoid revocation of the credential. Faxed Recertification Applications or booklets will NOT be accepted.

Once we receive your recertification application or booklet, it will take approximately four weeks for the approval process. After approval, you will receive a new BONENT wallet card in the mail.

A 30-day grace period will be allowed after the certification renewal date expires before the candidate’s certification is considered lapsed.

Lapsed Certification
(within 12 months of your certification expiration date)
BONENT members who let their certification lapse (within 12 months of your certification expiration date) and wish to recertify can:
• Pay the $100 Lapsed Certification Fee
• Pay any outstanding Annual Certification Fees and
• Submit: 40 contact hours, or use the one-time Waiver, which allows you to automatically recertify without submitting contact hours.

To use the one-time waiver, you must check the box next to the “I wish to use my one-time waiver” option on the Recertification Application. Once the waiver is used, it cannot be used again. After using the waiver, you must have the required amount of contact hours or take the BONENT exam each time you are due to recertify.

Expired Certification
(from 1 to 8 years after your certification expiration date)
If a nurse or technician has allowed their BONENT certification to expire from one to eight years after the certification expiration date, and wish to reinstate their certification, they can:
• Submit 40 contact hours from the past four years and
• Pay the $200 Expired Certification Fee
• You do not qualify to use the one-time waiver.
• Your new certification expiration date will be 4 years from the date your contact hours are approved.
How to Recertify

Initial certification is the result of having successfully passed the BONENT certification examination and is valid for four years from the date the candidate originally passed the examination. In order to continue certification beyond the initial four-year period, you must recertify using one of the following three options:

1. Accumulation of 40 Contact Hours
Recertification for the BONENT-certified candidate using this option means that at least forty (40) contact hours during the four year certification period must be obtained. This is accomplished by:

- Obtaining a minimum of thirty (30) contact hours in Group A
- Obtaining the balance of ten (10) contact hours from among any combination of Groups A or B
- BONENT members eligible for recertification will only be required to complete the one-page Recertification Application and submit it to the BONENT Executive Office. The application will be the only paperwork required to complete recertification. It is recommended that all members continue to complete the “Contact Hours for Recertification” booklet and keep their certificates to help track their courses and number of contact hours.

OR

2. Re-Examination
This option should be accomplished during the fourth year of BONENT certification. A schedule of examination dates and sites is available on our website www.BONENT.org. The examination fee must be paid at the time the individual registers for the examination. Taking the exam does not exempt you from paying the annual fee. If you pass the exam, you will receive a new BONENT wallet card in the mail.

OR

3. One-time Waiver
Use the one-time waiver which allows you to automatically recertify without having to accumulate 40 contact hours.

Payment

To maintain a BONENT certification, nurses and technologists/technicians are required to pay an Annual Certification Fee of $60. There are two payment options – annually ($60) or four years in advance ($200). There is NO extra fee for the Recertification process and wallet card in the fourth year, but the Annual Certification Fee is still applicable. If fees are NOT received by the due date, a $10 late fee will apply in the first three years after certification and $20 on the fourth year.

Returned Check Fee
A $75 Returned Check Fee is assessed for any returned checks.

Incomplete Fee
Incomplete Recertification Applications will be assessed a $40 incomplete application fee.

Bring to the Exam

The applicant’s Confirmation Letter lists his/her test center address. To gain admission to the test center an applicant MUST show the Confirmation Letter to the supervising proctor.

He/she MUST provide one form of photo identification:

- A valid driver’s license
- A valid government-issued ID card with photo
- A valid passport
- A notarized photo with the Candidate’s name printed on the back

These are the ONLY acceptable forms of ID.

Employment and student I.D. cards are NOT acceptable forms of identification.

You must have proper identification to gain admission to the test center.

PPE Applicants must report to the test center at the time listed on the Confirmation Letter. Seating of candidates, distribution of test materials and testing instructions begin shortly thereafter. The actual starting time of the test may vary at different test centers due to the amount of time necessary for pre-administration procedures.

ANYONE WHO ARRIVES AFTER TESTING BEGINS WILL NOT BE ADMITTED.

Guidelines for Day of Exam

BONENT provides these guidelines as part of its criteria for candidates who are scheduled to sit for an exam:

- Do not bring pencils. Pencils will be provided.
- You may wish to take your watch to the examination to help pace yourself during the examination. The test center supervisor will keep the official time and ensure that you are given the correct amount of time for the examination.
- No books, calculators, writing instruments, slide rules, papers, dictionaries or other reference materials may be taken into the examination room.
- No electronic devices are permitted in the examination room or center, including cell phones or signaling devices such as pagers, alarms, and PDAs (personal digital assistants).
- No examination materials, documents or memoranda of any kind are to be taken from the examination room.
- No questions concerning the content of the examination may be asked during the examination. Listen carefully to the instructions given by the Supervising Proctor and read all directions in the examination booklet thoroughly.
- A BONENT observer may be present at the test center. The observer will not answer questions regarding the examination or become involved with exam administration.
Online Practice Examination

The Online Practice Examination for Hemodialysis Technologists/Technicians was developed by BONENT and conforms to the specifications of the official CHT examination in terms of its content and average degree of difficulty. The online practice exam is only available online and has a length of 50 questions, whereas the official CHT exam has 150 questions. The online practice exam is intended to reflect the knowledge required of a hemodialysis technologist/technician to be successful on the CHT examination.

Payment

The Online Practice Exam is available for a fee of $50. If you choose to take the practice exam more than once, the $50 fee must be paid each time.

Do NOT send payment for the practice exam to the Executive Office. The Executive Office does not have copies of the practice exam.

Go to www.BONENT.org to take the online practice exam.

Study Guides

The following section contains detailed content outlines for each of the four BONENT examinations. These examination tools and the Suggested Reading Materials on page 21 can be useful study aids when preparing for an examination.

Certified Hemodialysis Technologist/Technician (CHT)

Examination Content

The BONENT Certified Hemodialysis Technologist/Technician examination measures technical proficiency in certain skills, tasks and general areas of knowledge. The examination tests the following five major domains of practice and tasks performed in the scope of hemodialysis technology:

• Patient Care 45%
• Machine Technology 12%
• Water Treatment 15%
• Infection Control 18%
• Education/Personal Development 10%

The examination has a three-hour time limit and consists of 150 multiple-choice questions.

Eligibility

• A copy of your high school diploma or official transcripts with school seal/stamp.
• One year of experience (12 months) in nephrology patient care, and current active participation in an ESRD facility or successful completion of an accredited dialysis course approved by the BONENT Board. All programs are subject to the approval of the BONENT Board.
• Applicants are required to submit two signed letters of reference with their applications. A signed letter will be required from their immediate supervisor. The other will be required from a professional (e.g., a peer or mentor) in the field of nephrology. Applicants must be employed at the time of application submission.

Legislative Mandates for Certification

In addition to the Federal requirement for certification, some states may require state certification for technologists/technicians who perform certain patient care procedures. It is incumbent upon all applicants to familiarize themselves with...
any state licensure requirements for the state in which they intend to be certified. For instance, Ohio certification requires that all applicants have completed one year of patient care prior to the administration of the examination. Other states may have similar requirements.

Detail of Examination Content

I. PATIENT CARE (45%)

A. Evaluate Patient Pre and Post Treatment

1. Evaluate fluid management
   a. Replacement therapy
   b. Sequential ultrafiltration
   c. Ultrafiltration concepts

2. Collect and evaluate patient data
   a. Vital signs
   b. Weight evaluation
   c. Access patency
   d. Edema
   e. Signs and symptoms of infection
   f. Hemostasis
   g. Orthostasis
   h. Need for supplemental oxygen

3. Document assessment
   a. Report complaints or observations to nurse
   b. Document observations in medical record
   c. Discuss ultrafiltration plan with nurse

B. Evaluate, Intervene, and Manage Treatment

1. Pre treatment
   a. Set treatment parameters per physician order (e.g., bath, blood flow rate, dialysate flow rate)
   b. Check reuse dialyzer label
   c. Inspect dialyzer
   d. Evaluate access (e.g., patency, infection, appearance)
   e. Prepare vascular access for cannulation

f. Prepare CVC and change dressing

g. Gain access

h. Collect laboratory samples (e.g., cultures, blood, urine)
i. Administer heparin for initiation of treatment
j. Verify patient identification at initiation of dialysis
k. Initiate treatment (e.g., set parameters, blood flow rate, dialysate flow)
l. Document observations and patient data

2. During treatment
   a. Collect laboratory samples (e.g., cultures, blood, urine)
   b. Monitor and record treatment data
   c. Identify and respond to complications
   d. Notify nurse of any changes in patient condition
   e. Administer oxygen to patient by cannula or mask
   f. Respond to dialysis machine alarms
   g. Document observations and patient data

3. Post treatment
   a. Collect laboratory samples (e.g., cultures, blood, urine)
   b. Perform procedures to terminate dialysis treatment
   c. Needle site care per protocol (e.g., removal, pressure, dressing)
   d. Catheter care per protocol
   e. Document observations and patient data
   f. Check dialyzer efficiency (e.g., clots, fibers, leaks)

B. Set-up Machine

1. Prepare dialysis equipment for treatment (e.g., prime, rinse, fluid delivery system)
2. Prepare auxiliary equipment (e.g., oxygen therapy, glucometer, conductivity meter)
3. Rotate dialysis equipment in dialysis unit
4. Perform residual chemical checks
5. Perform required safety checks on dialysis equipment (e.g., conductivity, pH, temperature)
6. Test alarms (e.g., air detector, venous/arterial pressure, blood leak detector)
7. Prepare and verify bicarbonate and acid solutions
8. Document daily equipment logs

C. Evaluate Machine Operation

1. Understand quality control of dialysis equipment per Association for the Advancement of Medical Instrumentation (AAMI) standards
2. Perform rinse procedures for dialysis delivery systems
3. Perform disinfect procedures for dialysis delivery systems
4. Understand equipment maintenance records for compliances with regulatory and standard setting
5. Adhere to equipment maintenance procedures and schedules

III. Water Treatment (15%)

A. Understand Components/Design of Systems

1. Recognize actions
2. Recognize the process of ultraviolet light exposure

B. Maintain Systems

1. Understand the process of disinfecting water treatment system
2. Understand the maintenance of all treatment components
3. Perform water treatment system checks
C. Monitor and Evaluate Systems
1. Understand quality control of reprocessing equipment per AAMI standards
2. Monitor total chlorine or chloramines
3. Maintain water treatment systems records for compliance with regulatory and standard setting

IV. Infection Control (18%)
A. Maintain a Clean and Safe Patient Environment
1. Follow all clean/dirty procedures in order to eliminate cross-contamination
2. Recognize complications in dialysis treatments regarding infectious diseases (e.g., AIDS, TB, influenza)
3. Ancillary equipment and supplies
4. Demonstrate understanding and perform cannulation using aseptic technique for needle insertion and all other required procedures
5. Glove changing
6. Wash machines, station area, and chairs after each patient run
7. Hand washing

B. Use Dialysis Precautions
1. Personal protective equipment (PPE) (e.g., gown, gloves, mask)
2. Disinfecting dialysis station
3. Disposal of biohazard waste and SHARPS

C. Implement Isolation Procedures
1. Designated equipment
2. Understand CMS requirements for designated staff
3. Understand status of patient’s hepatitis survey
4. Disinfection

V. Education and Professional Development (10%)
A. Educate Patient
1. Advise patient of discharge instructions (e.g., diet, fluid intake, medication regimen)
2. Advise patient and family members based on physician’s orders (e.g., personal hygiene, self-care, treatment modalities)
3. Explain dialysis concepts to patients
4. Review and reinforce dialysis prescription
5. Describe basic features of end stage renal disease (ESRD)
   a. Complications
   b. Hemodialysis treatment
   c. Psychosocial implications
   d. Dietary restrictions
   e. Treatment modality
6. Describe treatment of acute renal failure

B. Engage in Professional Development
1. Continuing education of dialysis (e.g., attend meetings, workshops, conferences)
2. Multidisciplinary care plans
3. Medications in the dialysis clinic (e.g., anticoagulants, antihypertensives, erythropoietic stimulating agents (ESA)
4. Proper body mechanics for patient and self
5. Professional ethics and boundaries
6. Dialysis unit safety procedures (e.g., fire drills, disaster drill, bomb threat)
7. Professional literature
8. Role of the preceptor
9. Government regulations
10. Treatment modalities (e.g., peritoneal, transplant, home hemodialysis)

C. Understand Quality-Related Issues
1. Document incidents (e.g., emergency-related, equipment/devices, patient care)
2. Maintain documentation/data
   a. Process improvement
   b. Treatment
3. Maintain storage of medications (e.g., heparin, normal saline, Xylocaine)
4. Maintain storage of equipment and supplies
5. Participate in quality assurance process improvement (QAPI) activities
6. Participate in the development of dialysis unit objectives

D. Demonstrate Communication Skills with Staff Members
1. Promote a teamwork approach by offering information, advice, and assistance
2. Contribute to constructive working relationships
3. Participate in self and/or peer evaluations as directed
4. Ensure the confidentiality of patient and employee information
5. Assist in orientation of new staff members
Certified Hemodialysis BioMedical Technologist (CHBT)

Examination Content
The BONENT Certified Hemodialysis Bio-Medical Technician examination measures technical proficiency in certain skills and general areas of knowledge. The examination tests the following seven (7) major domains of practice and tasks performed in the scope of hemodialysis technology:

- Medical Machine Maintenance 24%
- Quality Assurance Performance Improvement 7%
- Water Treatment System Management 30%
- Concentrate System Management 11%
- Reprocessing of Dialyzer 4%
- Life-Safety and Physical Plant Maintenance 9%
- Documentation Practices 7%
- Professional Responsibilities 8%

The examination has a three-hour time limit and consists of 150 multiple-choice questions. Nephrology technicians may receive certification in either or both exams - patient care (CHT) and bio-medical (CHBT).

Eligibility
12 months of work experience in nephrology, which includes a minimum of 6 months of dialysis BioMedical (BM) experience and any BM training certificates.

Detail of Examination Content
I. MEDICAL MACHINE MAINTENANCE (24%)
A. Basic hydraulic and electronic circuitry
B. Purpose and operation of dialysis-related medical equipment
C. Purpose and use of test equipment and maintenance
D. Maintenance for medical equipment (e.g., water treatment equipment, dialysis equipment, testing equipment, and mechanical/electrical systems)
E. Maintenance of machines to complete all scheduled treatments

II. QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT (QAPI) (7%)
A. QAPI principles related to biomed responsibilities
B. Alerts and recalls, or risk management investigations related to medical equipment

III. WATER TREATMENT SYSTEM MANAGEMENT (30%)
A. Procedures for the processing of water samples
B. AAMI analysis water samples
C. Regulatory requirements for water quality
D. Clinical manifestations for out-of-range test results
E. Cultures and endotoxins for water treatment system
F. Water system cleaning and disinfection requirements
G. Theory and test methods of water treatment component operation
H. Valve tags, component labels, directional tape, system schematic, valve legend

I. State regulatory requirements for alternate water treatment plan and update as needed
J. Requirement for secure water room

IV. CONCENTRATE SYSTEMS MANAGEMENT (11%)
A. Bicarb and acid
B. Principles for testing of specific gravity, conductivity, or pH
C. Knowledge of concentrate chemistry
D. Cultures and endotoxins of dialysate
E. Maintenance of concentrate equipment
F. Concentrate equipment cleaning and disinfection requirements
C. Knowledge of concentrate chemistry

V. REPROCESSING OF DIALYZER (4%)
A. Principles for reprocessing programs
B. Reprocessing equipment (e.g., automated, manual)
C. Water treatment systems for reprocessing equipment
D. Physical plant requirements for a reprocessing program

VI. LIFE SAFETY EQUIPMENT AND PHYSICAL PLANT MAINTENANCE (9%)
A. Requirements for life safety equipment
B. Inspections on life safety equipment
C. Vendors for repair of life safety equipment
D. Routine inspections of physical plant as per quality requirements
E. Vendors for repairs related to physical plant
VII. DOCUMENTATION PRACTICES (7%)
A. Documentation of repair and maintenance (e.g., water treatment, medical equipment, physical plant)
B. Documentation practices
C. Review, audit, and trend logs

VIII. PROFESSIONAL RESPONSIBILITY (8%)
A. Procedures for the processing of Work-related vocabulary, symbols, abbreviations, etc.
B. Confidentiality of patient and employee information
C. Regulatory organizations (e.g., AAMI, CMS, OSHA)
D. Maintenance of professional certification
E. Support staff on technical issues related to medical equipment
F. Types of and safe handling of medical waste
G. Support staff in-service related to biomedical and clinical equipment
H. Infection control procedures

BONENT CHBT
Sample Questions

It is recommended that the user of dialysis equipment validate the functional integrity of each monitor at what interval?
(A) Daily
(B) Weekly
(C) Following each patient treatment
(D) Prior to each patient treatment
Key: D

A Phoenix meter must be calibrated
(A) once a day
(B) once a week
(C) annually
(D) bi-weekly
Key: A

All sample ports being used to collect samples shall have
(A) tubing attached to the outlet
(B) direct access to the stream
(C) stainless steel internal parts
(D) a check valve
Key: B

The use of “Dummy Drip Chambers” is acceptable only
(A) during patient change over
(B) during priming machines
(C) in the machine maintenance area
(D) when approved by the Medical Director
Key: C

Nitrates are a marker of an increase in
(A) bacteria and fertilizer
(B) chlorine and chloramine
(C) calcium and magnesium
(D) potassium and calcium
Key: A
**Examination Content**

The BONENT Certified Hemodialysis Nurse examination measures nursing proficiency in certain skills, tasks and general areas of knowledge. The examination tests the following four major domains of practice and tasks performed in the scope of hemodialysis nursing.

- Supervision/Administration 10%
- Dialysis and Related Issues 74.5%
- Professional Development 5.5%
- Environmental Control 10.0%

The examination has a three-hour time limit and consists of 150 multiple-choice questions.

**Eligibility**

- RN with valid license and one year of experience in an ESRD facility (copy of valid license)
- LPN or LVN with valid license and two years experience in ESRD in a nursing capacity as verified by your immediate supervisor or medical director.
- Applicants are required to submit two signed letters of reference with their applications. A signed letter will be required from their immediate supervisor. The other will be required from a professional (e.g., a peer or mentor) in the field of nephrology. Applicants must be employed at the time of application submission.
- Applicants must complete the application in its entirety and sign.

**Detail of Examination Content**

I. **SUPERVISION/MANAGEMENT** (10%)

A. **Personnel Management**

Develop and implement policies and procedures relating to personnel management of patient care staff.

1. Patient needs and staffing patterns
2. Staff abilities and limitations
3. Standards of dialysis care
4. Unit policies and procedures relating to personnel management
5. Medical ethical issues involved with patient care

B. **Equipment and Supplies**

Develop and implement policies and procedures for evaluation of equipment and supplies for potential unit use.

1. Current status of dialysis technology
2. Critical elements for evaluation of dialysis equipment and supplies
3. AAMI Standards for Hemodialysis Systems

II. **DIALYSIS AND RELATED ISSUES** (74.5%)

A. **Patient Care**

Collect, document and analyze patient information before, during and after dialysis in order to maintain and/or improve the quality of patient care through continuous evaluation and ongoing revision of interventions.

1. Steps in the nursing process
2. Normal renal anatomy and physiology
3. Fluid and electrolytes
4. Causes of renal failure
5. Clinical manifestations of renal failure
6. Dialysis principles and procedures
7. Physical assessment
   a. normal and abnormal patient signs and symptoms
8. Nursing interventions
   a. teaching
   b. counseling
   c. referral
9. Charting
10. Medications
    a. use of medications
    b. desired effects of medications
    c. interactions with dialysis
11. Nutritional considerations
    a. restrictions (i.e., fluid, protein, potassium, sodium)
    b. dietary noncompliance
12. Complications occurring during dialysis
13. Psychosocial aspects of renal failure
14. Types of vascular access
    a. creation
    b. care and precautions
    c. complications of each type
15. Heparinization
    a. the coagulation system
    b. heparin and its affects on the coagulation system
16. Types of adjunctive therapy
    a. sequential ultrafiltration
    b. hemoperfusion
    c. hemofiltration
    d. bicarbonate dialysis
    e. high sodium dialysate
17. Determining the adequacy of dialysis
    a. kinetic modeling
18. Quality control and quality assurance
19. Other treatment modalities
    a. peritoneal dialysis
    b. transplantation

B. **Machine Set Up**

Set up equipment prior to the start of the dialysis procedure to ensure that all parameters are intact and functional.

1. Dialysis fluid delivery systems
   a. types
   b. functions
   i. abnormal functions
   ii. corrective actions
   c. monitors and alarms
   i. function
   d. disinfectants
   i. rinsing and testing
   e. AAMI Standards for Dialysate Supply Systems
2. Dialyzers
   a. various types
   b. priming and testing procedures
3. Dialysis Bath
   a. chemical composition
   b. types of dialysis baths
c. techniques for altering the composition of the dialysis bath
d. verification of dialysate composition

4. Ancillary equipment
   a. procedures for use of ancillary equipment

C. Initiation of Dialysis
   Connect patient to dialysis machine to initiate procedure by obtaining access to circulation, taking blood samples, beginning blood flow, administering the anticoagulant, monitoring machine parameters and patient response.
   1. Aseptic technique
   2. Access to the patient’s blood circulation (i.e., types)
   3. Machine parameters
      a. QB
      b. QD
      c. TMP/UFR
      d. conductivity
      e. temperature
   4. Blood drawing
      a. sampling techniques
      b. blood analyses
   5. Anticoagulation
      a. parameters
      b. dosage adjustment
      c. methods for performing blood clotting time analysis
   6. Patient responses, potential problems and emergencies (i.e., hemolysis, blood leak, venipuncture)
      a. resolutions
   7. Acute dialysis
      a. acute renal failure care
      b. specific and/or special care and precautions to be taken

D. Monitoring During Dialysis
   Monitor patient response during dialysis, recognizing and responding to problems and emergencies, by collecting and analyzing patient and machine data in order to maintain safe and effective dialysis.
   1. Patient response
   2. Machine parameters and adjustments

a. QB/QD
b. TMP/UFR
c. conductivity
d. temperature

3. Complications during dialysis
   a. resolution

E. Termination of Dialysis Procedure
   Terminate dialysis procedure by stopping further blood flow, returning the extracorporeal blood to the patient, disconnecting the patient, stabilizing and dressing the access and cleaning the machines.
   1. Methods of returning extracorporeal blood
   2. Achieving hemostasis of various internal blood accesses
      a. dressing procedures for all types of dialysis access
      b. maintaining patency of catheters
   3. Cleaning and disinfection of machine
      a. types of solutions
      b. solution concentration
      c. dwell time
   4. Disposal of software
   5. Potential problems and emergencies associated with the termination of dialysis
      a. resolutions

F. Home Dialysis
   Teach the patient and dialysis partner how to set up the machine, initiate, monitor and terminate the dialysis procedure and recognize and respond to problems, or emergencies in order to maintain safe and effective dialysis in the patient’s home.
   1. Principles of adult learning

G. Dialyzer Reuse
   Procedures used for cleaning, disinfecting and rinsing dialyzers so that they will approximate their original performance characteristics with use of appropriate recycling equipment.
   1. Methods of dialyzer recycling
      a. cleaning and disinfectant solutions

2. Testing procedures
3. Record keeping

H. Water Treatment
   Equipment and methods used for treating water to make it suitable for in dialysis procedures in order to remove contaminants and trace elements by use of deionization, reverse osmosis, filtration and/or softening.
   1. Source water
      a. analysis of source water
      b. normal versus abnormal water
      i. effect on patient and machinery
   2. Methods of treating water
      a. AAMI Standards
      b. disinfection and rinsing procedures

I. Transplantation
   Current practice relating to renal transplantation in order to inform and support potential and previous transplant candidates and their families.
   1. Advantages/disadvantages of kidney transplantation
   2. Indications/contraindications for transplantation
   3. Work-up procedures required for transplantation
   4. Drugs commonly used as immunosuppressive agents in transplantation
   5. Special care needs of patients returning to hemodialysis after a failed transplant
   6. Laboratory and other parameters expected in a new transplant patient

III. PROFESSIONAL DEVELOPMENT (5.5%)
A. Information Sharing
   Share information with colleagues to stimulate professional growth by participating in and/or organizing formal in-service programs, disseminating professional literature and attending professional meetings.
### Examination Content

The BONENT Certified Peritoneal Dialysis Nurse examination measures nursing proficiency in certain skills, tasks and general areas of knowledge. The examination tests the following four major domains of practice and tasks performed in the scope of peritoneal dialysis nursing:

- **Nursing Process** 60%
- **Administration** 10%
- **Education** 20%
- **Professional Development** 10%

The examination has a three-hour time limit and consists of 150 multiple-choice questions.

Nephrology nurses may receive certification in either or both hemo and peritoneal dialysis.

### Eligibility

- RN with valid license and one year of experience in nephrology nursing (copy of valid license)
- LPN or LVN with valid license and two signed years experience in ESRD in a nursing capacity as verified by immediate supervisor or medical director
- All experience must be verified by two signed letters of reference: one from the immediate supervisor, the other from a professional, e.g., a peer or mentor in the field of nephrology. Applicants must be employed at the time of application submission
- Applicants must complete the application in its entirety and sign

### Detail of Examination Content

#### I. NURSING PROCESS (60%)

Collect, document and analyze patient information before, during, and after dialysis in order to maintain and/or improve the quality of patient care through continuous evaluation and ongoing revision of interventions.

- **A. Interviewing Techniques**
- **B. Physical Assessment**
  1. Normal and abnormal patient signs and symptoms
- **C. Nursing Assessment**
  1. Patient, family, and significant others’ knowledge, skills, and self-care abilities
  2. Gross and fine motor coordination
  3. Hand strength
  4. Vision
- **D. Human Anatomy and Physiology**
  1. Anatomy and physiology of the kidney and urinary system

#### II. ENVIRONMENTAL CONTROL (10%)

Maintain a safe environment for patients and staff to prevent injury and the spread of disease by developing, promoting and implementing policies for the use and handling of chemical and biological agents and the prevention of contamination.

- **1. Chemical Agents**
  - use of chemical agents
  - effects of chemical agents
  - potential hazards of chemical agents
- **2. Biological Agents**
  - potential hazards
  - effects of biological agents
  - routes of transmission
- **3. Infection Control**
- **4. Occupational Injuries**
- **5. Hazards Prevention and Control** (i.e., fire, bomb threats, power failure, water loss and/or contamination, etc.)

#### III. PATHOPHYSIOLOGY OF THE KIDNEY AND URINARY SYSTEM

#### IV. ETIOLOGIES OF END STAGE RENAL DISEASE

#### V. LABORATORY TESTING

- **1. Patient preparation**
- **2. Nursing responsibilities**
- **3. Interpretation of results**

#### VI. DIAGNOSTIC TESTING

- **1. Patient preparation**
- **2. Nursing responsibilities**
- **3. Interpretation of results**

#### VII. PHARMACOLOGY

- **1. General**
- **2. Alterations in drug excretion and metabolism in end stage renal disease**
- **3. Drugs used frequently in ESRD patients**

#### VIII. STAFF TRAINING

Orient and instruct staff to unit policies and dialysis procedures to maintain the standards of performance by providing learning situations and observing and evaluating performance.

- **1. Professional literature**
- **2. Professional organizations**
  - a. Purpose of professional organizations
- **3. Research**
  - Investigate clinical nephrology issues to resolve a problem in order to contribute to the body of nephrology knowledge and improve patient care by using the scientific method.
  - 1. Scientific method and its application
  - 2. Research design and implementation

#### IX. LABORATORY TESTING

- **1. Scientific method and its application**
- **2. Research design and implementation**

Certified Peritoneal Dialysis Nurse (CPDN)
4. Alterations in drug metabolism and excretion in peritoneal dialysis
5. Kinetics of intraperitoneally administered medications
6. Antibiotics used in peritonitis
7. Methods of administration

J. Medical and Surgical Asepsis

K. Clinical Manifestations of End Stage Renal Disease

L. Dietary Prescriptions for End Stage Renal Disease Patients
1. Predialysis
2. Peritoneal dialysis
3. Hemodialysis
4. Transplantation

M. General Principles of Dialysis
1. Osmosis
2. Diffusion
3. Ultrafiltration
4. Blood flow
5. Membrane area
6. Dialysis solution

N. Kinetics of Peritoneal Dialysis
1. Dialysate to plasma equilibration
2. Ultrafiltration patterns
3. Absorption of calcium, dextrose
4. Obligatory losses of protein, water soluble vitamins, hormones
5. Factors that influence ultrafiltration
6. Factors that influence solute transport
7. Drug transport
8. Kt/V measurement

O. Peritoneal Membrane Characteristics
1. Measurement of peritoneal membrane characteristics (PET)

P. Types of Peritoneal Dialysis
1. CAPD
2. CCPD
3. IPD or NPD

Q. Peritoneal Dialysis Systems
1. (i.e., Cyclers; CAPD systems – bag-spoke, bag-spoke with assist device; disconnect systems; sterile connections device)

R. Dialysis Solutions
1. Composition
2. Dextrose concentrations
3. Volumes
4. Containers

S. Access
1. Types
   a. acute
   b. chronic
2. Preoperative nursing management
3. Insertion techniques
4. Postoperative management

T. Peritoneal Dialysis Prescription
1. Type of dialysis (i.e., IPD, CAPD, CCPD)
2. Frequency of dialysis
3. Exchange volume
4. Number exchanges
5. Type(s) solution
6. System of equipment to be used
7. Time (total exchange, fill time, dwell time, drain time, etc.)
8. Additives

U. Acute Peritoneal Dialysis (hospitalized, ill patients)
1. Indications
2. Predialysis patient assessment and education
3. Initiating and terminating dialysis
4. Monitoring
5. Patient education, psychosocial support during treatment

V. Procedures
1. Chronic automated dialysis (IPD, CCPD)
   a. predialysis patient assessment
   b. machine setup
   c. initiation of dialysis
   d. technical problem solving, troubleshooting
   e. diagnosis and management of patient problems/complications
   f. discontinuing dialysis
   g. post dialysis assessment
   h. documentation

2. Chronic manual dialysis (CAPD)
   a. procedure for initiation of dialysis
   b. exchange procedure
   c. daily patient assessment, documentation
   d. diagnosis and management of patient problems/complications
   e. technical problems
   f. procedure to discontinue or interrupt dialysis

3. Other procedures
   a. warming dialysis solutions
   b. adding medications for IP administration
   c. catheter fluoroscopy
   d. CT scan for diagnosis of internal leaks
   e. splicing damaged catheter
   f. changing catheter adapter
   g. transfer set change

W. Complications
1. Infectious
   Etiology, signs and symptoms, diagnostic evaluation, nursing, medical and surgical intervention, sequelae of:
   a. peritonitis
   b. exit site infection
   c. subcutaneous tunnel infection
   d. intraperitoneal abscess
   e. systemic infection (septicemia)
   f. recurrent infections

2. Noninfectious
   Etiology, signs and symptoms, diagnostic evaluation, nursing, medical and surgical intervention, sequelae of:
   a. catheter related problems
      i. malfunction (i.e., malposition, obstruction, air lock, other)
      ii. pain
      iii. cuff erosion
      iv. cuff extrusion
      v. damage to catheter
   b. surgical complications
      i. bladder perforation
      ii. bowel perforation
iii. incisional pain
iv. external leak
v. subcutaneous leak
vi. hemorrhage
vii. ileus
c. complications resulting from increased intraabdominal pressure
i. hernia
ii. hemorrhages
iii. dialysate leaks
d. problems related to peritoneal dialysis (inherent and due to less than optimal management)
e. pain
i. abdominal pain
   a) low pH
   b) solution infusion
   c) empty abdomen
ii. low back pain
iii. shoulder pain
f. pneumoperitoneum
g. fibrin production
h. blood in dialysate
i. pleural leak
j. changes in pulmonary function
k. changes in cardiovascular function
l. inherent glucose load
m. changes in glucose metabolism
n. fluid overload
o. hyperkalemia
p. hypokalemia
q. hypernatremia
r. hyponatremia
s. hyperphosphatemia
t. hypertension
u. hypotension
v. hyperglycemia
w. protein losses
x. other losses
y. peritoneal eosinophilia
z. significant changes in membrane permeability
diagnosis and intervention

2. Anemia
   a. etiology
   b. management
   c. erythropoietin
   d. administration
3. Diabetes mellitus
   a. pathophysiology
   b. glucose control
   c. insulin pharmacokinetics
d. blood glucose monitoring
e. urine testing
f. systemic complications
g. intraperitoneal and subcutaneous insulin administration

4. Gerontology
   a. physiologic changes associated with aging
   b. interventions to facilitate vision
   c. interventions to facilitate hearing

Z. Other Treatment Modalities
1. Principles of transplantation
   a. candidate selection criteria
   b. pre-transplant evaluation
   c. surgical procedure
d. immunosuppressive therapy
   e. complications
   f. success/failure rates
2. Principles of hemodialysis
   a. indications
   b. access
c. components of the extracorporeal system
d. solute and fluid removal
e. treatment parameters
   f. complications

X. Contraindications to Peritoneal Dialysis
1. Hypercatabolism
2. Pleural-peritoneal communication
3. Inadequate membrane permeability
4. Relative contraindications

Y. Outpatient Nursing Management of the Chronic Peritoneal Dialysis Patient
1. Ongoing assessment, nursing
F. Quality Assurance
Establish and implement a quality assurance program that ensures compliance with established standards in order to provide optimal patient care.
1. Continuous quality improvement

III. EDUCATION (20%)
Instruction and guidance for the patient and/or family and significant others in peritoneal dialysis theory and procedures based on the principles of adult learning, to achieve optimal health status.

A. Principles of Learning
1. Learning styles
2. Teaching methods
3. Learning domains
   a. i.e., cognitive, psychomotor, affective

B. Activities and Teaching
1. Comparison to nursing process
2. Assessment/diagnosis phase
   a. assessment of learning needs
   b. assessment of readiness and ability to learn
3. Planning phase
   a. teaching activities
   b. purpose
   c. developing the teaching plan
      i. behavioral objectives
      ii. content and outline
      iii. learning activities
      iv. alternative teaching strategies
      v. evaluation
4. Implementation phase
5. Evaluation phase

IV. PROFESSIONAL DEVELOPMENT (10%)
A. Information Sharing
Share information with colleagues to stimulate professional growth by participating in and/or organizing formal in-service programs, disseminating professional literature and attending professional meetings.
1. Professional literature
2. Professional organizations

B. Research
Participate in and/or conduct research designed to analyze and validate current practice and procedures and generate new knowledge. Communicate the information obtained to clarify, revise, and strengthen nursing practice.
1. Scientific method and its application
2. Research design and implementation

C. Ethics
Adhere to the professional code of ethics (e.g., patient confidentiality, patient’s rights, informed consent, allocation of resources) and intervene, if necessary, when violations of practice standards, institutional policies, codes of ethics, or legal standards have been identified in order to protect the peritoneal dialysis patient and the public.
1. Nursing Code of Ethics
2. State Nurse Practice Act
3. Patient’s Bill of Rights
4. Nursing Practice Standards
5. Patient Care Standards
6. Legislative process
   a. legal standards
   b. legal ramifications
Reference Guide

A variety of textbooks and publications are currently available to assist candidates in preparing for the examinations. The following is a list of suggested references for use in preparing for each of the BONENT examinations.

A: CPDN, CHT, CHN.

1. **Core Curriculum for Nephrology Nursing** © 2008, 5th edition
2. **Contemporary Nephrology Nursing: Principles and Practice** © 2006, 2nd edition
3. **Applying Continuous Quality Improvement in Clinical Practice** © 2009
5. **American Heart Association, CPR Standards** © 2010
   Reprocessing of hemodialyzers
   Water for hemodialysis and related therapies
   Quality of dialysis fluid for haemodialysis and related therapies
10. **Handbook of dialysis** [Book]
11. **Review of Hemodialysis for Nurses and Dialysis Personnel**
12. **Textbook of Peritoneal Dialysis**
    Nolph R and Gokal, R, Krediet, R - Apr 24, 2009
13. **Peritoneal dialysis**
    Napier M. Thomson, Peter C. Farrell
14. **Dialysis therapy**
15. **Clinical Dialysis**
16. **A Study Guide for Dialysis Technologists**
    Varughese, P. Orsini-Negron and Andrysiak, P. 4th Ed.
17. **Dialysis Technology: A Manual for the Dialysis Technician**
    3rd edition, Varughese, P, Curtis, J

Continued on Page 21
NANT Manuals and Study Guides

A Study Guide for Dialysis Technologists, Fourth Edition (NT-S102)
Water Treatment for Hemodialysis (NT-P102)

Go to www.NANT.biz to purchase these publications.

B. CHBT

1. Association for the Advancement of Medical Instrumentation
   (AAMI)
   RD 52, DR 62, RD5

2. Centers for Medicare & Medicaid Services:
   ESRD Core Survey Field Manual
   Interpretive Guidelines for Dialysis

   C.F. Gutch, Martha H. Stoner, Anna L. Corea

   Curtis, J., & Varughese, P, 2003, National Association of Nephrology Technicians


6. The Basics of Hemodialysis Equipment
   Hemodialysis International 2005, Madhukar MISRA

7. Monitoring Your Dialysis Water Treatment System

8. Occupational Safety and Health Standards

9. Water Treatment for Hemodialysis May 2005

Take the Online BONENT CHT Practice Exam
Visit www.BONENT.org
For More Information
Visit Our Web Site:

www.BONENT.org
Board of Nephrology Examiners Nursing Technology

Application for Certification

Instructions

1. Complete ALL sections of the application. Please type or print legibly in ink.
2. Request your immediate supervisor’s signature as verification of your employment.
3. Submit two signed letters of recommendation that MUST include your full legal name and verify: 1. Length of experience. 2. Character. 3. Job duties. One from your immediate supervisor (the same person who signs this application), the second from a professional in nephrology (physician, technician, nurse, or dietician).
4. If your name has changed since high school, you must indicate your previous name in the space provided on the application and provide court documentation (i.e. marriage certificate or name change application) for each name change.
5. Sign and date the application form.
6. Mail the completed original, signed application form, other materials as required and the examination fee listed below to the BONENT Executive Office.
7. If you choose to pay by credit card, please complete the credit card payment information section of this application.
8. Application must be received no later than the published deadline date. Late applications will be returned unprocessed.

Application to be filled out by Applicant ONLY! (Please Print Clearly)

Name [Mr. or Ms.]
Current Legal Last Name / Surname [Print Clearly]
Maiden or Previous Legal Last Name / Surname
Legal First Name / Given Name
Middle Name
Home Address ____________________________________________________________
Street
Apt. #
City State Zip Country
Work Phone ( ) Home Phone ( ) Cell ( )
E-mail ____________________________ Social Security # ____________________________ Date of Birth ___/___/_____

Are you restricted from providing patient care by any state or federal agency? [ ] Yes [ ] No
Has your state medical license ever been suspended, revoked, or under investigation/restriction? [ ] Yes [ ] No

NOTE: If you have been convicted of a felony, you are not eligible to become BONENT certified.

Exam-Specific Documents Required:

a. All Technician applicants: photocopy of your high school diploma or official high school transcript (with principal’s signature and/or school seal) and/or documentation of completion of post-high school education if applicable.
   • BioMed applicants: BioMedical (BM) dialysis training certificates.

b. Nurse applicants: photocopy of your current, valid nursing license with the expiration date clearly visible.
   • LVN/LPN applicants: written verification of two years of experience in ESRD in a nursing capacity.

<table>
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<tr>
<th>Country</th>
<th>Paper &amp; Pencil Exam</th>
<th>Computer Based Testing</th>
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<td>International**</td>
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**US dollars only (credit card or money order)

Additional Fees

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<td>Exam Withdrawals &amp; Transfers</td>
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<tr>
<td>Returned Check Fee</td>
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Payment Information: [ ] Check/Money Order: Make payable to BONENT
(Always check one)

Credit Card: [ ] MasterCard [ ] Visa [ ] AMEX

Credit Card Number ____________________________ Exp. Date ____________________________ Security Code ____________________________

Cardholder’s Name as it appears on card (PRINT) ____________________________

Cardholder’s Signature ____________________________

Contact Us

Contact the BONENT Executive Office at (202) 462-1252 if you have questions about the application process or the application deadline.

Contact Us

DO NOT FAX This Application!

PM _______ # _______ Amt. _______ I _______ D _______

Board of Nephrology Examiners Nursing Technology

Candidate Examination Handbook 23
For which BONENT certification examination are you applying?
- Certified Hemodialysis Technologist/Technician (CHT)
- Certified Hemodialysis Biomedical Technician (CHBT)
- Certified Hemodialysis Nurse (CHN)
- Certified Peritoneal Dialysis Nurse (CPDN)

Exam Method
- You must schedule your exam and location online after receipt of a BONENT Confirmation Letter
- See Schedule on BONENT Website & list choice below:
  - Site

Professional Category
- RN
- LPN/LVN
- Patient Care Technician
- Equipment/Machine Technician
- Other

Number of years in nephrology:
- One year
- 2 to 3 years
- 4 or more

Highest Level of Education Completed
- High School
- GED
- Bachelors
- Other

BioMedical Experience (CHBT Applicants only)
From (mo/yr) ______________ to _________________
Position_______________________________________ Hrs/Wk_________
Describe major duties and responsibilities.

Current Employment
From (mo/yr) ______________ to _________________
Company __________________________________________
Position_________________________________________ Hrs/Wk_________
Describe major duties and responsibilities.

Past Nephrology Employment
From (mo/yr) ______________ to _________________
Company __________________________________________
Position_________________________________________ Hrs/Wk_________
Describe major duties and responsibilities.

Employment or Approved Training Program Verification
As the immediate supervisor of the dialysis unit, the following signature certifies that the above employment information has been completed and is correct. If you have completed a BONENT Approved Training Program, the main instructor or program director must complete the section below.

Current Supervisor*/Instructor MUST complete this entire section & sign.

Current Supervisor / Instructor (please print or type) Title

Facility Name Facility Address City State Zip Country

Phone Signature Date

Application Checklist - Please check the boxes below to ensure that you have:
- Included check, money order or credit card information
- Indicated test date and location for PPE only
- Indicated examination type
- Included photocopy of high school diploma, nursing license or equivalent, marriage certificate or court documents proving name change (if applicable)
- Both signed reference letters include your full legal name and verifies:
  1. Length of experience
  2. Character
  3. Job duties
- Indicated number of years of experience
- Signature of applicant and supervisor

Incomplete by Deadline: If you submit an incomplete application and fail to provide documents requested by the BONENT Executive Office by the given deadline, you will not be allowed to take the exam for which you are applying.

INCOMPLETE APPLICATION FEE
$40

Transfers & Withdrawals
$75

Returned Check Fee
$75

Confidentiality
Official Board policy states that the BONENT Executive Office:
- Can only speak to exam applicants regarding application details.
- May not discuss any application with managers, supervisors, educators, co-workers or family members.

I understand that the Board of Nephrology Examiners Nursing Technology, Inc., Certification Board reserves the right to verify any or all information on this application. I understand that the information accrued in the certification process may be used for statistical purposes and for evaluation of the certification program and that the information from my certification records shall be held in confidence and shall not be used for any other purpose without my permission. I hereby authorize the Board to request information concerning me from any of the persons or organizations referred to in this application. I further understand that BONENT Certification depends upon meeting the eligibility requirements stated herein as well as achieving a passing score on the appropriate BONENT examination. If I achieve certification, I agree to pay such fees and meet such standards as are prescribed by the Board of Nephrology Examiners Nursing Technology, Inc., to maintain my certification status. I understand that BONENT maintains a registry of all BONENT-certified practitioners and that, should I become BONENT certified, my name and professional category will appear in this registry as long as my certification remains current. Upon successful completion, I authorize BONENT to verify my current status regarding my certification. I hereby state that to the best of my knowledge, I meet the eligibility requirements for this examination and that the information contained in this application is true, complete, correct and is made in good faith. I understand that any falsification in this application will be grounds for rejection of my application for certification or revocation of any certification issued. By signing this application, I authorize BONENT to post my application status on the BONENT Website.

Applicant’s Signature Date

Mail to: BONENT Executive Office: 100 South Washington St., Rockville, MD 20850

Board of Nephrology Examiners Nursing Technology
For More Information
Visit Our Web Site:

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