

CERTIFICATION EXAMINATION FOR DIALYSIS WATER SPECIALISTS

Handbook for Candidates



National Nephrology Certification Organization



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This handbook contains necessary information about the Certification Examination for Dialysis Water Specialists. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This handbook is subject to change.

CERTIFICATION

The National Nephrology Certification Organization (NNCO) endorses the concept of voluntary, periodic certification by examination for all individuals specializing in dialysis water treatment and concentrate systems. Certification is one part of a process called credentialing. It focuses specifically on the individual and is an indication of current competence in a specialized area of practice. Certification as a dialysis water specialist is highly valued and provides formal recognition in the profession of dialysis water treatment.

PURPOSES OF CERTIFICATION

TO PROMOTE DELIVERY OF SAFE AND EFFECTIVE CARE AS A DIALYSIS WATER SPECIALIST THROUGH THE CERTIFICATION OF QUALIFIED DIALYSIS WATER SPECIALISTS BY:

1. Recognizing formally those individuals who meet the eligibility requirements of the National Nephrology Certification Organization and pass the Certification Examination for Dialysis Water Specialists.
2. Encouraging continued personal and professional growth in the practice of dialysis water treatment.
3. Establishing and measuring the level of knowledge required for the standardized practice regarding dialysis water treatment and concentrate systems.
4. Providing a standard of knowledge requisite for certification; thereby assisting the employer, state agencies, public, and members of the health professions in the assessment of dialysis water specialists.

ELIGIBILITY REQUIREMENTS

1. Candidates must meet ONE of the following eligibility options:
 - a. High school diploma or equivalent and 3 years of experience specific to dialysis water
 - b. Associate's Degree/Some college and 2 years of experience specific to dialysis water
 - c. Baccalaureate degree or higher or a healthcare credential (e.g., nursing, physician assistant, pharmacist) and 1 year of experience specific to dialysis water
 - d. Current certification in NNCO CCNT or CBNT and 1 year of experience specific to dialysis water
2. Completion and filing of an Application for the Certification Examination for Dialysis Water Specialists.
3. Payment of required fee.

It is required that all candidates have a minimum of one year of experience specific to dialysis water.

ADMINISTRATION

The Certification Program is sponsored by the National Nephrology Certification Organization. The Certification Examination for Dialysis Water Specialists is administered for the NNCO by the Professional Testing Corporation (PTC), 1350 Broadway, Suite 800, New York, New York 10018, (212) 356-0660, www.ptcny.com. Questions concerning the examination should be referred to PTC.

ATTAINMENT OF CERTIFICATION AND RECERTIFICATION

Eligible candidates who pass the Certification Examination for Dialysis Water Specialists are eligible to use the registered designation CDWS after their names and will receive certificates from the NNCO. A registry of CDWSs will be maintained by the NNCO and may be reported in its publications.

Certification as a Dialysis Water Specialist is recognized for a period of four years at which time the candidate must retake and pass the current Certification Examination for Dialysis Water Specialists or meet such alternative requirements as are in effect at that time in order to retain certification. Go to <http://www.ptcny.com/clients/NNCO> for further information.

REVOCATION OF CERTIFICATION

Certification will be revoked for any of the following reasons:

1. Falsification of an Application.
2. Falsification of any material requested by the NNCO.
3. Misrepresentation of certification status.

The appeals process of the NNCO provides the mechanism for challenging revocation of Certification. It is the responsibility of the individual to initiate this process.

COMPLETION OF APPLICATION

PART I:

Complete or fill in as appropriate ALL information requested on the Application. Mark only one response unless otherwise indicated.

NOTE: The name you enter on your Application must match exactly the name listed on your government issued photo ID such as driver's license or passport. Do not use nicknames or abbreviations.

CANDIDATE INFORMATION: Starting at the top of the Application, print your name, address, phone number, and e-mail address in the appropriate row of empty boxes.

ELIGIBILITY AND BACKGROUND INFORMATION: All questions must be answered. Mark only one response unless otherwise indicated.

OPTIONAL INFORMATION: These questions are optional. The information requested is to assist in complying with equal opportunity guidelines and will be used only in statistical summaries. Such information will in no way affect your test results.

CANDIDATE SIGNATURE: When you have completed all required information, sign and date the Application in the space provided.

Mail the Application with the appropriate fee (see FEES on page 5) and all required documentation to:

**NNCO EXAMINATIONS
PROFESSIONAL TESTING CORPORATION
1350 Broadway, Suite 800
New York, New York 10018**

NOTE: Submit Application at least one month prior to your preferred testing date.

EXAMINATION ADMINISTRATION

The Certification Examination for Dialysis Water Specialists is administered on an ongoing basis, Monday through Saturday, excluding holidays, at computer-based testing facilities managed by PSI. PSI has several hundred testing sites in the United States, as well as Canada. Scheduling is done on a first-come, first-serve basis. To find a testing center near you visit: www.ptcny.com/cbt/sites.htm or call PSI at (800) 733-9267. Please note: hours and days of availability vary at different centers. You will not be able to schedule your examination appointment until you have received an Eligibility Notice from PTC.

ONLINE SOFTWARE TUTORIAL

A Testing Software Tutorial can be viewed online. Go to <http://www.ptcny.com/cbt/demo.htm>. This online Testing Software can give you an idea about the features of the testing software.

SCHEDULING YOUR EXAMINATION APPOINTMENT

Eligibility Notices will be emailed to candidates approximately 10 days after the application has been received, reviewed, and processed. The Eligibility Notice will indicate how to schedule your examination appointment as well as the dates during which testing is available. Appointment times are first-come, first-serve, so schedule your appointment as soon as you receive your Eligibility Notice in order to maximize your chance of testing at your preferred location and on your preferred date.

If you do not receive an Eligibility Notice within two weeks of submitting your application, contact the Professional Testing Corporation at (212) 356-0660. Scheduling Authorization emails sometimes end up in junk/spam mail folders. Please add notices@ptcny.com to your contacts or email safe sender list to avoid this.

You MUST present your current driver's license, passport, or U.S. military ID at the test center. Temporary, paper driver's licenses are not accepted. The name on your Scheduling Authorization must exactly match the name on your photo I.D.

PTC also recommends you bring a paper copy of your Eligibility Notice and your PSI appointment confirmation with you to the testing center. After you make your test appointment, PSI will send you a confirmation email with the date, time and location of your exam. Please check this confirmation carefully for the correct date, time and location. Contact PSI at (800) 733-9267 if you do not receive this email confirmation or if there is a mistake with your appointment.

Candidates have six (6) months from the date of application to sit for the examination. After the six-month period, candidates will need to reapply for the examination and pay a new application fee.

- **It is your responsibility as the candidate to call PSI to schedule the examination appointment.**
- **It is highly recommended that you become familiar with the testing site prior to your appointment.**
- **Arrival at the testing site at the appointed time is the responsibility of the candidate. Please plan for weather, traffic, parking, and any security requirements that are specific to the testing location. Late arrival may prevent you from testing.**

INTERNATIONAL TESTING

Candidates outside of the United States and Canada must complete and submit the Request for Special Testing Center Form found on the www.ptcny.com homepage. This form must be uploaded to your application no later than 8 weeks prior to the start of the chosen testing period. Fees for testing at an international computer test center (outside of the United States and Canada) are \$100.00 in addition to the examination fee. PTC will arrange a computer-based examination at an international test center for you.

SPECIAL NEEDS

The NNCO and PTC support the intent of and comply with the Americans with Disabilities Act (ADA). PTC will take steps reasonably necessary to make certification accessible to persons with disabilities covered under the ADA. Special testing arrangements may be made upon receipt of the Application, examination fee, and a completed and signed Request for Special Needs Accommodations Form, available from www.ptcny.com or by calling PTC at (212) 356-0660. This Form must be uploaded with the online application at least EIGHT weeks before the testing period begins. Please use this Form if you need to bring a service dog, medicine, food or beverages needed for a medical condition with you to the testing center.

Only those requests made and received on the official Request for Special Needs Accommodations Form (found at www.ptcny.com) will be reviewed. Letters from doctors and other healthcare professionals must be accompanied by the official Form and will not be accepted without the Form.

Information supplied on the Request for Special Accommodations Form will only be used to determine the need for special accommodations and will be kept confidential.

CHANGING YOUR EXAMINATION APPOINTMENT

If you need to cancel your examination appointment or reschedule to a different date, you must contact PSI at (800) 733-9267 no later than noon, Eastern Standard Time, of the second business day PRIOR to your scheduled appointment.

If you fail to arrive for your appointment or cancel without giving the required notice, you will forfeit your testing fee. Candidates have six (6) months from the date of application to sit for the examination. After the six-month period, candidates will need to reapply for the examination and pay a new application fee.

RULES FOR THE EXAMINATION

1. All electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to cell phones, laptop computers, tablets, Bluetooth devices; all wearable technology such as smart watches; MP3 players such as iPods; pagers, cameras, and voice recorders are not permitted to be used and cannot be taken into the examination room.
2. No papers, books, or reference materials may be taken into or out of the examination room.
3. Simple, nonprogrammable calculators are permitted with the exception of calculators as part of cellular phones, etc. A calculator is also available on screen if needed.
4. No questions concerning content of the examination may be asked during the testing session. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.
5. Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.
6. Bulky clothing, such as sweatshirts (hoodies), jackets, coats and hats, except hats worn for religious reasons, may not be worn while taking the examination.
7. All watches and "Fitbit" type devices cannot be worn during the examination. It is suggested that these items are not brought to the test center.

FEES

Application fee for the Certification Examination for Dialysis Water Specialists \$275.00

Fees must be submitted in U.S. dollars. MAKE CHECK OR MONEY ORDER PAYABLE TO: **PROFESSIONAL TESTING CORPORATION**

Visa, MasterCard, and American Express are also accepted. Please complete and sign the credit card payment form on the Application.

REFUNDS

There will be no refund of fees. Candidates have six (6) months from the date of application to sit for the examination. After the six-month period, candidates will need to reapply for the examination and pay a new application fee.

REPORT OF RESULTS

At the end of the examination, candidates will receive a printout that confirms their completion of the examination. Candidates will receive an unofficial test result report prior to leaving the testing center. Candidates are not eligible to use the CDWS credential until their official score is received. Candidates will be notified in writing by PTC within one week after test data is received by PSI whether they have officially passed or failed the examination. This is necessary to allow for the psychometric review and administrative time required to ensure accurate and reliable scores. Scores on the major areas of the examination and on the total examination will also be reported. Successful candidates will also receive certificates from the NNCO.

REEXAMINATION

The Certification Examination for Dialysis Water Specialists may be taken as often as desired upon filing of a new Application and fee. There is no limit to the number of times an examination may be repeated.

CONFIDENTIALITY

1. The NNCO will release the individual test scores ONLY to the individual candidate.
2. Any questions concerning test results should be referred to NNCO or the Professional Testing Corporation.

CONTENT OF EXAMINATION

1. The Certification Examination for Dialysis Water Specialists is a computer-based examination composed of a maximum of 175 multiple-choice, objective questions with a total testing time of three (3) hours.
2. The content for the examinations is described in the Content Outline starting on page 8.
3. The questions for the examinations are obtained from individuals with expertise in dialysis water treatment and are reviewed for construction, accuracy, and appropriateness by the NNCO.
4. The NNCO, with the advice and assistance of the Professional Testing Corporation, prepares the examinations.

CONTENT OUTLINE FOR DIAYSIS WATER SPECIALISTS

THE CERTIFICATION EXAMINATION FOR DIALYSIS WATER SPECIALISTS WILL BE WEIGHTED IN APPROXIMATELY THE FOLLOWING MANNER:

I.	Water Quality Standards.....	15%
II.	Water Treatment Terminology and Acronyms.....	5%
III.	Basic Water and Water Quality.....	15%
IV.	Risks & Hazards Associated with Inadequately Treated Water.....	15%
V.	Water Purification Equipment.....	20%
VI.	Water System Performance Monitoring.....	15%
VII.	Disinfection Strategies and Prevention Practices.....	15%

I. Water Quality Standards

- A. Safe Drinking Water Act (SDWA) (1975)
 - 1. SDWA Amendments: “The Lead Laws” (1996)
 - 2. EPA Drinking Water Standards, i.e. MCL
 - a. Primary
 - b. Secondary
 - c. Other
- B. FDA Regulations
 - 1. CFR Part 820 Quality System Regulation
 - 2. GMP/CGMP
 - 3. 510k
 - 4. Guidance Documents
 - 5. Pharmaceutical Water Standards-US Pharmacopeia
- C. ANSI/AAMI/ISO Standards & Recommended Practice
 - 1. RD Guidance Documents
 - 2. ISO/IEC Documents
 - 3. TIR
- D. Centers for Medicare and Medicaid Services (CMS)
 - 1. Conditions for Coverage
 - a. Medical Director Responsibilities
 - b. Governing Body Responsibilities
 - c. Clinical Manager Responsibilities
 - c. Biomedical Technician Responsibilities
 - 2. Interpretive Guidelines
 - 3. Water Treatment System Survey – V Tags
- E. Water Quality Associations
 - 1. WQA
 - 2. UWQA
 - 3. NSF
 - 4. AWWA
 - 5. ASTM
- F. Other Standards
 - 1. IAMPO Universal Plumbing Code (UPC)
 - 2. NFPA Life Safety Code
 - 3. OSHA
 - 4. American Hospital Building Code
 - 5. State Plumbing Boards
 - 6. Local Plumbing Boards and Sewer Authorities

II. Water Treatment Terminology and Acronyms

- A. Introduction
- B. Terminology and Acronyms
- C. Units of Measure/Formulas

III. Basic Water and Water Quality

- A. Hydrologic Cycle
- B. Meteoric Water
- C. How Water Acquires Impurities
 - 1. Environmental Factors
- D. Chemistry
 - 1. Physical and Chemical Changes
 - 2. Elements
 - 3. Compounds and Mixtures
 - 4. Atoms and Molecules
 - 5. Nuclear Atom
 - 6. Electrons
 - 7. Bonds
 - a. Ionic
 - b. Valence
 - 8. Redox Reactions
 - 9. Ions
 - 10. pH
 - 11. Acids
 - 12. Bases
 - 13. Salts

IV. Risks and Hazards Associated with Inadequately Treated Water

- A. Contaminants with Documented Toxicity in Hemodialysis
 - 1. Organic
 - 2. Inorganic
 - 3. Microbiological
 - 4. Radioactive Contaminants
- B. Source Water Characteristics
 - 1. Types of Source Water
 - 2. Municipal Source Water Suppliers
 - 3. Communication with Municipal Source Water Suppliers
 - a. Identifying and Contacting
 - b. Assessing Worse-Case Scenario
- C. Surveillance

V. Water Purification Equipment

- A. Materials of Construction/Compatibility
- B. Backflow Prevention
- C. Tempering Valves
- D. City Water Booster Pumps
- E. Filtration
- F. Carbon Adsorption

- G. Softening
 - 1. Ion Exchange
 - 2. Descaling
- H. Primary Purification Method
 - 1. Reverse Osmosis
 - a. Central RO
 - b. Portable RO (PRO)
 - c. Membranes
 - 2. Ion Exchange
 - a. Mixed Bed Deionizers
 - b. Dual Bed Deionizers
- I. Other Equipment
 - 1. UV Systems
 - 2. Chemical Injection Systems
 - 3. Organic Scavengers
 - 4. Dealkalizers
 - 5. Heat Exchangers
 - 6. Chillers
 - 7. CIP Tank
- J. Treated Water Distribution Systems
 - 1. Types
 - a. Direct
 - b. Indirect
 - 2. Components
 - a. Piping
 - b. Storage Tanks
 - c. Repressurization Pumps
 - d. Ultrafilters
 - e. Wall Stations
 - f. DI Bypass Systems
- K. Dialysis Water System Design
 - 1. Feed Water Onsite Analysis
 - 2. Evaluation of Feed Water Quality
 - 3. Seasonal Variations
 - 4. Worse-Case Scenario Considerations
 - 5. Equipment Selection and Sizing
 - 6. Final Configuration
- L. Selecting a Medical Device Water Treatment Equipment Vendor
 - 1. Preparing a Request For Proposal (RFP)
 - a. Quality and Quantity Requirements
 - b. Feed Water Quality Analysis
 - c. Preferred System Configuration
 - d. Proposed Equipment and System Features
 - e. Installation, Validation, Training, and Support Services
 - f. Evaluation of Bids Submitted
 - g. Conclusions

VI. Water System Performance Monitoring

- A. Water Contaminants
 - 1. Chemical Contaminants
 - a. Organic
 - b. Inorganic
 - 2. Microbiological Contaminants
 - a. Bacteria
 - b. Viruses
 - c. Algae
 - d. Mold
 - e. Fungus
 - f. Biofilm
- B. Standard Test Methods
 - 1. Microbiological Assays
 - 2. Titration
 - 3. Colorimetric
 - 4. Amperometric
 - 5. Polarographic
 - 6. Other Assays
 - 7. Test Interferences
- C. Types of Monitoring
 - 1. Automated vs. Manual
 - 2. Online Monitoring
 - 3. Off-line Monitoring
 - 4. Sample Collection
- D. Evaluation of Equipment Performance
 - 1. Tempering Valve
 - 2. City Boost Pump
 - 3. Filtration
 - 4. Activated Carbon Filtration
 - 5. Ion Exchange Softener
 - 6. Reverse Osmosis Device
 - 7. Other Devices
 - a. Injection Systems
 - b. Organic Scavengers
 - c. UV Systems
 - d. Ultrafilters
 - e. Distribution Pumps
 - 8. Evaluation of Water System Performance - Trending
 - 9. Monitoring Schedules
 - 10. System Failures

VII. Disinfection Strategies and Prevention Practices

- A. Installation
 - 1. Partnering with Water Equipment Vendor
- B. Prevention: Getting a Good Start
- C. Partnering with the Lab
 - 1. Identification
 - a. Bacteria
 - b. Viruses
 - c. Algae
 - d. Fungus
 - e. Molds
 - f. Normal Skin or Body Organisms
 - 2. Validating the System Disinfection Schedule
 - 3. Verifying the Effectiveness of Disinfectant
 - 4. Proper Sample Collection Procedures
- D. Methods of Disinfection
 - 1. Chemical
 - 2. Heat
 - 3. Ozone
- E. Standard Disinfection
- F. High Level Disinfection
- G. Presence Testing
- H. Residual Testing
- I. Remediation: Waterman to the Rescue

SAMPLE EXAMINATION QUESTIONS

1. Substances with a pH of 10 are considered
 1. ionic.
 2. basic.
 3. acidic.
 4. neutral.

2. What is the recovery rate of the RO if the product flow is 8.33 gpm and the concentrate flow is 2.77 gpm?
 1. 25%
 2. 50%
 3. 75%
 4. 100%

3. Which of the following is a characterization of a deionization system?
 1. Dual bed
 2. Brine bed
 3. Carbon bed
 4. Multimedia bed

4. The total viable microbial count for dialysate should be a MAXIMUM of
 1. 50 CFUs/mL.
 2. 200 CFUs/mL.
 3. 1,000 CFUs/mL.
 4. 3,000 CFUs/mL.

CORRECT ANSWERS
TO SAMPLE QUESTIONS

1.2 2.3 3.1 4.2

REFERENCES

The National Nephrology Certification Organization has prepared a suggested reference list to assist in preparing for the Certification Examination for Dialysis Water Specialists. These references contain journals and textbooks which include information of significance to Dialysis Water Specialists. This list does not attempt to include all acceptable references nor is it suggested that the Certification Examination for Dialysis Water Specialists is necessarily based on these references.

AAMI/ANSI Standards

Deionization Basics, Water Quality Association, 1996.

FDA Water Treatment Manual

Haug, I.M. Ultrafiltration for the Water Quality Improvement Industry. Water Quality Association, 1991.

Johnston, P.R. Fundamentals of Fluid Filtration: A Technical Primer, 2nd ed. 1990.

Kim, Y.H. Coagulants and Flocculants: Theory and Practice. Littleton, CO: Tall Oaks Publishing, 1995.

McGowan, W. Water Processing, 3rd ed. Water Quality Association, 2000.

Meltzer, T.H. Pharmaceutical Water Systems, Littleton, CO: Tall Oaks Publishing, 1997.

Morrelli, C.D. Basic Principles of Water Treatment. Littleton, CO: Tall Oaks Publishing, 1996.

Reverse Osmosis for Point-of-Use Application. Water Quality Association, 2001.

The Nalco Water Handbook, 3rd ed. Daniel J. Flynn (Ed.). Nalco Company: McGraw Hill, 2009.

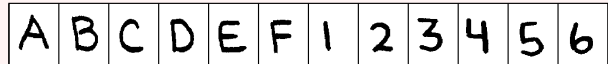
Water Filtration for Point-of-Use Application. Water Quality Association, 1998.

Water Treatment Fundamentals, 7th ed., Water Quality Association, 2004.



Application for Certification Examinations in Nephrology Technology - Part I

MARKING INSTRUCTIONS: This form will be scanned by computer, so please make your marks heavy and dark, filling the circles completely. Please print uppercase letters and avoid contact with the edge of the box. See example provided.



Candidate Information

Please enter your Name exactly as it appears on your current Government-Issued Photo I.D.

Mr. Last Name _____ Middle Initial _____
 Mrs. _____
 Ms. _____
 Dr. _____

First Name _____ Suffix (Jr., Sr., etc.) _____
 Home Address - Number and Street _____ Apartment Number _____
 City _____ State/Province _____ Zip/Postal Code _____
 Daytime Phone _____ Evening Phone _____
 Email Address (Please enter only ONE email address. Use two lines if your email address does not fit in one line.)

Eligibility and Background Information

Darken only one choice for each question unless otherwise directed.

A. EXAMINATION FOR WHICH YOU ARE APPLYING:

- Clinical Nephrology Technology
- Biomedical Nephrology Technology
- Dialysis Water Specialists

B. ARE YOU CURRENTLY OR WERE YOU EVER CERTIFIED IN ANY OF THESE SPECIALTY AREAS BY THE NNCO?

No Yes (Select certificate below)

CCNT - Certified Clinical Nephrology Technology

CURRENT CCNT CERTIFICATE # _____

CCNT MONTH/YEAR CERTIFICATION LAPSES: ____/____ (MM/YYYY)

CBNT - Certified Biomedical Nephrology Technology

CURRENT CBNT CERTIFICATE # _____

CBNT MONTH/YEAR CERTIFICATION LAPSES: ____/____ (MM/YYYY)

CDWS - Certified Dialysis Water Specialists

CURRENT CDWS CERTIFICATE # _____

CDWS MONTH/YEAR CERTIFICATION LAPSES: ____/____ (MM/YYYY)

C. HAVE YOU TAKEN THIS EXAMINATION BEFORE?

No Yes

If yes, indicate month, year, and name under which the examination was taken.

Date (month/year): _____

Name: _____

D. EXPERIENCE IN THE FIELD OF NEPHROLOGY:

- Less than 1 year 5 to 10 years
- 1 year (or 2000 hours part-time) More than 10 years
- 2 to 4 years

E. CURRENT PRIMARY POSITION: (Darken one response.)

- Patient Care Technician Administrator
- Equipment Technician Student
- Chief Technician Field Service Technician
- Reuse Technician Other (specify): _____

F. PRIMARY FORM OF DIALYSIS IN WHICH YOU ARE INVOLVED: (Darken only one response.)

- Chronic Hemodialysis PD In-Patient Hemodialysis
- Home Hemodialysis Other (specify): _____

G. PRIMARY AREAS OF DIALYSIS IN WHICH YOU ARE INVOLVED:

- Patient Care Water Treatment
- Administration Reuse
- Equipment Maintenance Other (specify below): _____
- Transplant _____

H. PERCENT OF WORKING TIME YOU CURRENTLY SPEND IN NEPHROLOGY TECHNOLOGY:

- Less than 25% 51 to 75%
- 25 to 50% Over 75%

I. EMPLOYMENT SETTING:

- Community Hospital Manufacturer/Supplier
- University Medical Center Other (specify below)
- Free Standing Unit _____

(Continue on page 2)





Application for Certification Examinations in Nephrology Technology - Part I

Eligibility and Background Information

J. HIGHEST ACADEMIC LEVEL:

- High School Diploma or Equivalent
- Certificate in Nephrology Technology
- Associate's Degree
- Bachelor's Degree
- Master's Degree
- Doctorate

K. ARE YOU A MEMBER OF NANT?*

- No
- Yes: Membership # _____

L. ARE YOU A MEMBER OF AAMI?*

- No
- Yes: Membership # _____

M. ARE YOU A MEMBER OF ANNA?*

- No
- Yes: Membership # _____

**Note: Membership is not required.*

N. ARE YOU AN LPN/LVN?

- No
- Yes

O. ARE YOU AN RN?

- No
- Yes

Clinical Nephrology Technician Candidates in Ohio Only

PLEASE NOTE: Clinical Nephrology Technician Candidates in Ohio are required to have at least 12 months of experience in dialysis care. Dialysis care is defined as: performing and monitoring dialysis procedures, including initiating, monitoring, and discontinuing dialysis; drawing blood; administering medications when the administration is essential to the dialysis process; and responding to complications that arise during dialysis.

YEARS OF EXPERIENCE IN DIALYSIS CARE:

- 1 year
- 2 to 3 years
- 4 to 5 years
- More than 5 years

Optional Information

Note: Information related to race, age, and gender is optional and is requested only to assist in complying with general guidelines pertaining to equal opportunity. Such data will be used only in statistical summaries and in no way will affect your certification.

Race:

- African American
- Asian
- Hispanic
- Native American
- White
- No Response
- Other

Age Range:

- Under 25
- 25 to 29
- 30 to 39
- 40 to 49
- 50 to 59
- 60+

Gender:

- Male
- Female

Candidate Signature

I have read the Handbook for Candidates and understand I am responsible for knowing its contents. I certify that the information given in this Application is in accordance with Handbook instructions and is accurate, correct, and complete. I am aware that my application is valid for six (6) months. If I do not sit for the exam within six months, I will need to reapply for the examination and pay a new fee.

CANDIDATE SIGNATURE: _____ **DATE:** _____

CREDIT CARD PAYMENT *If you want to charge your application fee on your credit card provide all of the following information.*

Name (as it appears on your card): _____

Address (as it appears on your statement): _____

Charge my credit card for the total fee of: \$ _____

Expiration date _____ / _____

Card type: Visa MasterCard American Express

Card Number: _____

SIGNATURE: _____

FOR OFFICE USE ONLY

Date

Fee: _____

CC Check



APPLICATION FOR CERTIFICATION EXAMINATIONS IN NEPHROLOGY TECHNOLOGY - PART II

NAME: (please print) _____ **Date of Birth:** ____/____/____
Last Name First Name Middle Initial

HAVE YOU EVER BEEN KNOWN BY ANY OTHER NAME? (including maiden name) ____ No ____ Yes Other name(s): _____

Name for Certificate: _____

WORK ADDRESS: _____ **TELEPHONE NUMBER:** (____)_____
Street City State ZIP Code

HOME ADDRESS: _____ **TELEPHONE NUMBER:** (____)_____
Street City State ZIP Code

EXAMINATION FOR WHICH YOU ARE APPLYING: ____ **Clinical Nephrology Technology** ____ **Biomedical Nephrology Technology** ____ **Dialysis Water**

EDUCATIONAL HISTORY: List each school, nephrology technology program, college, or university attended. Use separate sheet if necessary.

Institution: _____ Address: _____
City State

Year of Graduation: _____ Degree/Diploma/Certificate earned: _____

Institution: _____ Address: _____
City State

Year of Graduation: _____ Degree/Diploma/Certificate earned: _____

Institution: _____ Address: _____
City State

Year of Graduation: _____ Degree/Diploma/Certificate earned: _____

EMPLOYMENT HISTORY: List most recent first. Use separate sheet if necessary.

Date of Employment: From _____ To _____ Employer: _____ Position Title: _____

Address: _____ Supervisor: _____ Hours/week: _____

Date of Employment: From _____ To _____ Employer: _____ Position Title: _____

Address: _____ Supervisor: _____ Hours/week: _____

Date of Employment: From _____ To _____ Employer: _____ Position Title: _____

Address: _____ Supervisor: _____ Hours/week: _____

PROFESSIONAL AFFILIATIONS: _____

CANDIDATE AFFIRMATION: I understand the National Nephrology Certification Organization reserves the right to verify any or all information on this application and that certification depends upon successful completion of the specified eligibility requirements and examination. To the best of my knowledge, the information contained in this application is true, complete, correct, and is made in good faith.



Signature of Candidate

Date