THE AMERICAN BOARD OF NEUROSCIENCE NURSING

Certified Neuroscience Registered Nurse (CNRN®)

2021 Recertification Handbook

For CNRNs initially certified in 2016 or recertified as of January 1, 2017

Application Deadline for Recertify by Exam: September 2, 2021*
Early-Bird Application Deadline for Recertify by CE: October 1, 2021*

*Applications received at the national office after 5:00pm Central Time October 1, 2021 will pay the standard recertification fee.

Final Recertification Deadline: January 31, 2022
No applications will be accepted after 5:00 PM (Central), January 31, 2022
Application forms must be completed on the web and printed if submitting by check.

The American Board of Neuroscience Nursing
8735 W. Higgins Rd. Suite 300
Chicago, IL 60631
Toll-free: 888/557-2266 | 847/375-4733 | Fax: 847/375-6430
www.ABNNcertification.org
info@abnnncertification.org
American Board of Neuroscience Nursing Recertification Program

Duration of Certification

CNRN certification is recognized for a period of five (5) years. The actual expiration date of a CNRN certificate is December 31st of the 5th complete year after certification (i.e., certification of CNRNs initially certified in 2016 or recertified effective January 1, 2017, expires on December 31, 2021). To renew certification, the certificant may either apply to retake the certification exam or submit documentation of the required continuing education hours and work hours in neuroscience nursing. Early in the year that an individual’s certification is due to expire, ABNN will notify candidates that their recertification application is due. However, it is ultimately the responsibility of the CNRN to initiate the recertification process as well as to provide ABNN with current contact information.

Eligibility for Recertification

- Current licensure as a registered nurse in the United States or Canada.

**OPTION 1**

4,160 neuroscience nursing practice hours in the past 5 years (equivalent to 2 years full-time work)

and

Retaking of the certification exam

**OPTION 2**

4,160 neuroscience nursing practice hours in the past 5 years (equivalent to 2 years full-time work)

and

75 continuing education hours (see following pages for specific categories)

**OPTION 3**

2,500 neuroscience nursing practice hours in the past 5 years (part-time)

and

100 continuing education hours (see following pages for specific categories)

- Neuroscience nursing practice includes clinical practice, consultation, research, administration, or education in the neuroscience field.
- An approved CE offering or program is one approved by a state or national organization authorized to grant continuing education credit such as the American Nurses Association, the National League for Nursing, the American Association of Neuroscience Nurses, a state nurses association, a state board of nursing, or a hospital or other institution accredited as a provider by a national or state nursing organization, such as the American Nurses Credentialing Center (ANCC). In the event the application lists attendance at a seminar not meeting this definition, additional documentation is required.
- Candidates for recertification who select Option 1 and fail the examination cannot opt to recertify with continuing education hours after taking the exam.
Options 2 & 3: Recertification by Continuing Education (CE) Hours Credit

The activities documented must pertain to the application or dissemination of knowledge that the certified neuroscience nurse is required to know to stay current in practice. All items submitted for CE credit, regardless of category, must be neuroscience-related. Any item that is not neuroscience-related will not be accepted. There are six categories of CE eligible for recertification credit:

- **Category 1**: Neuroscience Nursing Education
- **Category 2**: Program or Project Activities
- **Category 3**: Research
- **Category 4**: Teaching
- **Category 5**: Publication
- **Category 6**: Involvement in Professional Organizations
Of the required CE hours, a **minimum** of thirty (**30**) under Option 2 or forty (**40**) under Option 3 must be in Category 1. **All 75 (100) CE hours may be obtained in Category 1.** Or, once the required CE for Category 1 is obtained, the remaining CE can be earned in any and all of the other five categories. Examples of acceptable CE activities broken down by category are listed below.

**Category 1: Neuroscience Nursing Education.** A **minimum** of thirty (**30**) CE hours under Option 2 or forty (**40**) CE hours under Option 3 must be attended in neuroscience nursing courses approved by state or national organizations authorized to grant nursing continuing education credit, a state board of nursing, or an institution accredited to grant approval by a national or state nursing organization.

The following examples can be submitted for CE under Category 1: Neuroscience Nursing Education

- a. Courses attended with DOCUMENTED neuroscience nursing content approved or accredited by ANCC (e.g., the AANN annual meeting), state boards of nursing, AACN, Association of Rehabilitation Nurses, or other nursing CE approvers
- b. Neuroscience nursing home study courses approved by similar accrediting bodies.
- c. Internet or on-line neuroscience nursing courses approved as above (e.g., AANN’s on-line JNN articles).
- d. Courses taken for academic credit from an accredited college or university and specific to neuroscience. One quarter credit hour equals ten (10) CE hours. One semester credit hour equals fifteen (15) CE hours.
- e. Neuroscience CMEs. One CME equals one (1) CE hour.

If you attended a course that was only partially or not clearly neuroscience-related, or the title of the course does not explicitly indicate neuroscience content, submission of a course outline is required to enable the determination of the appropriate amount of neuroscience nursing credit. For example, a course titled “2006 Critical Care Update” may contain some neuroscience content, but based on the title alone the content is not clear to the reviewer unless a course syllabus or outline is submitted.

Please see the exam content outline on page 8-11.

For all attendance or home study activities, each of the following equals **one (1) CE hour:**

- 60 minutes of lecture
- 0.1 continuing education unit (CEU)
- 1 continuing education recognition point (CERP)

Applicants wishing to count programs/courses that do not carry accredited nursing CE or medical CME credit must include the full name and description of the program, including its specific neuroscience content (e.g., “grand rounds” does not qualify).

**Category 2: Program or Project Activities.** This category does not have an overall minimum or maximum for the recertification cycle, although some activities have yearly maximums. Please review the following for a list of acceptable activities and the corresponding CE amounts that can be submitted. All activities must be neuroscience-related. Activities that are not neuroscience-related will not be accepted.

- a. Service on a neuroscience-related committee for 1 year = 5 CE
  - includes committees that are institutional or employer-based
- b. Development of a neuroscience teaching tool for patients or staff = 5 CE
- c. Development of a QI project = 5 CE (maximum 15 per year)
- d. Development of an original policy/procedure or competency-based tool = 5 CE
- e. Facilitation of a neuroscience-related support group for 1 hour = 1 CE (maximum of 10 per year)

**Category 3: Research.** This category does not have an overall minimum or maximum for the recertification cycle, although some activities have yearly maximums. Please review the following for a list of acceptable activities and the corresponding CE amounts that can be submitted. All activities must be neuroscience-related. Activities that are not neuroscience-related will not be accepted.

- a. PhD dissertation = 25 CE
  - Committee letter documenting completion and approval required.
- b. Master's thesis = 15 CE
  - Committee letter documenting completion and approval required.
c. Grant proposal submission = 10 CE (maximum of 10 per year)
d. Research project implementation (including data collection and recruitment) for 1 year = 5 CE

**Category 4: Teaching.** This category does not have an overall minimum or maximum for the recertification cycle, although some activities have yearly maximums. Please review the following for a list of acceptable activities and the corresponding CE amounts that can be submitted. All activities must be neuroscience-related. Activities that are not neuroscience-related will not be accepted.

a. Presentation of neuroscience content at a conference or class for 60 minutes = 3 CE (maximum of 15 per year)
b. Poster presentation of neuroscience content at conference = 3 CE
c. Development and teaching of an academic course for 1 semester credit hour = 20 CE
d. Development and teaching of an academic course for 1 quarter credit hour = 15 CE
e. Precepting a new neuroscience nurse for 80 hours = 10 CE

**Category 5: Publication.** Some items in this category have maximums for the recertification cycle. Please review the following for a list of acceptable activities and the corresponding CE amounts that can be submitted. All activities must be neuroscience-related. Activities that are not neuroscience-related will not be accepted.

a. Writing or editing a chapter in a text = 15 CE (maximum of 60 per recertification cycle)
   - The chapter submitted for CE credit must be neuroscience-related, although the text it is included in does not need to be exclusively made up of neuroscience content.
b. Publication of a neuroscience article in a peer reviewed journal = 10 CE (maximum of 30 per recertification cycle)
c. Manuscript review of one neuroscience-related article for publication in the *Journal of Neuroscience Nursing* or other peer-reviewed journal = 5 CE (maximum of 30 per recertification cycle)
d. Publication of an article written for a local journal or newsletter = 5 CE

**Category 6: Involvement in Professional Organizations.** Some items in this category have maximums for the recertification cycle. Please review the following for a list of acceptable activities and the corresponding CE amounts that can be submitted. All activities must be neuroscience-related. Activities that are not neuroscience-related will not be accepted.

a. Service on the board of ABNN, the American Association of Neuroscience Nurses (AANN), or the Agnes Marshall Walker Foundation (AMWF) for one (1) year = 10 CE (maximum of 30 per recertification cycle)
b. Development of five (5) CNRN items = 3 CE hours (maximum of 15 per recertification cycle)
c. Serving on ABNN’s Test Development Committee (TDC) for one (1) term (3 years) = 30 CE
d. Serving on ABNN’s Re-referencing Committee for one (1) year = 10 CE
   *Note: Assignment must be completed. No CE will be given for partial work.*
e. Volunteer/medical work for patient support organizations and/or missions for one year = 10 CE (maximum of 30 per recertification cycle)
f. Committee member at the national or local level for one year = 10 CE (maximum of 30 per recertification cycle)

If CE hours are not specifically listed in any of the categories above, you may be asked to submit supporting documentation.
Recertification Application Fees (Non-Refundable)

Applications submitted on or before the early-bird deadline of October 1, 2021 must pay the following fee:

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<th>AANN Member</th>
<th>Non-Member</th>
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<td>$275</td>
<td>$385</td>
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<tr>
<td>Online – Check</td>
<td>$300</td>
<td>$410</td>
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Applications received between October 2, 2021 and January 31, 2022 must pay the standard recertification fee below:

<table>
<thead>
<tr>
<th></th>
<th>AANN Member</th>
<th>Non-Member</th>
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<tbody>
<tr>
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<td>$470</td>
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<tr>
<td>Online – Check</td>
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<td>$495</td>
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If you are unable to pay by credit card, the check or money order in U.S. dollars payable to the American Board of Neuroscience Nursing (ABNN) must be submitted with the reference number received with the online application. Applications will not be processed without the accompanying fee. The application fee is not refundable. Early-bird applications must be submitted at the national office by 5:00pm Central Time on Friday, October 1, 2021. Applications received at the national office after 5:00pm Central Time October 2, 2021 will be charged the standard recertification fee. Applications will be accepted at the national office only through 5:00pm Central Time, January 31, 2022. No applications will be accepted after this date.

Application Instructions

Please follow the instructions below to complete your recertification application.

1. Visit [www.abnncertification.org](http://www.abnncertification.org) and click 'Certification Center'.
2. Log-in to your certification center:
   - IMPORTANT: Do NOT create a new account. Since you are due to renew, you already have an account in our system. If you click create a new account, it will prevent you from being able to complete your recertification application. If you do not remember your username and/or password, please click on the links provided and an email will be sent to you to reset. If you need assistance with your username or password, please contact Customer Service at 847-375-4733.
3. Click on “Apply” for CNRN Recertification in your Current Applications (opens June 1, 2021)
4. Follow each step to complete your recertification application.
5. You have the ability to save your work before moving on to the next tab and are able to come back to your previously started application.

If submitting a check, please fill out the online application, hit “Pay by check” and mail your check along with reference number to:

ABNN Recertification Program  
PO Box 3781  
Oakbrook, IL 60522-3781

For applications received by the October 1st deadline, notification of your recertification status will be sent to you by the first week in December 2021. If are audited and it is found that you do not have the required number of CEs to recertify, you will be notified in time to earn more prior to December 31, 2021. Applicants submitting their application after the October 1st deadline cannot be guaranteed notification of additional CE needed to be earned prior to December 31, 2021. Late applicants will be notified of their recertification status no later than February 28, 2022. A new certificate and wallet card will be issued to applicants who meet all criteria and requirements specified herein.

If you need assistance completing the application or have questions about the status of your application, contact ABNN at the address above or call 888/557-2266 or 847/375-4733.
Application Audits

Each year the ABNN randomly selects 10% of applications to be audited. Candidates will be notified by email within 30 days of submission if their application has been selected for audit. If your application is selected for audit you will be required to send the documentation for all CE activities, within 21 days of notice of your audit. Be prepared to submit a photocopy of your RN licensure, have your supervisor attest to your work experience, and enter each of your CE/upload certificates and written documentation of other activities (e.g., table of contents of journal showing you as author of an article; school transcript, etc.). If a CE program you attended does not meet the definition of an approved program, submit a copy of the behavioral objectives and an outline of the content (e.g., a program brochure) in addition to a copy of the CE certificate. If you do not complete the audit, you will forfeit all fees and will no longer be considered certified.

Denial of Application and Appeal

Approval of recertification will be denied if the applicant is deemed ineligible for continued certification, or if documentation does not meet the requirements listed. Falsification of the application is grounds for denial of recertification. Applicants denied recertification will be notified in writing of the specific reason.

In the event an application for recertification is denied, the decision can be appealed to the ABNN Appeals Committee. Should you wish to appeal the decision you must notify ABNN in writing at 8735 W. Higgins Rd., Suite 300, Chicago, IL 60631, within 21 days of the postmarked date on the letter informing you of the denial.

Any applicant whose application for recertification is denied approval will automatically be sent information about how to appeal the decision, including the steps in the appeal process and additional information required.

Candidates with insufficient CE hours to recertify will not receive a refund. Candidates who are unsuccessful in recertifying by exam are not eligible for any fee refund.
Disorders - Detailed Content Outline

I. Trauma (30 items)

A. Traumatic Brain Injury
   1. Blast, blunt, penetrating
   2. Diffuse Axonal Injury
   3. Contusions/Concussions
   4. Fractures (e.g., skull, spinal column)
B. Hematoma/Hemorrhage
   1. Acute and Chronic Subdural
   2. Epidural
   3. Intracerebral
   4. Traumatic subarachnoid
C. Spinal Cord Injury

II. Cerebrovascular (50 items)

A. Ischemic Stroke
   1. Thrombotic
   2. Embolic
   3. Lacunar
B. Hemorrhagic Stroke
   1. Intracerebral hemorrhage
   2. Subarachnoid hemorrhage
   3. Intraventricular hemorrhage
   4. Hemorrhagic conversion
C. Transient Ischemic Attack
D. Cerebral Venous Sinus Thrombosis
E. Vascular Anomalies
   1. Aneurysm (Cerebral vasospasm)
   2. Arteriovenous malformation
   3. Arteriovenous fistula
   4. Carotid stenosis
   5. Cavernous angiomas
   6. Carotid dissection
   7. Vertebral dissection
   8. Moya Moya
F. Anoxic Injury

III. Tumors (26 items)

A. Brain Tumors
   1. Neuroepithelial Tissue (e.g., glioblastoma, astrocytoma, oligodendroglioma, embryonal tumors)
   2. Cranial and Spinal Nerves (e.g., schwannoma, acoustic neuroma, neurofibroma)
   3. Meningioma (e.g., spinal cord, intracranial)
4. Hematopoietic (e.g., lymphomas, hemangioblastomas)
5. Endocrine (e.g., craniopharyngioma, pineal, pituitary)
6. Metastatic (e.g., Leptomeningeal spread)

B. Spinal Cord Tumors
   1. Primary (e.g., ependymoma, glioma)
   2. Metastatic

IV. Infection and Immune Complications (22 items)

   I. Abscesses
   II. Meningitis
   III. Encephalitis
   IV. Amyotrophic Lateral Sclerosis
   V. Bell’s Palsy
   VI. Demyelinating Polyneuropathy
      1. Guillain-Barré
      2. Acute Disseminating Encephalomyelitis (ADEM)
      3. Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
   VII. Multiple Sclerosis
   VIII. Myasthenia Gravis
   IX. Encephalopathies (e.g., toxic, metabolic, PRES)

V. Neurodevelopmental Conditions (10 items)

   A. Cranial/Cerebral Defects (e.g., craniosynostosis, plagiocephaly, microcephaly, anencephaly)
   B. Chiari Malformation
   C. Hydrocephalus (e.g., congenital)
   D. Congenital Brain and Spinal Cord Anomalies

VI. Neurological Disorders (62 items)

   A. Partial, Generalized, Status Epilepticus, Non-epileptic Seizures
      1. Idiopathic
      2. Symptomatic
      3. Provoked
      4. Cryptogenic
   B. Headaches
      1. Acute
      2. Chronic
   C. Hydrocephalus (e.g., communicating, non-communicating, normal pressure)
   D. Pseudotumor Cerebri
   E. Pain
      1. Acute
      2. Chronic
      3. Neuropathic pain (e.g., trigeminal neuralgia, peripheral neuropathy)
   F. Dementia
      1. Alzheimer’s disease
      2. Vascular
      3. Lewy body
4. Age related memory loss
5. Sundown syndrome

G. Delirium

H. Movement Disorders
   1. Parkinson's Disease
   2. Dystonia
   3. Benign essential tremor

I. Chemical Dependency

J. Degenerative Spine Disease
   1. Degenerative disc disease
   2. Vertebral compression fractures
   3. Lumbar spondylolisthesis
   4. Spinal stenosis
   5. Herniated nucleus pulposus

K. Peripheral Nerve Injury
Interventions – Detailed Content Outline

I. Physiological (54%)

A. Activity and Self-care
   1. Rehabilitation (e.g., physical therapy, occupational therapy, speech therapy)
   2. Neurological positioning for optimal, appropriate body alignment
   3. Stabilize and immobilize (e.g., halo devices, TLSO brace, splints, cervical collars)
   4. Skin care for complication prevention and wound healing

B. Bowel and Bladder Management

C. Nutrition
   1. Dysphagia screening
   2. Nutritional monitoring
   3. Nausea and vomiting management

D. Comfort Promotion
   1. Environmental management
   2. Pain management modalities

E. Metabolic Management
   1. Acid base
   2. Fluid
   3. Electrolytes
   4. Glycemic management

F. Pharmacological Management

G. Neurological Management
   1. Neurological assessments and monitoring
   2. Diagnostic testing
   3. Cerebral perfusion promotion
   4. Cerebral edema management
   5. Cerebral Spinal Fluid (CSF) drainage management (e.g., ventriculostomy, lumbar drain, shunts, Endoscopic Third Ventriculostomy)
   6. Intracranial Pressure (ICP) monitoring and management
   7. Device management (e.g., epilepsy monitoring, Vagal Nerve Stimulator, Deep Brain Stimulator, implantable pumps)
   8. Dysreflexia management
   9. Seizure precautions and management
   10. Subarachnoid hemorrhage management
   11. Tumor treating fields

H. Surgical Treatment and Management
   1. Surgical indications and preparation
   2. Postoperative care and prevention of complications
   3. Procedural management (e.g., conscious sedation, interventional and bedside procedures)

I. Respiratory Monitoring and Airway Management

J. Thermoregulation

K. Cardiovascular Management
   1. Bleeding precautions
   2. Venous Thromboembolism (VTE) prophylaxis
   3. Hemodynamic monitoring and management (e.g., dysrhythmia, blood pressure, shock)
II. Behavioral (21%)

A. Cognitive Behavioral Therapy
   1. Overactivity/inattention/neglect modification
   2. Self-harm prevention
   3. Anxiety reduction
   4. Sleep hygiene and promotion
   5. Substance abuse treatment (e.g., alcohol/drug withdrawal, smoking cessation)
   6. Cognitive stimulation (e.g., memory training, speech therapy)

B. Health Education
   1. Disease process
   2. Procedure/treatment
   3. Individual risk factors (e.g., activity/exercise, diet, medication, substance abuse)
   4. Community resources (e.g., support group)
   5. Psychomotor skills
   6. Patient specific discharge education

III. Quality of Life (12%)

A. Coping Assistance
B. Family
   1. Caregiver support
   2. Patient/family-centered care
C. Culture (e.g., cultural competence, spiritual and religious support)
D. Ethics
E. Organ Donation
F. Palliative Care
G. End of Life

IV. Patient Safety (8%)

A. Identification of Neurological Decline
B. Abuse Protection and Support
C. Environment Safety Management (e.g., fall prevention, suicidal precaution)
D. Infection Prevention
E. Physical and Chemical Restraint

VI. Health System Management (5%)

A. Collaboration
   1. Transfer of care (e.g., bedside handoff, intrafacility, temporary transfer)
   2. Multidisciplinary collaboration
B. Professional Competence
   1. Evidence-Based Practice
   2. Research
   3. Quality Improvement
   4. Continuing Education