



## 2010 CANDIDATE GUIDE

# NEONATAL INTENSIVE CARE NURSING

*Congratulations on taking the next step in your career*

*– earning your RNC-NIC credential!*

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**IT IS IMPORTANT TO READ THE INFORMATION IN THIS GUIDE. IT WILL ANSWER YOUR QUESTIONS AND WILL EXPLAIN ALL POLICIES TO WHICH YOU WILL BE SUBJECT.**

***NCC is accredited by the National Commission for Certifying Agencies***

### ABOUT THIS GUIDE

This guide provides general information about the NCC examination process. There are different rules and policies based on how you are taking the exam: computer testing with AMP, NCC annual paper and pencil testing, testing with PEC courses or contracted by your institution through the ICP program. Please make sure you review the pertinent information for the appropriate exam administration option. It includes specific information about the further communication you will have with NCC before you take the examination, the policies of the examination program, and the procedures to be followed on the day you take the examination. In addition, this guide provides information that will help you prepare for the examination including sample questions to familiarize you with question format, competency statements and examination content outline. A bibliography is also provided for your review. It is recommended that you familiarize yourself with the information in this guide. It should answer your questions about the NCC examination process. If you have other questions, please feel free to contact NCC at 312-951-0207 or visit the NCC website at [www.nccwebsite.org](http://www.nccwebsite.org).

### NCC'S PHILOSOPHY OF TESTING

Certification is an evaluative process that provides the opportunity for nurses in the obstetric, gynecologic and/or neonatal specialty to demonstrate publicly what they know and to be recognized for the special knowledge they possess. The NCC certification credential carries no licensing authority. The ability to practice as a nurse is regulated by the state boards of nursing and while certification may be required in some states for advanced practice roles, NCC has no regulatory power to require states to recognize NCC certification for this purpose. Practice and educational standards are reflected in the certification process, but the responsibility for development of such standards rests with the professional nursing specialty organizations and the nursing educational community. NCC encourages individual nurses to seek out information about how certification relates to state licensure requirements, program accreditation of the educational institutions attended, the educational and practice standards of national nursing specialty organizations, and employment expectations in the community.

# COMPUTER TESTING WITH AMP

## KEY POINTS

**Schedule your test as soon as possible** with AMP either by phone on their website – see eligibility letter for details.

Remember to bring **two forms of ID** with you, one must be with a picture and both must be current. You will not be allowed admittance without proper ID.

You must arrive at least 15 minutes prior to your scheduled appointment time. **AN APPLICANT WHO ARRIVES MORE THAN 15 MINUTES AFTER THE SCHEDULED TESTING TIME WILL NOT BE ADMITTED** and will forfeit all fees.

Preliminary results are given at the site but your **official (verified) results will come to you in the mail** within 21 days of testing. You are **NOT** certified until you receive your official letter.

**Verification of certification to third parties** can only be done via our **online system on the NCC website**. Your information will not be on the system until you receive your official letter in the mail. Cost is \$30.

## SCHEDULING TO TAKE YOUR EXAM

It is your responsibility to schedule when you wish to take the examination. You have **90 days to schedule and to take** your examination. The specific starting and ending days are provided in your eligibility letter. It is recommended that you schedule your appointment as soon as possible. **Space availability at any specific test center cannot be guaranteed.** If you schedule later than the first month of your testing window and space is not available in your assigned window, you will have to file an extension and pay all applicable fees.

You can schedule your examination at one of Applied Measurement Professional (AMP) test centers via **telephone** or via the **web**. Refer to your eligibility letter for the specific telephone number and web site address. A candidate can reschedule a testing date **ONCE** at no charge. You must select a reschedule date when you call to cancel your original test date and that date must be within your assigned 90 day window for testing. Subsequent reschedules require payment of a \$100 fee. Any rescheduling must take place at least 4 days prior to the original scheduled test date.

The examination is administered by appointment only. Walk in candidates cannot be accommodated. Examinations may be scheduled **Monday-Saturday only** and are available on a first come, first served basis. Therefore, you are encouraged to schedule your appointment as soon as possible. Examinations are scheduled at **9 am or 1:30 pm, Monday-Saturday**.

A list of AMP test sites is provided in this guide and at [www.GOAMP.com](http://www.GOAMP.com). AMP Assessment Centers are located in selected H & R Block offices. When you call or visit the web to schedule your appointment, the specific address will be provided, and directions to all AMP sites are available on the AMP web site. **Sites are subject to change.** AMP personnel will be able to advise you about the availability of test centers.

All AMP test centers are **closed** on the following days:

|                           |   |
|---------------------------|---|
| New Year's Day            | Columbus Day                                      |
| Martin Luther King Day    | Thanksgiving (& the following Friday)             |
| Presidents' Day           | Christmas Eve                                     |
| Good Friday               | Christmas Day                                     |
| Memorial Day              | The week between Christmas Day and New Year's Day |
| Independence Day (July 4) |   |
| Labor Day                 |   |

# COMPUTER TESTING WITH AMP

## INCLEMENT WEATHER, POWER FAILURE OR EMERGENCY

### How to Determine if a Test Center is Closed Due to Weather Conditions

In the event of inclement weather or unforeseen emergencies on the day of an examination, AMP will determine whether circumstances warrant the cancellation, and subsequent rescheduling, of an examination. The examination will usually not be rescheduled if the Assessment Center personnel are able to open the test center. If power to a testing center is temporarily interrupted during an administration, your examination will restart where you left off and you may continue the examination.

Candidates may contact AMP's at the same number they called to schedule their appointment or visit the AMP website at [www.goamp.com](http://www.goamp.com) to determine weather related test site closures. Such information is located on the AMP website homepage. Every attempt is made to administer the examination as scheduled; however, should an examination be canceled at a test center, all scheduled candidates will receive notification regarding a rescheduled examination date or reapplication procedures.

## THE DAY OF THE EXAM – ARRIVAL & ADMISSION

When you arrive at an AMP test center (located in H & R Block offices), look for the signs indicating AMP Assessment Center Check-in. You must check in with the test supervisor.

To gain admission to the Assessment Center, a candidate needs to present **two forms of identification**, one with a current photograph. Both forms of identification must be current and include the candidate's current name and signature. The candidate will also be required to sign a roster for verification of identity.

Acceptable forms of photo identification include: a current driver's license with photograph, a current state identification card with photograph, a current passport, or a current military identification card with photograph. Employment ID cards, student ID cards and any type of temporary identification are NOT acceptable. Candidates are prohibited from misrepresenting their identities or falsifying information to obtain admission to the Assessment Center. **YOU MUST HAVE PROPER IDENTIFICATION TO GAIN ADMISSION TO THE TEST CENTER.**

Bring the copy of your eligibility letter with you.

You must arrive at least 15 minutes prior to your scheduled appointment time. **AN APPLICANT WHO ARRIVES MORE THAN 15 MINUTES AFTER THE SCHEDULED TESTING TIME WILL NOT BE ADMITTED** and will forfeit all fees.

If you have any problem during your test session, you should alert the proctor. This could be related to computer function, environment or any other issue.

While every effort is made to provide a comfortable environment, individual temperature responses or facility management beyond the proctor's control can make the site too hot or too cold for your individual taste. Please bring a sweater or jacket that you can remove or put on as needed.

# COMPUTER TESTING WITH AMP

## PREPARING FOR THE EXAM

After your identification has been confirmed, you will be directed to a testing carrel. The computer will be turned on and will be ready to be used. You will be prompted on-screen to enter your NCC assigned ID number. Your photograph will be taken, and it will remain on-screen throughout your testing session. This photograph will also print on your pass/fail report.

### SECURITY

NCC and AMP adhere to test administration and test security standards that are designed to assure that all candidates are provided the same opportunity to demonstrate their abilities. The Assessment Center is continuously monitored by audio and video surveillance equipment for security purposes.

### PRACTICE TEST

Prior to attempting the examination, you will be given the opportunity to practice taking a test on the computer. The time you use for this practice test is NOT counted as part of your examination time. When you are comfortable with the computer testing process, you may quit the practice session and begin the timed examination. If you have any questions about how the computer testing works, please ask your proctor.

## TAKING THE EXAM BY COMPUTER – WHAT TO EXPECT

### TIMED EXAMINATION

Following the practice test, you will begin the actual examination. Before beginning, instructions for taking the examination are provided on-screen.

Three (3) hours are allotted to complete the examination.

The computer monitors the time you spend on the examination. The examination will terminate if you exceed the time limit. You may click on the “Time” button in the lower right portion of the screen or select the TIME key to monitor your time. A digital clock indicating the time remaining for you to complete the examination will appear. The time feature may also be turned off during the examination. Only one test item is presented at a time. The item number appears in the lower right portion of the screen. The entire test item appears on-screen (i.e., stem and three options labeled A, B, and C). **Indicate your choice by either entering the letter of the option you think is correct (A, B, or C) or clicking on the option using the mouse.** To change your answer, enter a different option by pressing the A, B, or C key or by clicking on the option using the mouse. You may change your answers as many times as you wish during the testing time limit.



To move to the next item, click on the forward arrow (>) in the lower right portion of the screen (see diagram above) or select the NEXT key. This action will move you forward through the examination item by item. If you wish to review any item or items, click the backward arrow (<) or use the left arrow key to move backward through the examination.

A test item may be left unanswered for return later in the testing session. Items may also be bookmarked (flagged) for later review by clicking in the blank square to the right of the Time button. Click on the double arrow (>>) or select the NEXT key to advance to the next unanswered or bookmarked item on the examination. To identify all unanswered and bookmarked items, repeatedly click on the double arrow (>>) or press the NEXT key. When the examination is completed, the number of test items answered is reported. If not all items have been answered and there is time remaining, return to the examination and answer those items. **Be sure to provide an answer for each test item before ending the examination. There is no penalty for guessing.**

Online comments may be provided for any item by clicking on the button displaying an exclamation point (!) to the left of the Time button. This opens a dialogue box where comments may be entered. **Comments will be reviewed, but individual responses will not be provided. NOTE: the time to make comments will be counted toward the test time, and no comments are acceptable as answers.**

# COMPUTER TESTING WITH AMP

## FORFEITURE OF FEES

All fees will be forfeited by the candidate for any of the following:

- Failure to follow any AMP rules
- Failure to appear at the test center (no-show) without requesting an extension or a deferral within the allotted time period
- Failure to call for an appointment within the 90 day window
- Arrival too late at the test center
- Refusal of entry because of failure to have proper ID or to meet any required rule
- Dismissal from the test center for being disruptive or otherwise disorderly to other test candidates, test center personnel or others at the test center

**VIOLATION OF ANY OF THE ABOVE PROVISIONS RESULTS IN DISMISSAL FROM THE TESTING SESSION. THE CANDIDATE'S RESULTS ON THE EXAMINATION ARE VOIDED AND EXAMINATION FEES ARE NOT REFUNDED.**

## RULES OF COMPUTER TESTING

Report to your designated Assessment Center location on the day of the examination at the time you were instructed when your appointment was scheduled. **Candidates arriving more than 15 minutes late will not be admitted.**

No books, papers, dictionaries, other reference materials or personal items (e.g., purses, briefcases, coats) may be taken into the Assessment Center; you must leave all personal items at home or in your automobile. AMP will not be responsible for loss of or damage to personal items.

You will be provided with scratch paper to use during the examination which must be returned to the supervisor at the completion of testing, or you will not receive a pass/fail report. **No documents or notes of any kind may be removed from the examination room.** All computer screens, questions, paper and written materials are the property of NCC and AMP and may not be reproduced in any form.

**No** questions concerning the **content** of the examination may be asked during the test.

Eating, drinking or smoking will not be permitted in the Assessment Center.

You may take a break whenever you wish, but you will **not** be allowed additional time to make up for time lost during breaks.

The supervisor may **dismiss a candidate from the examination** for any of the following reasons:

- the candidate's admission to the examination is unauthorized
- the candidate creates a disturbance, is abusive, or otherwise uncooperative
- the candidate gives or receives help or is suspected of doing so
- the candidate attempts to record test questions or to make notes

**No electronic devices** other than approved calculators are permitted in the Assessment Center, **including telephones, signaling devices such as pagers and alarms and photographic or duplicating devices.** In addition, personal digital assistants (PDAs) and other hand-held computers are prohibited.

NCC allows candidates to bring a battery-operated noiseless, non-programmable calculator to the test site.

# COMPUTER TESTING WITH AMP

## RESULTS NOTIFICATION

After completing the exam or once the allotted time has expired, candidates are asked to complete a short evaluation of their testing experience. Then candidates are instructed to report to the testing supervisor to receive their pass/fail report.

The pass/fail report received at the test site will indicate pass or fail status only and **will be unofficial until you receive official written notice** from NCC. This process allows NCC to verify the accuracy of all test results.

Your official notice will be sent within 21 business days of your test date **via US first class mail**. Pass/fail status will not be reported over the telephone, the NCC website, by electronic mail, express mail or by fax. **There are no exceptions to this policy.**

Your official notice will confirm your PASS or FAIL status. Additional reporting regarding areas of strength and weakness in the various examination content areas will be included.

**Third party notification of pass/fail status will not be released without authorization from the candidate.** A \$30 fee is required for any third party notification or issuance of duplicate pass/fail reports. Such verifications will not be issued until written confirmation of pass/fail is made by NCC and the candidate is so notified.

**Verification requests can only be made via the online verification system on the NCC website.** NCC no longer issues verifications via mail or fax.

## WHAT HAPPENS IF YOU CAN'T TAKE THE EXAM?

### EXTENSION POLICY AND FEES

Any candidate can be granted one (1) extension for the next consecutive 90 day window after the extension request is received (**NOT following the last day of the original testing window**) and provided that all the following apply:

- request is made in writing with a non-refundable extension fee of \$100 and postmarked before the final day of the assigned testing window;
- candidate's window of testing time has not expired;
- candidate has not made an appointment with AMP to take the examination or if an appointment has been made, it was cancelled no later than four business days prior to the scheduled testing

Candidates who are approved to extend their 90 day window will not be allowed subsequently to withdraw or request a deferral from the examination process.

### DEFERRAL POLICY AND FEES

Candidates who are unable to participate in the examination for which they are scheduled and who are beyond the time frame for rescheduling or cancellation of the appointment may request an additional 90 day window of time to take the examination. The request must be in writing. **This deferral is available on a one time only basis and must be approved by NCC. Candidates who have requested an extension cannot withdraw and are not eligible for a deferral.**

Deferral candidates must submit a new application and any appropriate documentation and an additional nonrefundable \$125 fee. Eligibility must be re-established. Candidates who request a deferral are not eligible for any refund. **Deferral requests must be received within 30 days from the last day of the original 90 day window.** Deferral candidates will be assigned to the next available 90 day window for testing following receipt of the deferral request.

### WITHDRAWING CANDIDATES

Only the applicant/candidate can withdraw from the examination process. Withdrawing candidates will receive a refund of \$135. All withdrawal requests must be made in writing, signed and dated and sent to NCC provided that all the following apply:

- the candidate has not made an appointment to take the exam at an AMP center, or
- if the candidate has made an appointment with AMP, it must be cancelled no later than four days prior to the scheduled testing.

The request must be postmarked no later than one month prior to the end of the candidate's 90 day test window. For example, if the test window concludes on September 20, 2010, the last day for a withdrawal request to be accepted would be August 20, 2010.

### SUBSTITUTIONS

New candidate substitutions **CANNOT BE MADE** for ineligible, withdrawn or extension/deferral candidates

**NO REFUND WILL BE CONSIDERED AFTER THE CANDIDATE HAS TAKEN AN EXAMINATION.**

# COMPUTER TESTING WITH AMP

## COMPUTER TEST CENTERS

The AMP test centers are located in H & R Block Centers and are listed below. Sites are subject to change. Go to [www.GoAMP.com](http://www.GoAMP.com) for the most current list.

### Alabama

Birmingham  
Huntsville  
Mobile  
Montgomery

### Alaska

Anchorage

### Arkansas

Fayetteville  
Little Rock

### Arizona

Phoenix  
Tucson

### California

Chino  
Fresno  
Irvine  
Los Angeles  
(Glendale)  
Los Angeles  
(Stanton)  
Sacramento  
San Diego  
San Francisco  
San Jose  
Santa Maria

### Colorado

Denver  
Grand Junction

### Connecticut

South Windsor  
West Haven

### DC

Washington

### Delaware

Wilmington

### Florida

Jacksonville  
Miami  
Orlando  
Sarasota  
Tallahassee  
West Palm Beach

### Georgia

Atlanta (Decatur)  
Atlanta (Roswell)  
Macon  
Savannah

### Hawaii

Honolulu

### Idaho

Boise

### Illinois

Buffalo Grove  
Carbondale  
Chicago  
Franklin Park  
Glen Ellyn  
Libertyville  
Matteson  
Naperville  
Rockford  
Roselle  
Springfield  
Urbana

### Indiana

Evansville  
Fort Wayne  
Indianapolis  
Mishawaka

### Iowa

Davenport  
Des Moines

### Kansas

Kansas City  
Wichita

### Kentucky

Lexington  
Louisville

### Louisiana

Baton Rouge  
New Orleans  
Shreveport

### Maine

Portland

### Maryland

Baltimore

### Massachusetts

Boston  
(Dorchester)  
Holyoke

### Michigan

Detroit  
Flint  
Grand Rapids

### Minnesota

Duluth  
Minneapolis

### Mississippi

Jackson

### Missouri

Jefferson City  
Kansas City  
Springfield  
St. Louis

### Montana

Billings  
Missoula

### Nebraska

Lincoln  
North Platte  
Omaha  
Scottsbluff

### Nevada

Las Vegas  
Reno

### New Hampshire

Concord  
Manchester  
Nashua  
Portsmouth

### New Jersey

Robbinsville  
Wayne

### New Mexico

Albuquerque

### New York

Albany  
Buffalo  
Long Island  
New York  
Rochester  
Utica  
White Plains

### North Carolina

Charlotte  
Raleigh

### North Dakota

Bismarck  
Fargo

### Ohio

Cincinnati  
Cleveland  
Columbus  
Toledo

### Oklahoma

Oklahoma City  
Tulsa

### Oregon

Bend  
Eugene  
Medford  
Portland  
Salem

### Pennsylvania

Harrisburg  
Philadelphia  
Pittsburgh  
Wyoming

### Rhode Island

Providence

### South Carolina

Columbia  
Georgetown  
Spartanburg

### South Dakota

Rapid City  
Sioux Falls

### Tennessee

Chattanooga  
Johnson City  
Knoxville  
Memphis  
Nashville

### Texas

Austin  
Dallas  
El Paso  
Fort Worth  
Houston  
Lubbock  
McAllen  
San Antonio  
Wichita Falls

### Utah

Salt Lake City

### Vermont

Burlington

### Virginia

Norfolk  
Richmond  
Roanoke

### Washington

Seattle (Bellevue)  
Spokane

### West Virginia

Charleston

### Wisconsin

Green Bay  
Milwaukee

### Wyoming

Casper  
Cheyenne

# ANNUAL PAPER & PENCIL TEST

SEPTEMBER 24, 2010

## PREPARING FOR EXAM DAY

### ADMISSION TICKET

You will receive your admission ticket approximately two weeks prior to examination day. Your ticket will list your name, address, your NCC assigned ID number, the examination you are taking and the schedule for exam day. You should review the ticket as soon as you receive it to verify that the information on it is correct.

### CANDIDATE BULLETIN

With your admission ticket, you will also receive a Candidate Bulletin which will give you specific information about reporting to your test site.

If your name or address changes from the time you receive your notice of eligibility and the day of the examination, please notify the NCC office as soon as possible. We will reissue your admission ticket with the correct information if time permits and update your NCC file.

## THE DAY OF THE ANNUAL PAPER & PENCIL EXAM

### ADMISSION TO THE TEST SITE

- Only the candidate who has applied for and been found eligible to take the examination will be admitted to the test site.
- Candidates will be required to show their admission ticket and a photo ID.
- Examination procedures will begin at 9:00 a.m. local time on the testing date. Candidates must report to the test site by 8:30 a.m. for check-in.
- Three hours are allotted for the examination. Please be advised that a candidate may take only one examination per test administration date. The exam is specified in the eligibility letter and on the admission ticket.
- All NCC certification examinations are administered from 9:00 a.m. to 12:00 noon.
- NCC allows candidates to bring a battery-operated noiseless, non-programmable calculator to the test site.
- On the day of the examination, an NCC representative will be available to assist you with any problem from **7 a.m. to 4:00 p.m.** Central Time. Call (312) 951-0207.

### LOST ADMISSION TICKETS

If you misplace your ticket, report to the test site at the scheduled exam time. **Make sure you bring a photo ID with your name and signature.** You will be asked to submit an affidavit of identification that will be submitted to NCC.

### PROCTOR RESPONSIBILITIES

The proctor at your test site has three primary functions:

- maintaining security of the examination,
- providing an orderly processing of candidate credentials for admittance to the examination, and
- facilitating an optimal testing environment for candidates.

Proctors are there to help you. If during the examination, there is an environmental problem, please let the proctor know. S/he cannot help you if the problem is not identified. Proctors cannot assist you with interpretation of examination content.

While every effort is made to provide a comfortable environment, individual temperature responses or facility management beyond the proctor's control can make the site too hot or too cold for your individual taste. Please bring a sweater or jacket that you can remove or put on as needed.

# ANNUAL PAPER & PENCIL TEST

SEPTEMBER 24, 2010

## RESULTS NOTIFICATION

### SCORE REPORT

Your test results will be mailed within 4-6 weeks following test administration.

Test results will be sent by U.S. first class mail only. No test results will be given over the telephone, faxed, express mailed, or e-mailed. **There are no exceptions to this policy.**

Your test results will give your PASS or FAIL status. Additional reporting regarding areas of strength and weakness in the various examination content areas will be included.

Third party notification of status will not be released without authorization from the certified nurse (RNC-NIC). A \$30 fee is required for any third party notification or issuance of duplicates of test results reports. **Verification requests can only be submitted after official written results have been received in the mail.** Verification requests can only be made via the online verification system on the NCC website. NCC no longer issues verifications via the mail or fax.

### ANSWER SHEET REVIEW

All answer sheets are scored electronically.

If you believe there might be a discrepancy in your results, you may request a review of your answer sheet for a fee of \$25. You must make this request in writing no later than a postmark date of December 27, 2010. Please include your name, address, NCC ID number, the name of the examination you took, your test site, and the fee. Send your request to NCC, P.O. Box 11082, Chicago, IL 60611-0082. You will be notified of the results by mail. Requests received after that time will not be honored.

## WHAT HAPPENS IF YOU CAN'T TAKE THE EXAM?

### WITHDRAWING FROM THE EXAMINATION PROCESS

- Only the applicant/candidate may request to be withdrawn from the examination process. All such requests must be made in writing by a postmark date of **August 20, 2010**
- Withdrawal candidates will receive a \$110 refund.
- Withdrawal fees will be issued AFTER the test administration date.
- No refund requests will be considered after a postmark date of **August 20, 2010** for any reason. Please mail your request for withdrawal to NCC, P.O. Box 11082, Chicago, IL 60611-0082.

### CARRYOVER FEES

All carryover candidates must submit a new application and documentation and meet current eligibility criteria. Carryovers are to computer testing only.

- If, due to illness or other unforeseen circumstances on the day of the examination, you are unable to report to your test site, you may be able to carryover your examination fee to computer testing.
- The carryover request must be received no later than a postmark date of **November 12, 2010** for those who failed to appear to take test as scheduled.
- A \$125 non-refundable fee must be submitted with the request, along with a new application and documentation by mail. Then current eligibility criteria must be met.
- The applicant will be given the next available 90-day window after determination of eligibility to take the exam.
- **This is a one-time only option.**
- Candidates who carryover to a subsequent test administration are not eligible for any refund.
- Substituting new candidates for those who carryover or withdraw will not be allowed.

**IF YOU CAN'T GET TO THE TEST SITE ON THE DAY OF THE EXAM DUE TO UNFORESEEN CIRCUMSTANCES, YOU MAY BE ABLE TO CARRY OVER YOUR FEES. YOU MUST REQUEST A CARRYOVER IN WRITING BY NOVEMBER 12, 2010. THERE IS A FEE TO DO THIS, AS NOTED ABOVE AND YOU MUST RE-ESTABLISH ELIGIBILITY BY SENDING A NEW, COMPLETE APPLICATION AND DOCUMENTATION BY MAIL.**

# PEC TESTING

## PEC INTRODUCTION

PEC testing is administered through special arrangements with NCC. All aspects of NCC quality and integrity of exam administration are maintained but certain special rules do apply (see the following) in addition to the usual NCC rules. For specific questions regarding these exams, contact Betty Sobala at [Bsobala@nccnet.org](mailto:Bsobala@nccnet.org)

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**NOTE:**  
**THIS IS NOT THE**  
**ANNUAL PAPER & PENCIL**  
**TEST OF**  
**SEPTEMBER 24, 2010**

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**IF YOU LOSE YOUR ELIGIBILITY LETTER, BRING YOUR PHOTO ID TO THE TEST SITE AT YOUR SCHEDULE EXAM TIME.**

*All applications for PEC testing must be obtained at the PEC website.*

## SPECIAL RULES FOR PROFESSIONAL EDUCATION CENTER (PEC)

### REFUNDS:

No refund will be issued for any reason. A candidate who signs up for the NCC exam and does not successfully complete the PEC course, fails to take the exam after signing up for the exam, fails to appear at the site, or fails to take the exam for any other reason will not be entitled to a refund.

### WITHDRAWAL:

Once the candidate is determined eligible for the exam, withdrawal from the process will not be allowed. No application may be transferred to another person or to another test date.

### UNSUCCESSFUL CANDIDATES:

A candidate who sits for the examination and does not receive a passing score is not eligible for any refund nor for any credit on any later NCC exam.

### REGISTRATION:

All applicants must complete an application and send it along with the stated payment on the application to NCC. The application must be received by the stated deadline date. All applicants must be approved by NCC to sit for the exam. PEC has no authority to accept or to allow any applicant to take the NCC exam. Incomplete applications or those postmarked after the deadline for the NCC exam will be returned.

### INCOMPLETE APPLICATIONS:

Incomplete applications are those missing any requested information or documentation, contain wrong or have no fees, do not contain original signatures or for any other reason resulting in an inability to determine applicant eligibility status. Such applications, if re-filed, are subject to a \$25 re-processing fee, but all documents and fees must be reconciled in full no later than 21 days prior to the exam. INELIGIBLE APPLICANTS are subject to a \$50 non-refundable fee.

### PAYMENT:

All applications must include full payment. If a check is returned for NSF, stop payment or any other reason or if a credit card charge is disputed, the applicant will no longer be eligible to take the exam at the PEC site if payment is not fully reconciled in full no later than 21 days prior to the exam. Any returned check is subject to a \$25 fee and it must be submitted when the application is resubmitted.

### TEST RESULTS:

NCC shall provide final test results reports to individual candidates within 6 weeks of receipt of the answer sheets. All communications regarding the exam must be to NCC at the email provided to you by PEC on the exam application.

# ICP TESTING

## ICP INTRODUCTION

ICP testing is administered through special arrangements with NCC. All aspects of NCC quality and integrity of exam administration are maintained but certain special rules do apply (see the following) in addition to the usual NCC rules. For specific questions regarding these exams contact your local test coordinator.

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**IF YOU LOSE YOUR ELIGIBILITY LETTER, BRING YOUR PHOTO ID TO THE TEST SITE AT YOUR SCHEDULE EXAM TIME.**

## SPECIAL RULES FOR INSTITUTIONAL CERTIFICATION PLAN (ICP)

### **REFUNDS:**

No refund will be issued for any reason. A candidate who does not successfully complete the program and has submitted his/her application and fees will not be entitled to a refund.

### **WITHDRAWAL:**

Once the candidate is determined eligible, withdrawal from the process will not be allowed.

### **CARRYOVER:**

A candidate who fails to appear to take the examination will not be eligible to participate in the carryover process.

### **UNSUCCESSFUL CANDIDATES:**

A candidate who sits for the examination and does not receive a passing score is not eligible for any refund.

### **REGISTRATION:**

All applications must be given to the Coordinator by the stated deadline to be considered – see your Coordinator for the deadline date. Applications received after that time will be returned.

### **PAYMENT:**

All applications must include full payment. If a check is returned for NSF, stop payment or any other reason or if a credit card charge is disputed, the candidate will no longer be eligible to take the exam at the Institution Test Site. Any returned check is subject to a \$25 fee and it must be submitted when the application is resubmitted.

### **TEST RESULTS:**

NCC shall provide final test results reports to individual candidates within 6 weeks of receipt of the answer sheets. All communications regarding the exam must be to the Coordinator of the exam. Do not contact NCC for any reason concerning the exam.

# TERMS OF CERTIFICATION AND CERTIFICATION MAINTENANCE

## WHEN YOU PASS THE EXAM

### CREDENTIAL

Your NCC certification status entitles you to use the credential RNC-NIC (Registered Nurse Neonatal Intensive Care Nursing).

### TERMS OF CERTIFICATION

NCC certification is awarded for a period of three years.

For those taking the exam via computer, the effective date for certification is the date on the official test results report you receive from NCC.

For those taking the exam in paper & pencil format, the effective certification date is the date on the official NCC letter that tells you that you have successfully completed the certification process.

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**NO CONTINUING  
EDUCATION IS ISSUED FOR  
TAKING THE  
NEONATAL INTENSIVE CARE  
NURSING EXAM.**

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## MAINTAINING YOUR CERTIFICATION

- NCC certification must be maintained on an ongoing basis every three years.
- Certification that is not maintained will expire and can be regained only through re-examination.
- The NCC certification maintenance program provides two options for continuing your certification status:
  - obtaining 45 hours of continuing education credit, or
  - successfully retaking the examination.
- Continuing education credit to be used for certification maintenance must be earned between the date of your notification of certification and the date your maintenance is due.
- If using re-examination for maintenance, you must take and successfully pass the examination prior to your expiration date.
- The maintenance process includes filing a maintenance application prior to your maintenance due date with appropriate fees and requested documentation. All CE must be in the area of your certification specialty. Participation in NCC self assessment program for earning CE does NOT automatically maintain your certification. You must file a maintenance application and pay a maintenance fee in addition to any CE fees.

You may apply for maintenance as soon as you have obtained the required 45 contact hours of continuing education credit—***you do not need to wait until your maintenance deadline to apply***. Maintenance will be due no later than the last day of the quarter in which you were notified of your certification (not the date on which you took the examination). Please refer to the following for guidance:

| <b>Date of Notification of Certification</b> | <b>Certification Maintenance Due Dates</b> |
|--|--|
| <i>January-March 2010</i>                    | <i>March 31, 2013</i>                      |
| <i>April-June 2010</i>                       | <i>June 30, 2013</i>                       |
| <i>July-September 2010</i>                   | <i>September 30, 2013</i>                  |
| <i>October-December 2010</i>                 | <i>December 31, 2013</i>                   |

More information about the certification maintenance program—including a downloadable maintenance application—is available from the NCC website [www.nccwebsite.org](http://www.nccwebsite.org).

# TERMS OF CERTIFICATION AND CERTIFICATION MAINTENANCE

## CONTINUING COMPETENCY INITIATIVE

A new continuing competency initiative will become part of NCC's certification maintenance program beginning in June 2010.

Focused on providing tools to the certified nurse and nurse practitioner to assess continuing education needs through a specialty assessment evaluation, the new program will be implemented in two stages.

**Stage 1** will require everyone to take a 125 question specialty assessment evaluation at the NCC website beginning in June 2010 through December 31, 2013, that will provide content feedback information to you on your certification specialty knowledge competencies. There is no pass/fail. This is for feedback purposes only and to familiarize you with the assessment process which will be integral to the maintenance process in 2014.

In **Stage 2**, beginning 2014, the results of the specialty assessment evaluation will drive what CE is needed for certification maintenance which in most cases will decrease your CE requirements.

The program will be applicable only to NCC certified nurses and nurse practitioners. For those holding credentials no longer offered by NCC or who hold a certificate of added qualification, the new requirements will not apply. Download the Continuing Competency Initiative Brochure for full details by clicking the link below:

[http://www.nccwebsite.org/resources/docs/final\\_ncc\\_continuing\\_competency\\_web.pdf](http://www.nccwebsite.org/resources/docs/final_ncc_continuing_competency_web.pdf)

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**VISIT THE NCC WEBSITE  
AND DOWNLOAD YOUR  
CONTINUING COMPETENCY  
INITIATIVE BROCHURE FOR  
COMPLETE DETAILS!**

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# FEES AND GENERAL POLICIES

## FEES

### RETURNED CHECK FEE

A **\$25 fee** will be assessed to any applicant whose check is returned to NCC for insufficient funds, stop payment or any other reason. Remittance of fees thereafter must be in the form of a money order or certified cashier's check.

### CREDIT CARD CHARGEBACK

If an applicant's credit card company issues a notice of retrieval or a chargeback in response to the cardholder's dispute of the credit card charge, the applicant will be required to submit to NCC a certified check or money order to cover the original cost plus an **administrative fee of \$25**.

### THIRD PARTY PAYMENTS

Applicant fees paid by third parties will be reimbursed to the third party in the event the applicant is determined ineligible or withdraws within the specified time. Reimbursement will be in accordance with stated refund policies.

Certification will be revoked or withheld if a returned check or a chargeback request on a credit card payment results in loss of income to NCC and the monies are not recovered in an alternate payment. Fees received at any time will first be applied to any unpaid prior certification/special fees.

## GENERAL POLICIES

### UNSUCCESSFUL CANDIDATES

Candidates who do not pass the examination are not eligible for any refund.

### EXAM CATEGORY CHANGES

Requests to change examination category must be received in writing no later than a postmark date of **August 6, 2010** for those taking the exam by paper and pencil. A \$30 fee is assessed for any exam category changes and must be remitted with the request. Checks should be made payable to NCC. Candidates taking the test by computer must request the change prior to making an appointment to take the test. Eligibility must be re-established for the new examination category, and additional documentation and fees may be required. The time to consider eligibility for the new category will count toward the original 90 day window assigned to take the examination. Examinees must take the examination for which they have been determined eligible. No changes will be permitted on examination day. If a candidate knowingly or unknowingly takes an examination other than the one she/he was found eligible to take, the examination will not be scored. No refunds will be allowed, and all fee policies will apply if the candidate reapplies for an examination.

### RETENTION OF ANSWER SHEETS AND EXAMINATION BOOKLETS

All answer sheets are kept for one year from the date of the examination. Examination booklets used by the candidates are kept for six months from the date of the examination. Computer answer strings are kept for at least one year from the date of the examination.

### RETEST POLICY

You may retake the examination if you do not pass. You must reapply, submit all applicable fees and documentation, and re-establish eligibility according to the appropriate deadlines. There is no limit to the number of times you may retake the examination, however candidates must wait at least **90 days before making application to retake the examination** by computer or paper and pencil. All submission deadlines for application for paper and pencil testing must be met. No accommodation will be given to those who are retesting via paper and pencil mode if they cannot meet application deadline because of the 90 day wait rule. The **maximum number of times a candidate can take the same NCC test in a calendar year is two**.

### AMERICANS WITH DISABILITIES ACT

Special testing accommodations will be provided pursuant to the Americans with Disabilities Act. Contact the NCC office for further information before submitting your application.

# FEES AND GENERAL POLICIES

## VERIFICATION OF CERTIFICATION

Third party notification of status will not be released without authorization from the RNC. A \$30 fee is required for any third party notification or issuance of duplicates of test results reports. Verification requests can only be submitted after official written results have been received in the mail. Verification requests can only be made via the online verification system on the NCC website. NCC no longer issues verifications via the mail or fax.

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**POLICIES ARE SUBJECT  
TO CHANGE  
WITHOUT NOTICE.**

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## GENERAL POLICIES (CONTINUED)

### REVIEW COURSES AND MATERIALS

NCC does not offer or sponsor review courses or review materials for its certification examinations. Examination candidates should review any purported course of study as being independent of NCC. You should carefully examine the merits of any individual exam preparation offering before you participate.

### TEST DISCLOSURE

NCC does not make test questions available for review. Because test questions may be used for more than one examination administration, distributing this information would compromise the security of the test questions and would increase the cost of certification if the questions had to be replaced each year.

### APPEALS PROCEDURE

Any request to waive any policy of the NCC Board of Directors relative to eligibility, administration, examination content issues, or certification maintenance must be received in writing within 60 days of the dispute. The correspondence should contain a detailed account as to why the NCC policy should be waived or the candidate's status should be changed. Such requests are referred to the NCC Policy Review Committee of the Board of Directors. All decisions will be provided in writing. Cases not resolved by the Policy Review Committee will be referred to the full Board of Directors.

### NONDISCRIMINATION

It is the policy of NCC that no individual shall be excluded from the opportunity to participate in the NCC examination program on the basis of race, national origin, religion, sex, age, or disability.

### REVOCATION

Your certification may be revoked for falsifying any information submitted relative to eligibility to take the certification examination or for maintaining certification, if you lose your license to practice nursing, or if you fail to pay designated certification or maintenance fees.

### ANSWER SHEET REVIEW OF PAPER AND PENCIL EXAMINATIONS

All answer sheets are scored electronically. If you believe there might be a discrepancy in your results, you may request a review of your answer sheet for a fee of \$25. Please include your name, address, NCC ID number, the name of the examination you took, your test site, and the fee. Send your request to NCC, P.O. Box 11082, Chicago, IL 60611-0082. You will be notified of the results by mail.

# ABOUT THE EXAM

## CONTENT TEAMS

Content team members are experienced practitioners and are appointed on an annual basis by the NCC President. Content teams are solicited from the RNC (Registered Nurse Certified) population, NCC item writer workshop participants and from experts in the field. To see the current membership composition of the Content Team responsible for the neonatal intensive care nursing examination, please visit the NCC website under the section on NCC Leadership.

## EXAMINATION CONTENT DEVELOPMENT

The development of NCC credentialing involves many individuals and involves a meticulous process of review. There are three major groups that contribute to the test development process:

### ITEM WRITERS:

RNCs and others identified with special expertise have the responsibility of drafting test items per designated assignment for review by the content team and expert reviewers. Item writers are solicited from the RNC population and through recommendations.

### REVIEWERS:

Reviewers are RNCs or other designated experts who assist the content teams in review of test items developed by the item writers. Reviewers are responsible for reviewing items for content relevance and confirming that references cited for the questions support the items as written.

### CONTENT TEAM MEMBERS:

Content team members are RNCs or other identified experts who:

- develop and update the test outline and competency statements
- review test items developed by item writers
- set the pass/fail standard
- review item statistics from exam administrations and pretest examinations
- approve the exam forms to be administered
- review item banks
- undertake content validation studies

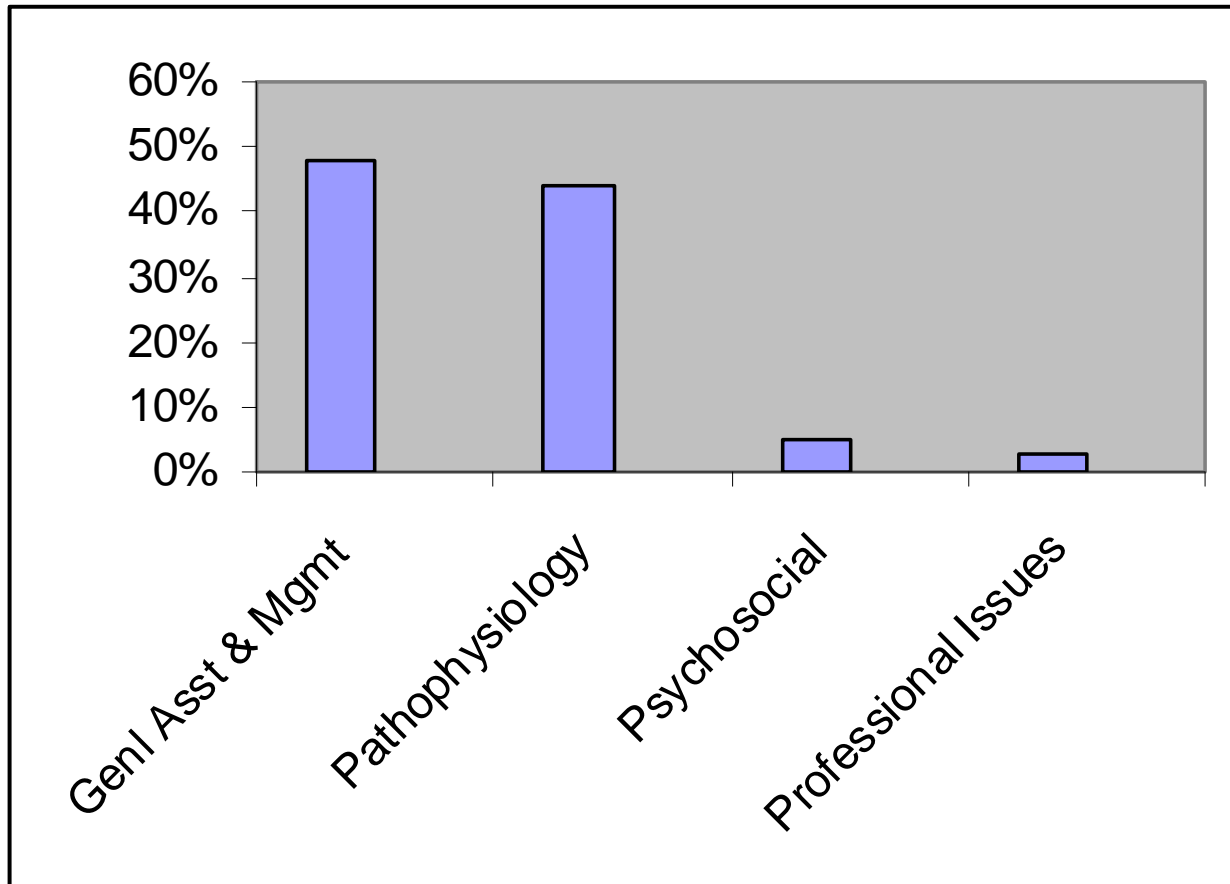
### EXAM FORMAT

The Neonatal Intensive Care Nursing examination can consist of up to 175 test questions. 150 are counted for scoring and the remainder are embedded in the exam as pretest items. The pretest items do not count toward the examinee's final results.

- There is one question format used for all NCC examinations.
- Each question has a premise (stem) and three alternative answers.
- The answer options are alphabetized by the first word in each answer option to randomize the answers.
- Computer tests are delivered in a different random order for each candidate.
- Questions will test both basic knowledge and application of knowledge.
- Questions that contain laboratory data will show results in conventional units of measure with international units in parentheses.
- Drugs are listed in both generic and trade names where appropriate.

# EXAMINATION CONTENT

## CONDENSED EXAM OUTLINE



The above chart shows the percentage distribution of questions on the Neonatal Intensive Care Nursing exam across the major content categories covered on the examination. The major focus of the examination is on General Assessment and Management and Pathophysiologic States having the most emphasis. Lesser emphasis is on psychosocial behavioral states and professional issues having the least number of questions assigned to this content category

# EXAMINATION CONTENT

## CONDENSED EXAM OUTLINE

### CONDENSED EXAM OUTLINE

This is an outline of topics and areas which may be included in the Neonatal Intensive Care Nursing examination

#### General Assessment and Management (45-55%)

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Maternal History and Risk Factor

Gestational Age (At Birth)

Physical Assessment

Resuscitation and Stabilization

Fluids and Electrolytes

Nutrition and Feeding

Oxygenation and Acid Base Homeostasis

Thermoregulation

Pharmacology

Developmental Care

#### Assess & Manage Pathophysiologic States (45-55%)

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Cardiac

Respiratory

Gastrointestinal

Genitourinary

Hematopoietic

Neurological/Neuromuscular

Infectious Diseases

Metabolic/Endocrine

Genetic Disorders

Head, Eye, Ear, Nose Throat

#### Assess and Manage Psychosocial/ Behavioral Adjustments (5-10%)

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Discharge Planning and Follow up

Grieving Process

Family Integration

#### Professional Issues (Less than 5%)

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# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### MATERNAL HISTORY AND RISK FACTORS

#### ASSOCIATED COMPETENCIES

- Identify antepartal and intrapartal indicators of neonatal risk and their potential significance
- Systematically assess all body systems utilizing physical examination, gestational age assessment and neurobehavioral assessment
- Apply knowledge of anatomy and physiology (maternal, fetal, transitional, newborn), pathophysiology, pharmacology, nutrition, and behavioral psychology to assess the neonate and differentiate abnormal from normal
- Recognize normal values and deviations in clinical laboratory and diagnostic data and identify potential significance
- Assess the neonate's family, community and environment to identify areas of risk

#### MATERNAL HISTORY AND RISK FACTORS

##### Effects of maternal medical complications

hematologic (anemia, thrombocytopenia)  
hypertension (chronic, PIH, HELLP Syndrome)  
infections (CMV, Toxoplasmosis, syphilis, herpes, hepatitis, AIDS, gonorrhea, chlamydia)  
renal disease

##### Problems associated with amniotic fluid and membranes:

amniotic bands  
oligohydramnios  
polyhydramnios  
PROM and chorioamnionitis

##### Significance of findings:

alpha-fetoprotein/triple screen  
biophysical profile  
diagnostic ultrasound  
lung maturation studies (L:S ratio, lung profile, PG)

##### Recognize neonatal significance of fetal heart rate patterns

altered variability  
decelerations (early, late, variable)  
tachycardia, bradycardia

##### Effects of maternal medications on the neonate

tocolytics  
analgesia, anesthesia

##### Problems in labor - impact on the neonate

breach and other malpresentation  
maternal hemorrhage  
meconium

##### Obstetric emergencies (impact on the neonate)

abruptio placenta  
cord prolapse  
placenta previa

##### Impact of methods of delivery on the neonate (forceps, vacuum, cesarean)

##### GESTATIONAL AGE (AT BIRTH)

##### Interpretation of growth curves (weight, length and head circumference)

##### Physical and neuromuscular characteristics

preterm  
term  
post-term  
AGA  
SGA  
LGA

##### Associated risks with

preterm  
post-term  
SGA/IUGR  
LGA

##### Physical Assessment

##### Normal/abnormal findings regarding:

general appearance  
head  
eyes, ears, nose & throat  
neck  
chest  
cardiovascular  
respiratory  
abdomen  
genitalia  
extremities  
spine/back  
skin  
maintaining skin integrity  
neuromuscular and reflexes

# EXAMINATION CONTENT

## CONDENSED EXAM OUTLINE

### RESUSCITATION AND STABILIZATION

#### Neonatal Cardiopulmonary

**Resuscitation** (*Per the American Heart Association & the American Academy of Pediatrics*)  
initial evaluation (ABC)  
indications for ventilation  
indications for intubation  
indications for cardiac massage

#### Use of drugs

epinephrine  
Narcan  
sodium bicarbonate  
volume expanders

#### Resuscitation and stabilization of the neonate with

diaphragmatic hernia  
hydrops fetalis  
perinatal asphyxia  
upper airway obstruction

### FLUIDS AND ELECTROLYTES

#### Normal fluid and electrolyte requirements

#### Monitoring fluid and electrolyte status

electrolytes  
urine output

#### Effects of

humidity  
maturity  
temperature

#### Specific problems

dehydration and overhydration  
gastrointestinal abnormalities  
insensible water loss  
patent ductus arteriosus  
post-asphyxia  
third spacing

#### Parenteral fluid therapy

### NUTRITION AND FEEDING

#### Nutritional requirements and effects of excess and deficiency

calories  
carbohydrates  
fat  
minerals  
protein  
vitamins

#### Enteral feeding

minimal enteral feedings (gut priming)  
gavage feeding  
bolus vs continuous feedings  
bottle feeding  
feeding techniques  
formula composition  
breast feeding  
stimulating production  
composition of breast milk

#### Parenteral nutrition

indications  
composition  
complications

#### Dietary supplements

breast milk fortifiers  
glucose polymers  
iron  
MCT  
vitamins

#### Nutritional management for

bronchopulmonary dysplasia  
prematurity  
short gut syndrome

### OXYGENATION/VENTILATION AND ACID BASE HOMEOSTASIS

#### Oxygenation: interpretation and management

hypoxia/hypoxemia  
oxygen saturation  
principles re: increasing/  
decreasing FiO<sub>2</sub> levels  
pulse oximeter

#### Methods of oxygenation/ventilation (indications, complications)

CPAP  
extracorporeal membrane oxygenation (ECMO)

#### Mechanical ventilation

conventional  
high frequency  
other methods of oxygen delivery (hood, nasal cannula, face mask)

#### Blood gases: interpretation and management

metabolic acidosis (compensated & uncompensated)  
metabolic alkalosis (compensated & uncompensated)  
respiratory acidosis (compensated & uncompensated)  
respiratory alkalosis (compensated & uncompensated)  
mixed

### THERMOREGULATION

#### Mechanisms of heat loss and production

assessment of thermal state  
responses to hypothermia and cold stress  
responses to hyperthermia

#### Maintaining a neutral thermal environment

#### Management of thermoregulation problems

evaporation  
conduction  
convection  
radiation  
hypothermia and cold stress  
hyperthermia

#### Equipment

incubators  
radiant warmers  
servo-controlled incubator

# EXAMINATION CONTENT

## CONDENSED EXAM OUTLINE

### PHARMACOLOGY

#### Principles of neonatal pharmacology

administration methods/issues  
absorption from GI tract, skin and muscle  
blood drug levels (toxic vs therapeutic)  
drug distribution in the body  
drug excretion  
drug incompatibilities  
drug withdrawal (therapeutic drugs)

#### Dosage calculations

#### Common drugs

anesthetics and analgesia (sedatives)  
antibiotics  
anticonvulsants  
antiviral drugs  
bronchodilators  
cardiovascular agents  
CNS stimulants (caffeine, etc)  
diuretics  
muscle relaxants

#### Management of the drug exposed neonate

Fetal alcohol syndrome  
Neonatal abstinence syndrome  
Cocaine

#### Laboratory Testing

urine  
meconium

#### Equipment

Infusion pumps

### DEVELOPMENTAL CARE

#### Neurobehavioral development

habituation  
motor organization  
state organization  
sensory/interaction capabilities

#### Self regulatory (stability) and stress responses

autonomic  
motoric  
state  
attentional

#### Impact of the NICU environment

physical  
light  
sound  
social  
caregiver-infants interactions  
patterns of caregiving

#### Intervention strategies

reducing noise levels  
reducing light levels/  
diurnal patterns  
altering care patterns  
handling  
positioning  
musculoskeletal integrity  
kangaroo care  
nonnutritive sucking  
provision of sensory experiences  
auditory  
tactile  
visual  
vestibular and proprioceptive

#### Pain

assessment  
non-pharmacologic interventions

### STUDY RESOURCES

- Blackburn, Maternal, Fetal and Neonatal Physiology, A Clinical Perspective, W. B. Saunders, Philadelphia, 2007.
- Davies, et al., Examination of the Newborn and Neonatal A Multidimensional Approach, Churchill Livingstone, London, 2009.
- Kenner, et al., Comprehensive Neonatal Nursing, W.B. Saunders, Philadelphia, 2007.
- Merenstein, et al., Handbook of Neonatal Intensive Care, Mosby, St. Louis, 2006.
- Simpson, et al., Perinatal Nursing, LWW, Philadelphia, 2009.
- Taeusch, et al., Avery's Diseases of the Newborn, Elsevier, Philadelphia, 2006.

# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### ASSESS AND MANAGE PATHOPHYSIOLOGIC STATES

#### ASSOCIATED COMPETENCIES

- Recognize normal values and deviations in clinical laboratory and diagnostic data and identify potential significance
- Utilize biophysical monitoring techniques to identify body system alterations
- Assess the neonate's family, community and environment to identify areas of risk
- Develop an individualized plan of care for the restoration, maintenance and promotion of health for the high risk neonate and family unit during hospitalization and following discharge
- Implement diagnostic, therapeutic and educational plans in collaboration with other health care providers to provide direct care for the high risk neonate and family
- Identify life-threatening states and initiate appropriate interventions
- Evaluate the plan of care in collaboration with other health care providers and the family and modify the plan of care as indicated

#### CARDIAC

##### Transition to Extrauterine Life

##### Cyanosis

central vs peripheral  
cardiac vs pulmonary

##### Specific Problems

*For all problems: presentation/assessment causes, management, complications, outcome*

arrhythmias  
cardiac tamponade  
congestive heart failure  
congenital heart defects  
    AV canal  
    coarctation of the aorta  
    hypoplastic left heart  
    pulmonary stenosis and atresia  
    tetralogy of Fallot  
    transposition of the great vessels  
    total anomalous pulmonary venous return  
    ventricular septal defect  
cyanotic vs acyanotic disease  
hypertension  
patent ductus arteriosus  
shock

##### Cardiovascular assessment

blood pressure  
central venous pressure  
EKG  
blood pressure monitors  
cardiopulmonary monitors  
indwelling lines

#### RESPIRATORY

##### Normal pulmonary function, surfactant

##### Specific respiratory problems

*For all problems: presentation/assessment causes, management, complications, outcome*

apnea of prematurity  
bronchopulmonary dysplasia  
diaphragmatic hernia/paralysis  
hypoplastic lungs  
meconium aspiration  
persistent pulmonary hypertension  
pneumothorax/air leaks  
pulmonary hemorrhage  
respiratory distress syndrome  
transient tachypnea of the newborn

##### Specific therapies

*For all problems: presentation/assessment causes, management, complications, outcome*

endotracheal intubation  
suctioning  
surfactant replacement therapy  
chest tubes and drainage systems

# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### GASTROINTESTINAL

#### Normal gastrointestinal function

#### Maturation of GI tract

#### Specific GI problems

*For all problems: presentation/assessment, causes, management, complications, outcome*

esophageal atresia/

tracheoesophageal atresia

GE reflux

GI bleeds/GI

perforation/peritonitis

Hirschsprung's disease

intestinal obstructions (duodenal, jejunal, ileal, imperforate anus)

meconium ileus/plug

malrotation/volvulus

necrotizing enterocolitis

omphalocele/gastroschisis

short gut syndrome

ostomy Care

### GENITOURINARY

#### Renal function/urinary output

#### Specific genitourinary problems

*For all problems: presentation/assessment causes, management, complications, outcome*

#### Genital

ambiguous genitalia

adrenogenital syndrome

inguinal hernia

hydrocele

#### Urinary tract

asphyxial renal damage

renal abnormalities

renal failure

renal vein thrombosis

### HEMATOPOIETIC

#### Interpret laboratory values

CBC

hematocrit, hemoglobin

platelets

total and direct serum bilirubin

direct and indirect Coomb's test

Kleihauer Betke test

#### Developmental differences

fetal vs adult hemoglobin

RBC differences

#### Administration of blood and blood products

techniques

risks

#### Hyperbilirubinemia

physiologic jaundice

causes of direct

hyperbilirubinemia

causes of indirect

hyperbilirubinemia

phototherapy

#### Specific hematologic problems

anemia

coagulopathies/DIC

polycythemia and hyperviscosity

Rh and ABO incompatibility/

hydrops fetalis

thrombocytopenia

### NEUROLOGICAL/ NEUROMUSCULAR

*For all problems: presentation/assessment causes, management, complications, outcome*

Birth injuries (neuromuscular)

Hydrocephalus/V-P shunts

Hypoxic ischemic encephalopathy

Neural tube defects

Periventricular/intraventricular

hemorrhage

periventricular

leukomalacia

Seizures

Subdural hemorrhage

### INFECTIOUS DISEASES

*For all infections: presentation/assessment causes, management, complications, outcome*

#### Interpret laboratory values

WBC and differential

cerebrospinal fluid

#### Immature host defenses

#### Neonatal sepsis/meningitis

#### Viral and fungal infections

candidiasis

cytomegalovirus

hepatitis B

herpes

HIV/AIDS

toxoplasmosis

varicella

#### Specific bacterial infections

chlamydia

E coli infection

Group B Streptococcal infection

early onset

late onset

staphylococcal infection

syphilis

#### Infection control procedures

nosocomial infection

infection control procedures

### METABOLIC/ENDOCRINE

#### Interpret laboratory values

calcium, phosphorus magnesium

glucose

#### Newborn screening

PKU

T assay

#### Glucose homeostasis

# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### **Specific metabolic/endocrine problems**

*For all problems: presentation/assessment, causes, management, complications, outcome*  
hypocalcemia and hypercalcemia  
rickets  
hypoglycemia and hyperglycemia  
infant of diabetic mother  
hyperthyroidism and  
hypothyroidism

### **GENETIC DISORDERS**

#### **Mendelian inheritance patterns**

autosomal recessive  
autosomal dominant  
sex-linked

#### **Chromosomal anomalies and diseases**

Trisomy  
Trisomy 1  
Trisomy 21  
Multifactorial diseases

### **HEAD, EYES, EARS, NOSE AND THROAT**

#### **Eye prophylaxis**

#### **Specific problems**

*For all problems: presentation/assessment, causes, management, complications, outcome*  
cephalhematoma  
choanal atresia  
cleft palate/lip  
retinopathy of prematurity  
tracheal stenosis/atresia  
tracheomalacia  
tracheostomy

### **STUDY RESOURCES**

- Blackburn, Maternal, Fetal and Neonatal Physiology, A Clinical Perspective, W. B. Saunders, Philadelphia, 2007.
- Chernick, et al., Kendig's Disorders of the Respiratory Tract in Children, Saunders, Philadelphia, 2006.
- Cloherty, et al., Manual of Neonatal Care, Lippincott-Raven Publishers, Philadelphia, 2007.
- Kenner, et al., Comprehensive Neonatal Nursing, W.B. Saunders, Philadelphia, 2007.
- MacDonald, et al., Atlas of Procedures in Neonatology, LWW, Philadelphia, 2007.
- Martin, et al., Neonatal-Perinatal Medicine: Diseases of the Fetus and Infant, Elsevier Mosby, 2006.
- Merenstein, et al., Handbook of Neonatal Intensive Care, Mosby, St. Louis, 2006.
- Taeusch, et al., Avery's Diseases of the Newborn, Elsevier, Philadelphia, 2006.

# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### ASSESS AND MANAGE PSYCHOSOCIAL/BEHAVIORAL ADJUSTMENT

#### ASSOCIATED COMPETENCIES

- Recognize normal values and deviations in clinical laboratory and diagnostic data and identify potential significance
- Implement diagnostic, therapeutic and educational plans in collaboration with other health care providers to provide direct care for the high risk neonate and family
- Evaluate the plan of care in collaboration with other health care providers and the family and modify the plan of care as indicated

#### DISCHARGE PLANNING AND FOLLOW-UP

##### General discharge planning and parent teaching

car seats  
CPR  
feeding  
immunizations  
SIDS  
visitors

##### Discharge planning and parent teaching for infants with special needs

nutrition  
medications  
special equipment needs  
special care needs  
developmental follow up  
visual screening  
hearing screening  
motor delay (including cerebral palsy)  
cognitive/language delay

#### GRIEVING PROCESS

Anticipatory grief  
Stages of grieving and common behaviors and interventions  
Factors which impede/enhance grief process  
Pathologic responses  
Maternal/paternal differences (incongruent grieving)

##### Specific circumstances

chronic sorrow  
death of a twin (triplets, etc)

repeated obstetric loss (recurrent abortion, stillbirth, preterm delivery)  
sibling responses

##### Support systems and referrals

bereavement groups  
parent support groups

#### FAMILY INTEGRATION

##### Parent-infant attachment behaviors

##### Parental stress responses

high risk birth  
changes in status  
transfer

##### Barriers to parent infant interaction

##### Specific circumstances

adolescent parents  
grandparents and other extended family  
long distance nurturing of parent/ infant attachment  
sibling responses and interventions

##### Specific interventions with parents and extended family

counseling techniques  
parent teaching

##### Shared decision making

parent-staff disagreements regarding treatment

##### Principles of culturally sensitive care

#### STUDY RESOURCES

- Blackburn, Maternal, Fetal and Neonatal Physiology, A Clinical Perspective, W. B. Saunders, Philadelphia, 2007.
- Kenner, et al., Comprehensive Neonatal Nursing, W.B. Saunders, Philadelphia, 2007.
- Merenstein, et al., Handbook of Neonatal Intensive Care, Mosby, St. Louis, 2006.
- Nugent, et al., Understanding Newborn Behaviors & Early Behavioral Observations (Nbo) System Handbook, Brookline Publishing, 2007.

# EXAMINATION CONTENT

## COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

### PROFESSIONAL ISSUES

#### ASSOCIATED COMPETENCIES

- Identify professional nursing issues which impact on the role of the neonatal nurse

#### Quality assessment/ improvement

##### Ethical issues and dilemmas

- process of bioethical decision making
- role of nurse in ethical decision making situations in regard to colleagues, patients, parents

##### Legal issues

- documentation
- informed consent
- standard of care
- Security/Abduction Precautions

##### Research

- Understanding/using research findings in clinical practice
- randomization
- significance of research findings
- generalization

##### Patient Safety

#### STUDY RESOURCES

- Legal & Ethical Issues for Health Professionals, Pozgar, et al., Jones and Barlett, NY, 2005.
- Nursing Research, Polit, LWW, Philadelphia, 2009.

# SAMPLE QUESTIONS

## NEONATAL INTENSIVE CARE NURSING SAMPLE QUESTIONS

Listed below are five sample questions to acquaint you with the test question format. These questions do not reflect the scope or the difficulty level of the questions on the actual examination. The reference from which each question is derived is also cited. However, other references might substantiate a different answer, and the answer shown here might be substantiated by other references.

The rigorous review to which actual test questions are subject is not applied to these sample questions. The focus that should be attended to in reviewing these items is format, not content.

1. Functional closure of the ductus arteriosus occurs as a result of

- A. fibrosis of the ductal muscle
- B. increased arterial oxygen tension
- C. increased left atrial pressure

Answer: B

Martin, et al., *Neonatal-Perinatal Medicine: Diseases of the Fetus and Infant*, Elsevier Mosby, Philadelphia, 2006, p. 1206.

2. A premature neonate has been consistently engaging in hand-to-mouth movements. The nurse should

- A. provide a time out for care giving activities
- B. recognize these behaviors as a form of self consolation
- C. swaddle and hold the infant for awhile

Answer: B

Merenstein, et al., *Handbook of Neonatal Intensive Care*, Mosby, St. Louis, 2006, p. 303.

3. After six hours of IV calcium replacement, the serum calcium level of a neonate remains below normal. Which of the following laboratory values should be obtained as the next step in evaluating the neonate's condition?

- A. Serum magnesium
- B. Serum phosphorus
- C. Urine calcium

Answer: A

Kenner, et al., *Comprehensive Neonatal Nursing* W. B. Saunders, Philadelphia, 2007, page 416.

4. The primary etiology of transient tachypnea of the newborn is thought to be

- A. asphyxia at birth
- B. retained lung fluid
- C. surfactant deficiency

Answer: B

Taeusch, et al., *Avery's Diseases of the Newborn*, Elsevier, Philadelphia, 2006, p. 697.

5. A 1300 gm neonate wearing only a diaper is placed in a single walled incubator with an inside temperature of 35°C (95°F). By what method is the neonate most likely to experience heat loss?

- A. Convection
- B. Evaporation
- C. Radiation

Answer: C

Blackburn, et al., *Maternal, Fetal & Neonatal Physiology, A Clinical Perspective*, W. B. Saunders, Philadelphia, 2007, p. 712.

# SCORING & SCORE REPORTS

## HOW EXAMS ARE SCORED

NCC examinations are criterion-referenced. This means the passing score is based on a predetermined criterion. This criterion is a statistical ability level established by the Content Team based on evaluation of criticality of content and the test questions' past statistical performance. Questions used to determine pass/fail have proven statistical history that demonstrates the question is appropriate for use to measure an individual's ability level.

There is no set percentage passing level, but pass/fail status is based on achieving a predetermined ability level. Each test item has a difficulty level. The higher the difficulty of an item, the greater the ability score one achieves. Pass/fail is determined based on the number of questions answered correctly, and the pass/fail standard is a predetermined ability criterion. As questions are answered correctly, the examinees build on their ability score and subtract from it when questions are answered incorrectly. When different forms of the examination are used, a process called equating is initiated. This procedure converts all results to a common scale. So someone who takes a slightly more difficult form of the exam will need to answer fewer questions correctly than someone who takes a slightly easier form of the exam.

NCC utilizes the item response theory of psychometrics for the analysis of its examinations. Item response theory (Rasch analysis) is the study of tests and item scores based on assumptions concerning the mathematical relationship between abilities and item responses. This is a commonly used system, and such examinations as the NCLEX and other health related certification examinations utilize this type of psychometric analysis.

Test results reports will identify a pass/fail status and will give feedback on the various content areas of the examination in the form of word descriptors: very weak, weak, average, strong and very strong. No percentage or standard score will be given.



# CHANGE REQUEST FORM

## REQUESTS FOR CHANGES OR EXTENSIONS

Requests for Changes or Extensions cannot be done online. You **MUST** mail this form to NCC and make sure that you include your check (made payable to NCC), for any fees due.

*Please mail to:*     **NCC**  
                                   **PO Box 11082**  
                                   **Chicago, IL 60611**

**NAME, ADDRESS OR TEST SITE CHANGES**  
 I am requesting a change in my name or address (complete information below)

**EXTENSIONS**

I am requesting an extension to my 90 day window to take the test via computer - Fee \$100

**EXAM CATEGORY CHANGE** (\$30 charge)

I want to change my examination category. (Must be requested by August 6, 2010 for paper/pencil testing candidates) or prior to the time an appointment is made with AMP for a computer test

**CARRYOVERS AND DEFERRALS** require submission of a new application with applicable fees. Please refer to pages 6 and 9 for information.

|   |                         |
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| <b>NCC ID Number</b>                    | <b>Exam to Be Taken</b> |
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| <b>Email Address</b>                    |                         |

If applicable- complete the following

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|------------------------------|---------------------------|
| <b>Former Name</b>           | <b>New Name</b>           |
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| <b>Former City/State/Zip</b> | <b>New City/State/Zip</b> |
| <b>Former Telephone</b>      | <b>New Telephone</b>      |
| <b>Former Email</b>          | <b>New Email</b>          |
| <b>Former Exam</b>           | <b>New Exam</b>           |